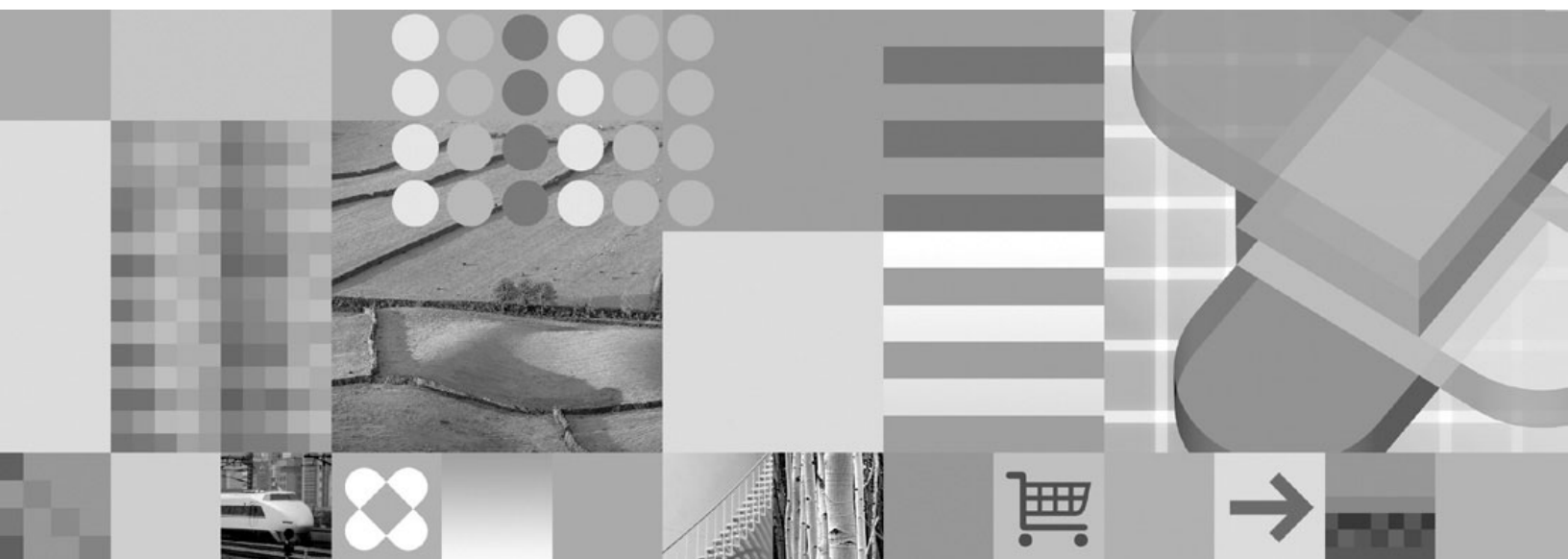


Version 8



Codes



Codes

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 779.

Second Edition (February 2006)

This edition applies to Version 8 of IBM DB2 Universal Database for z/OS (DB2 UDB for z/OS), product number 5625-DB2, and to any subsequent releases until otherwise indicated in new editions. Make sure you are using the correct edition for the level of the product.

This softcopy version is based on the printed edition of the book and includes the changes indicated in the printed version by vertical bars. Additional changes made to this softcopy version of the book since the hardcopy book was published are indicated by the hash (#) symbol in the left-hand margin. Editorial changes that have no technical significance are not noted.

This and other books in the DB2 for z/OS library are periodically updated with technical changes. These updates are made available to licensees of the product on CD-ROM and on the Web (currently at www.ibm.com/software/data/db2/zos/library.html). Check these resources to ensure that you are using the most current information.

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Part 1. Introduction

This information helps you to understand the codes you could receive while working with DB2.

This section contains specific information about codes and a general overview of the DB2 library.

This section contains information about the following topics:

- “Who should read this book” on page 3
- “How to use this material” on page 3
- “Summary of changes” on page 7
- “Using LookAt to obtain message explanations” on page 7
- “Terminology and citations” on page 7
- “Accessibility” on page 8

Chapter 1. About this book

Throughout the codes information, “DB2” means the program product DB2 Universal Database for z/OS (DB2 UDB for z/OS). Other DB2 products are given their complete names or abbreviations.

Important

In this version of DB2 UDB for z/OS, the DB2 Utilities Suite is available as an optional product. You must separately order and purchase a license to such utilities, and discussion of those utility functions in this publication is not intended to otherwise imply that you have a license to them. See Part 1 of *DB2 Utility Guide and Reference* for packaging details.

Who should read this book

DB2 Codes lists codes and IRLM messages issued by DB2, with explanations and suggested responses. This information is intended for users and system programmers who might encounter DB2 codes and IRLM messages.

How to use this material

DB2 Codes consists of the following topics:

- Part 1, “Introduction,” on page 1 explains the different types of messages and codes that DB2 generates.
- Part 2, “SQL return codes,” on page 9 lists the SQL return codes.
- Part 3, “DB2 codes,” on page 159 lists the various DB2 codes.
- Part 4, “IRLM messages and codes,” on page 685 lists the various IRLM messages and codes.
- Appendix A, “Abend codes for CICS transactions,” on page 727 lists the abend codes for CICS transactions.
- Appendix B, “SNA sense codes,” on page 729 lists the SNA codes.
- Appendix C, “Problem determination,” on page 735 lists the diagnostic items and resource types you can use to resolve problems.
- Appendix D, “SQLSTATE values - common error codes,” on page 745 lists the error code SQLSTATE values. These values provide common return codes for common error conditions.
- Appendix E, “New, changed, and deleted codes,” on page 769 lists the new, changed, and deleted codes.
- “Notices” on page 779 lists contact information and legal notices about this product

The introduction provides general information about DB2 codes. You will be referred to it from appropriate places in the documentation. However, it is recommended that you become familiar with this material ahead of time.

The SQL return codes are listed by numeric sequence. The DB2 codes are listed by their hexadecimal ID and further by their numeric identifier. The IRLM messages and codes are listed by numeric sequence.

The DB2 reason codes and subsystem termination reason codes are 4 bytes long. The first byte is always 00, which is the *high-order byte*. The second byte is the *hexadecimal identifier* (hex ID), which identifies the DB2 subcomponent. The last 2 bytes are the *numeric identifier*, which is unique within the subcomponent.

The codes have the following format:

00E50041

where:

00 is the high-order byte.

E5 is the hexadecimal identifier; it identifies the DB2 agent services manager.

0041 is the numeric identifier.

Accompanying each code is the following information, when applicable:

Explanation: This section tells what the code means, why it occurred, and what caused it.

System action: This part tells what is happening as a result of the condition causing the code. If this information is not shown, no system action is taken.

User response: If a response by the user is necessary, this section tells what the pertinent responses are and their effect. If this information is not shown, no user response is required.

Operator response: If an operator response is necessary, this section tells what the pertinent responses are and their effect. If this information is not shown, no operator response is required.

System programmer response: If a response by the system programmer is needed, this part tells what the pertinent responses are and their effect. If this information is not shown, no system programmer response is required.

Programmer response: If a programmer response is necessary, this part tells what the pertinent responses are and their effect. If this information is not shown, no programmer response is required.

Problem determination: This section lists the actions that can be performed to obtain adequate data for support personnel to diagnose the problem. If this information is not shown, no problem determination is required.

Message type codes

The last character of a message identifier is the *type code*. Four type codes are used, as shown in the following list:

A	Immediate action	Action is required immediately. The associated task does not continue until the requested action is taken.
D	Immediate decision	Decision or action is required immediately. The associated task does not continue until the requested decision is made or action is taken.
E	Eventual action	Action is required at some point; however, the associated task continues. All RC=8 error messages that are not host related (SOFT errors) have the E changed to a W in precompiler output when SQL(ALL) is in effect. All RC=8 errors (HARD errors) look the same as they have in the past.
I	Information only	No action is required.

DB2 message severity codes

Messages issued by the precompiler subcomponent of DB2, as well as some messages issued by the service controller and utility subcomponents of DB2,

provide severity codes. The specific meanings of the severity codes differ slightly for each of the subcomponents. In general, the higher the severity level, the more significant the situation.

Severity codes for these subcomponents are described at the beginning of the individual subcomponent sections in *DB2 Messages*. They are also included in the individual messages, where appropriate.

DB2 abend completion codes (X'04E' and X'04F')

DB2 uses two system abend completion codes: X'04E' and X'04F'.

X'04E' and X'04F' identify:

- Internal errors encountered during DB2 operation
- Diagnostic information for problem determination
- Subsystem actions initiated by the DB2 subcomponent involved in the error

X'04E'

An X'04E' abend completion code indicates that DB2 detected an internal error and abended a DB2 internal task (TCB) or a user-connected task. Errors associated with an X'04E' abend completion code might be preceded by an MVS system code or by internal errors.

The diagnostic material generated by the X'04E' abend must be examined to determine the source of the error that actually resulted in a subsequent task or subsystem termination.

X'04F'

An X'04F' abend completion code indicates that DB2 detected a severe error and abended the entire DB2 subsystem. When an X'04F' is issued, DB2 determined that continued operation could result in the loss of data integrity. Errors associated with an X'04F' abend completion code might be preceded by an MVS system error or by one or more DB2 X'04E' abend completion codes.

Table 1 summarizes the diagnostic information and subsystem actions available to DB2 when these abend completion codes are issued. Some pieces of this information are not relevant to some error situations and will not help in problem diagnosis. In these cases, DB2 does not produce any diagnostic information that is unnecessary. The information that DB2 produces for a given error depends upon the specific problem. The MVS services that provide diagnostic information are discussed in “DB2 diagnostic information” on page 6

Table 1. Abend Completion Codes

	X'04E'	X'04F'
Explanation	<ul style="list-style-type: none"> • Error during DB2 normal operation 	<ul style="list-style-type: none"> • Severe error; continued operation may jeopardize data integrity
System action	<ul style="list-style-type: none"> • Internal DB2 task is abended • Connected user task is abended 	<ul style="list-style-type: none"> • The entire DB2 subsystem is abended • User task with an active DB2 connection may be abnormally terminated with an X'04F' • Possible MEMTERM (memory termination) of connected allied address space

Table 1. Abend Completion Codes (continued)

	X'04E'	X'04F'
Diagnostic information	<ul style="list-style-type: none"> • SVC dump • SYS1.LOGREC entries • VRA data entries 	<ul style="list-style-type: none"> • SYS1.LOGREC entries • VRA data entries
Associated reason codes	<ul style="list-style-type: none"> • DB2 abend reason code • Associated MVS system codes 	<ul style="list-style-type: none"> • Subsystem termination reason code • MVS system completion codes and X'04E' codes that precede the X'04F' abend
Location of accompanying codes	<ul style="list-style-type: none"> • SVC dump title • Message DSNW050I • Register 15 of SDWA section "General Purpose Registers at Time of Error" • SYS1.LOGREC entries • VRA data entries 	<ul style="list-style-type: none"> • SYS1.LOGREC entries • VRA data entries • Message DSNV086E, which is sent to MVS system operator

DB2 diagnostic information

DB2's functional recovery routines use MVS services to provide diagnostic information for assistance in problem determination.

The following MVS services provide diagnostic information:

- SVC dumps
The DB2 abend completion code X'04E' uses the MVS SDUMP service to create SVC dumps. The content and storage areas associated with these dumps vary depending on the specific error and the state of the DB2 subsystem at the time the error.
- SYS1.LOGREC entries
Entries are requested in the SYS1.LOGREC data set at the time of the error using the MVS SETRP service. The following are also recorded in SYS1.LOGREC:
 - Subsystem abnormal terminations
 - Secondary abends occurring in a recovery routine
 - Recording requests from recovery routines percolated to by the recovery termination manager.
- Variable recording area (VRA) data
Data entries are added to the VRA of the SDWA by using an MVS VRA defined key. VRA data includes a series of diagnostic data entries common to both DB2 abend completion codes. Additional information is provided by the invoking subcomponent recovery routine during initial error processing or recovery termination manager percolation.

MVS abends resulting from DB2 operation

During DB2 operation, an abend can occur with an MVS system completion code. If you receive an MVS abend during DB2 operation, refer to the appropriate MVS publication.

Summary of changes

This edition adds and modifies codes to support DB2 UDB for z/OS Version 8. It also incorporates technical corrections and changes made to previously published information. This book, along with *DB2 Messages* (GC18-9602), replaces the Version 8 *DB2 Messages and Codes* (GC18-7422).

For specific information about new, changed and deleted codes for Version 8, see Appendix E, "New, changed, and deleted codes," on page 769.

Using LookAt to obtain message explanations

LookAt is an online facility that displays explanations for most messages that you encounter, and for some system abends and codes.

You can use LookAt:

- From the Internet at:
`www.ibm.com/eserver/zseries/zos/bkserv/lookat/`
- From anywhere in z/OS where you can access a TSO/E command line (for example, a TSO/E prompt, ISPF, or z/OS UNIX System Services running OMVS). To use LookAt as a TSO/E command, LookAt must be installed on your host system. Obtain the LookAt code for TSO/E from a disk on your z/OS Collection (SK3T-4269) or from the LookAt ftp site:
`ftp.software.ibm.com/ps/products/ibmreader/tools/lookat/ZOS/`
- From your Palm VIIx personal data assistant (PDA). To use LookAt from your Palm VIIx PDA, LookAt must be installed on the PDA. Obtain the LookAt code from a disk on your z/OS Collection (SK3T-4269) or from the LookAt ftp site:
`ftp.software.ibm.com/ps/products/ibmreader/tools/lookat/PALM/`

Terminology and citations

In this information, DB2 Universal Database™ for z/OS® is referred to as "DB2 UDB for z/OS." In cases where the context makes the meaning clear, DB2 UDB for z/OS is referred to as "DB2®." When this information refers to titles of books in this library, a short title is used. (For example, "See *DB2 SQL Reference*" is a citation to *IBM® DB2 Universal Database for z/OS SQL Reference*.)

When referring to a DB2 product other than DB2 UDB for z/OS, this information uses the product's full name to avoid ambiguity.

The following terms are used as indicated:

DB2 Represents either the DB2 licensed program or a particular DB2 subsystem.

OMEGAMON

Refers to any of the following products:

- IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS
- IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS
- IBM DB2 Performance Expert for Multiplatforms and Workgroups
- IBM DB2 Buffer Pool Analyzer for z/OS

C, C++, and C language

Represent the C or C++ programming language.

CICS® Represents CICS Transaction Server for z/OS or CICS Transaction Server for OS/390®.

IMS™ Represents the IMS Database Manager or IMS Transaction Manager.

MVS™
Represents the MVS element of the z/OS operating system, which is equivalent to the Base Control Program (BCP) component of the z/OS operating system.

RACF®
Represents the functions that are provided by the RACF component of the z/OS Security Server.

Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products. The major accessibility features in z/OS products, including DB2 UDB for z/OS, enable users to:

- Use assistive technologies such as screen reader and screen magnifier software
- Operate specific or equivalent features by using only a keyboard
- Customize display attributes such as color, contrast, and font size

Assistive technology products, such as screen readers, function with the DB2 UDB for z/OS user interfaces. Consult the documentation for the assistive technology products for specific information when you use assistive technology to access these interfaces.

Online documentation for Version 8 of DB2 UDB for z/OS is available in the Information management software for z/OS solutions information center, which is an accessible format when used with assistive technologies such as screen reader or screen magnifier software. The Information management software for z/OS solutions information center is available at the following Web site:
<http://publib.boulder.ibm.com/infocenter/dzichelp>

How to send your comments

Your feedback helps IBM to provide quality information. Please send any comments that you have about this book or other DB2 UDB for z/OS documentation. You can use the following methods to provide comments:

- Send your comments by e-mail to db2pubs@vnet.ibm.com and include the name of the product, the version number of the product, and the number of the book. If you are commenting on specific text, please list the location of the text (for example, a chapter and section title, page number, or a help topic title).
- You can also send comments from the Web. Visit the library Web site at:

www.ibm.com/software/db2zos/library.html

This Web site has a feedback page that you can use to send comments.

- Print and fill out the reader comment form located at the back of this book. You can give the completed form to your local IBM branch office or IBM representative, or you can send it to the address printed on the reader comment form.

Part 2. SQL return codes

This section describes the elements of SQL return codes and lists the successful and error SQL return codes.

This section contains information about the following topics:

- Chapter 2, "Introduction," on page 11
- Chapter 3, "Successful SQL codes," on page 13
- Chapter 4, "Error SQL codes," on page 29

Chapter 2. Introduction

When DB2 executes an SQL statement, it returns information about the statement execution. This information includes the SQL return code (SQLCODE) and the SQLSTATE, which indicate whether statement execution was successful.

An application program that contains executable SQL statements must do one of the following things:

- Declare SQLCODE and SQLSTATE (SQLCOD and SQLSTA in Fortran) as stand-alone host variables. If you specify the STDSQL(YES) precompiler or SQL statement coprocessor option, these host variables receive the return codes, and you should not include an SQLCA in your program.
- Provide a structure named SQLCA. The SQLCA includes the SQLCODE and SQLSTATE, in addition to other status information. You can provide an SQLCA by using the INCLUDE SQLCA statement. You can call the DSNTIAR sample subroutine from your application program to format the contents of the SQLCA, or you can retrieve fields from the SQLCA yourself.

For more information about the SQLCA, refer to Appendix F of *DB2 SQL Reference*. For more information about DSNTIAR, refer to Part 2 of *DB2 Application Programming and SQL Guide*.

In this section, the italicized phrases in the SQL return code message text corresponds to the tokens that are returned in the SQLERRMC field of the SQLCA. If DB2 returns several tokens, they appear sequentially in SQLERRMC in the order that they appear in the message text.

This section also has information about the following topics:

“SQLCODE”
“SQLSTATE”

SQLCODE

Regardless of whether the application program provides an SQLCA or a stand-alone variable, SQLCODE is set by DB2 after each SQL statement is executed. DB2 conforms to the ISO/ANSI SQL standard as follows:

- If SQLCODE = 0, execution was successful.
- If SQLCODE > 0, execution was successful with a warning.
- If SQLCODE < 0, execution was not successful.
- SQLCODE = 100, “no data” was found. For example, a FETCH statement returned no data because the cursor was positioned after the last row of the result table.

SQLSTATE

SQLSTATE is also set by DB2 after the execution of each SQL statement. Thus, application programs can check the execution of SQL statements by testing SQLSTATE instead of SQLCODE. SQLSTATE (SQLSTT in FORTRAN) is a 5-byte character string variable in the SQLCA.

SQLSTATE provides application programs with common codes for common error conditions (the values of SQLSTATE are product-specific only if the error or warning is product-specific). Furthermore, SQLSTATE is designed so that application programs can test for specific errors or classes of errors. The coding scheme is the same for all IBM relational database products. See Appendix D, "SQLSTATE values - common error codes," on page 745 for more information and a complete list of the possible values of SQLSTATE.

Chapter 3. Successful SQL codes

000 SUCCESSFUL EXECUTION

Explanation: Unqualified successful execution or successful execution with one or more warnings. If SQLWARN0 is blank, there are no warnings. If SQLWARN0 = W, at least one of the other warning indicators in the SQLCA has been set to indicate a warning condition. For example, SQLWARN1 is used to indicate that a value of a string column was truncated when assigned to a host variable. SQLWARNx fields are described in Appendix D of *DB2 SQL Reference*.

SQLSTATE: 00000 for unqualified successful execution

SQLSTATE: 01ddd for successful execution with warning 'ddd'.

+012 THE UNQUALIFIED COLUMN NAME *column-name* WAS INTERPRETED AS A CORRELATED REFERENCE

Explanation: The column name does not identify a column of a table or view in the FROM clause of the subquery. However, it does identify a column of a table or view in a FROM clause at a higher level in the statement.

System action: The column name is interpreted as a correlated reference.

Programmer response: If DB2's interpretation of the column name was not what you intended, rewrite the SQL statement and submit it again. If you intend the column name to refer to a table named at a higher level, we advise rewriting the statement anyway, using a table name or correlation name as a qualifier for the column name. The unqualified column name could be interpreted differently if you do a rebind after altering one of the tables to which you refer.

SQLSTATE: 01545

+098 A DYNAMIC SQL STATEMENT ENDS WITH A SEMICOLON.

Explanation: The statement string of a PREPARE or EXECUTE IMMEDIATE statement is a valid dynamic SQL statement, but it ends with a semicolon.

System action: The semicolon and any subsequent text are ignored.

Programmer response: Check that the semicolon is being used as a statement terminator.

SQLSTATE: 01568

+100 ROW NOT FOUND FOR FETCH, UPDATE OR DELETE, OR THE RESULT OF A QUERY IS AN EMPTY TABLE

Explanation: One of the following conditions occurred:

- No row met the search conditions specified in an UPDATE or DELETE statement.
- The result of a SELECT INTO statement was an empty table.
- The result of the subselect of an INSERT statement is empty.
- A FETCH statement was executed when the cursor was positioned after the last row of the result table.

When a SELECT statement is executed using SPUIFI, this SQLCODE indicates normal completion.

This SQLCODE is also issued when LOB data cannot be returned. This situation can occur when an application is running with isolation level UR and another application has locked the LOB table space.

System action: No data was retrieved, updated, or deleted.

SQLSTATE: 02000

+110 SQL UPDATE TO A DATA CAPTURE TABLE NOT SIGNALLED TO ORIGINATING SUBSYSTEM

Explanation: DataPropagator (DPropNR) exit routine issued an SQL INSERT, UPDATE, or DELETE statement to a table defined with DATA CAPTURE CHANGES. Since data capture is already in progress, notification is not sent back to the originating IMS subsystem.

System action: DB2 changes the data and records the change in the log. DB2 does not notify DPropNR's exit routine of the change, because doing so might cause the same change to be made again.

SQLSTATE: 01561

+111 THE SUBPAGES OPTION IS NOT SUPPORTED FOR TYPE 2 INDEXES

Explanation: You cannot use the SUBPAGES option for type 2 indexes.

System action: The option is ignored and processing continues.

Programmer response: Remove the SUBPAGES option to get rid of the warning.

SQLSTATE: 01590

+117 THE NUMBER OF INSERT VALUES IS NOT THE SAME AS THE NUMBER OF OBJECT COLUMNS

Explanation: The number of insert values in the value list of the INSERT statement is not the same as the number of object columns specified.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, specify one and only one value for each of the specified object columns.

SQLSTATE: 01525

+162 TABLESPACE *database-name.tablespace-name* HAS BEEN PLACED IN CHECK PENDING

Explanation: The indicated table space is in check pending status because the ALTER TABLE statement was used to specify a referential constraint or a check constraint (while special register CURRENT RULES = 'DB2') on a populated table. The table space is not generally available until the check pending status is removed from the table space.

System action: The table space was placed in check pending status.

Programmer response: Run the CHECK DATA utility. The enforcement of the referential constraint or the check constraint is deferred until the CHECK DATA utility is run.

SQLSTATE: 01514

+203 THE QUALIFIED COLUMN NAME *column-name* WAS RESOLVED USING A NON-UNIQUE OR UNEXPOSED NAME

Explanation: The table designator selected to resolve a qualified column name is one of the following:

- An unexposed name
- An exposed name that has an exposed duplicate in the same FROM clause
- An exposed name that has an unexposed duplicate which appears before the selected name in the ordered list of names to which the qualifier is compared

Therefore, the statement does not conform to the guidelines for using only unique exposed names as qualifiers or it is possible that the column reference was not resolved to the intended instance of the table or view.

System action: DB2 uses the selected name to resolve the reference.

Programmer response: If DB2's resolution of the qualifier was not what you intended, rewrite the SQL statement and submit it again. The rules used to resolve column name qualifiers are given in Chapter 2 of *DB2 SQL Reference*.

SQLSTATE: 01552

+204 *name* IS AN UNDEFINED NAME

Explanation: The object identified by 'name' is not defined in the DB2 subsystem. This return code can be generated for any type of DB2 object.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, determine that the object name was correctly specified in the SQL statement (including any required qualifiers). If so, ensure that the object exists in the system before resubmitting the statement.

SQLSTATE: 01532

+206 *column-name* IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, OR ANY TABLE IDENTIFIED IN A FROM CLAUSE

Explanation: This return code is used to report one of these errors:

- In the case of an INSERT or UPDATE statement, the specified column is not a column of the table or view that was specified as the object of the insert or update.
- In the case a SELECT or DELETE statement, the specified column is not a column of any of the tables or views identified in a FROM clause in the statement.
- There is a correlated reference in GROUP BY.
- There is an unresolved qualified reference in HAVING.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, verify that the column and table names are specified correctly in the SQL statement. In the case of a SELECT statement, check to be sure that all of the required tables were named in the FROM clause.

SQLSTATE: 01533

+218 THE SQL STATEMENT REFERENCING A REMOTE OBJECT CANNOT BE EXPLAINED

Explanation: The user has used EXPLAIN(YES) on the bind subcommand to bind an application which has SQL statement referencing a remote object or the user has a static EXPLAIN SQL statement which references a remote object in the application program. EXPLAIN on a remote object is not supported by DB2.

It is issued at BIND time, and only with VALIDATE(RUN).

System action: The plan or package will be bound successfully, but no information will be filled in the user's PLAN-TABLE for the SQL statement referencing a remote object. An SQLCODE -512 will be issued at run time if the EXPLAIN statement is found to explain a remote object.

SQLSTATE: 01537

+219 THE REQUIRED EXPLANATION TABLE *table-name* DOES NOT EXIST

Explanation: The EXPLAIN statement assumes the existence of the explanation table and it is not defined in the DB2 subsystem as a base table. Refer to Chapter 5 of *DB2 SQL Reference* for more information.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, determine whether the required explanation table does exist. If not, create the required table.

SQLSTATE: 01532

+220 THE COLUMN *column-name* IN EXPLANATION TABLE *table-name* IS NOT DEFINED PROPERLY

Explanation: An error occurred during the insertion of a row into the explanation table. The table is improperly defined for the following reasons:

- A column is missing.
- Columns are defined in the wrong order.
- The table contains an extra column.
- A column description is invalid because of its name, data type, length, or null attributes.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, correct the definition of the

required explanation table. Refer to Chapter 5 of *DB2 SQL Reference* for information about defining an explanation table.

SQLSTATE: 01546

+222 HOLE DETECTED USING CURSOR *cursor-name*

Explanation: A *delete hole* or an *update hole* has been detected while processing a FETCH for cursor *cursor-name*. With a SENSITIVE STATIC cursor, a delete hole occurs when DB2 tries to refetch a row from the database for a cursor and finds that the corresponding row of the underlying table has been deleted. An update hole occurs when DB2 tries to refetch a row from the database for a cursor and finds that the corresponding row of the underlying table no longer satisfies the search condition.

cursor-name

Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed, and no data is fetched. The cursor is repositioned on the hole.

Programmer response: Correct the application program to handle this situation, or change isolation levels so the base row cannot be deleted during the cursor operation.

SQLSTATE: 02502

+231 CURRENT POSITION OF CURSOR *cursor-name* IS NOT VALID FOR FETCH OF THE CURRENT ROW

Explanation: The cursor was not positioned on a row, and either FETCH CURRENT or FETCH RELATIVE 0 was specified. No data was fetched.

cursor-name

Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed. The cursor position is unchanged.

Programmer response: Correct the application program to establish position before issuing this FETCH statement.

SQLSTATE: 02000

+236 SQLDA INCLUDES *integer1* SQLVAR ENTRIES, BUT *integer2* ARE REQUIRED FOR *integer3* COLUMNS

Explanation: The value of the SQLN field of the SQLDA should be at least as large as the number of columns being described. *integer3* is the number of columns being described.

In the case that USING BOTH has been specified, twice as many SQLVAR entries are needed as the number of columns being described.

The number of SQLVAR entries that are needed to return all of the information about the columns is *integer2*.

Attention: In the case of DESCRIBE INPUT, each reference to *column* would actually be *parameter*.

System action: The SQLDAID 7th byte has been set to "on" with a value of 2 indicating that 2 SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries.

Programmer response: Increase the value of the SQLN field in the SQLDA to the value indicated in the message (making sure the SQLDA is large enough to support that amount) and resubmit the statement.

SQLSTATE: 01005

+237 **SQLDA INCLUDES *integer1* SQLVAR ENTRIES, BUT *integer2* ARE REQUIRED BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A DISTINCT TYPE**

Explanation: Given that at least one of the columns being described is a distinct type, space should be provided for the *extended* SQLVAR entries in addition to the *base* SQLVAR entries. The value of SQLN, *integer1*, indicates that there are not enough SQLVAR entries for the base and extended SQLVAR entries.

The total number of SQLVAR entries that are required depends on whether USING BOTH was specified (*n* is the number of columns being described):

- With USING BOTH, space should be allocated for $3n$ SQLVAR entries.
- Otherwise, space should be allocated for $2n$ SQLVAR entries.

The number of SQLVAR entries that are needed to return all of the information about the columns is *integer2*.

Attention: In the case of DESCRIBE INPUT, each reference to *column* would actually be *parameter*.

System action: DB2 has set the SQLDAID 7th byte flag "on" because sufficient space was not provided for the *extended* SQLVAR entries. The value of the 7th byte flag indicates how many SQLVAR entries are needed for each column. Additionally, because there were enough SQLVAR entries for the *base* SQLVARs, DB2 has set the fields of the *base* SQLVAR entries. However, DB2 has not set any *extended* SQLVAR entries.

Programmer response: If there is no need for the additional information about the distinct type(s), then no action is required unless USING BOTH was specified (in which case additional SQLVAR entries

must be provided for the labels).

If the distinct type information is needed, the value of the SQLN field in the SQLDA should be increased to *integer2* (after making sure that the SQLDA is large enough to support that amount) and the statement should be resubmitted.

SQLSTATE: 01594

+238 **SQLDA INCLUDES *integer1* SQLVAR ENTRIES, BUT *integer2* SQLVAR ENTRIES ARE NEEDED FOR *integer3* COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A LOB**

Explanation: Given that at least one the columns being described is a LOB, space must be provided for the *extended* SQLVAR entries in addition to the *base* SQLVAR entries. The value of SQLN, *integer1*, indicates that there are not enough SQLVAR entries for the base and extended SQLVAR entries. One or more of the columns being described may be a distinct type.

The total number of SQLVAR entries that are required depends on whether USING BOTH was specified or not (*n* is the number of columns being described which is *integer3*), and whether the columns include any distinct types:

- With USING BOTH, and one or more distinct types, space should be allocated for $3n$ SQLVAR entries.
- Otherwise, space should be allocated for $2n$ SQLVAR entries.

The number of SQLVAR entries that are needed to return all of the information about the columns is *integer2*.

Important: In the case of DESCRIBE INPUT, each reference to *column* would actually be *parameter*.

System action: DB2 has set the SQLDAID 7th byte flag "on" because sufficient space was not provided for the *extended* SQLVAR entries. The value of the 7th byte flag indicates how many SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries.

Programmer response: Increase the value of the SQLN field in the SQLDA to *integer2* (after making sure that the SQLDA is large enough to support that amount) and resubmit the statement.

SQLSTATE: 01005

+239 **SQLDA INCLUDES *integer1* SQLVAR ENTRIES, BUT *integer2* ARE REQUIRED FOR *integer3* COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A DISTINCT TYPE**

Explanation: Given that at least one of the columns

being described is a distinct type, space should be provided for the *extended* SQLVAR entries in addition to the *base* SQLVAR entries. The value of SQLN, *integer1*, indicates that there are not enough SQLVAR entries for the base and extended SQLVAR entries.

The total number of SQLVAR entries that are required depends on whether USING BOTH was specified or not (*n* is the number of columns being described which is *integer3*),

- With USING BOTH, space should be allocated for $3n$ SQLVAR entries.
- Otherwise, space should be allocated for $2n$ SQLVAR entries.

The number of SQLVAR entries that are needed to return all of the information about the columns is *integer2*.

Note: in the case of DESCRIBE INPUT, each reference to *column* would actually be *parameter*.

System action: DB2 has set the SQLDAID 7th byte flag "on" because sufficient space was not provided for the *extended* SQLVAR entries. The value of the 7th byte flag indicates how many SQLVAR entries are needed for each column. DB2 has not set any SQLVAR entries. :elq.

Programmer response: If the distinct type information is needed, the value of the SQLN field in the SQLDA should be increased to *integer2* (after making sure the SQLDA is large enough to support that amount) and the statement should be resubmitted.

If there is no need for the additional information about the distinct type(s) in the result set, then it is possible to resubmit the statement only providing enough SQLVAR entries to accommodate the number of columns being described (i.e. provide the necessary number of *base* SQL entries).

SQLSTATE: 01005

+252 **A NON-ATOMIC *statement* STATEMENT SUCCESSFULLY PROCESSED ALL REQUESTED ROWS, WITH ONE OR MORE WARNING CONDITIONS**

Explanation: A non-atomic *statement* statement successfully processed multiple rows of data. However, one or more warning conditions occurred. Use GET DIAGNOSTICS to obtain information about the warning conditions that occurred.

System action: The statement was processed.

Programmer response: Analyze the warning conditions to determine whether the statement should be rolled back or not.

SQLSTATE: 01659

+304 **A VALUE WITH DATA TYPE *data-type1* CANNOT BE ASSIGNED TO A HOST VARIABLE BECAUSE THE VALUE IS NOT WITHIN THE RANGE OF THE HOST VARIABLE IN POSITION *position-number* WITH DATA TYPE *data-type2***

Explanation: A FETCH or SELECT into a host variable list or structure, position number *position-number* failed because the host variable having data type *data-type2* was not large enough to hold the retrieved value having data type *data-type1*.

System action: The FETCH or SELECT could not return the data for the indicated SELECT item, the indicator variable is set to negative two (-2) to indicate a null value returned. Processing continues.

Programmer response: Verify that table definitions are current, and that the host variable has the proper data type. See the explanation for SQLCODE -405 for ranges of SQL data types.

SQLSTATE: 01515

+331 **THE NULL VALUE HAS BEEN ASSIGNED TO A HOST VARIABLE OR PARAMETER BECAUSE THE STRING CANNOT BE CONVERTED FROM *source-ccsid* TO *target-ccsid*. REASON *reason-code*, POSITION *position-number***

Explanation: A string had to be converted from *source-ccsid* to *target-ccsid* and an error occurred during the conversion. The *position-number*, if provided (non-zero), is the ordinality of the host variable or parameter in the SQLDA. See the description of SQLCODE -331 for further information including the meaning of the *reason-code*.

System action: The host variable is unchanged and its indicator variable is set to -2 to indicate that a null value is returned. Execution of the statement continues as if the translation error had not occurred.

SQLSTATE: 01520

+335 **DB2 CONVERTED A HOST VARIABLE, PARAMETER, OR COLUMN NUMBER *var-num* *var-name-or-num* TO COLUMN NAME, HOST VARIABLE, OR EXPRESSION NUMBER *col-name-or-num* FROM *from-ccsid* TO *to-ccsid*, AND RESULTING IN SUBSTITUTION CHARACTERS.**

Explanation: A translation error occurred during the conversion of a string to a different coded character set. One or more substitution characters have been placed in the string during the conversion process.

| **System action:** DB2 processes the statement successfully.

| **Programmer response:** This warning can occur in two situations:

- | • If trace for IFCID 136 or 168 is not active, DB2 processes the SQL statement, but used substitution characters instead one or more characters as a result of character conversion from *from ccsid* to *to-ccsid*. If substitution is acceptable, no action is necessary. If substitution is not acceptable, issue a ROLLBACK. Ensure that data being provided to DB2 is convertible from *from ccsid* to *to-ccsid* without data loss.
- | • If trace for IFCID 136 or 168 is active, and the *to-ccsid* token is an EBCDIC CCSID, and system parameter UIFCIDS is OFF, then this warning is caused by the conversion to EBCDIC CCSID for IFCID trace record. Use GET DIAGNOSTICS to determine if the original SQL string had any other warnings associated with it. If GET DIAGNOSTICS returns no other warnings, no action is required.

| **SQLSTATE:** 01517

| **+347 THE RECURSIVE COMMON TABLE EXPRESSION *name* MAY CONTAIN AN INFINITE LOOP**

| **Explanation:** The recursive common table expression called *name* may not complete. This warning is based on not finding specific syntax as part of the iterative portion of the recursive common table expression. The expected syntax includes:

- | • incrementing an INTEGER column in the iterative select list by 1.
- | • a predicate in the where clause of the iterative portion of the form "counter_col < constant" or "counter_col < :hostvar".

| The absence of this syntax in the recursive common table expression may result in an infinite loop. The data or some other characteristic of the recursive common table expression may allow the successful completion of the statement anyway.

| **System action:** The statement cannot be executed.

| **Programmer response:** To prevent an infinite loop, include the expected syntax as described.

| **SQLSTATE:** 01605

| **+354 A ROWSET FETCH STATEMENT MAY HAVE RETURNED ONE OR MORE ROWS OF DATA. HOWEVER, ONE OR MORE WARNING OR ERROR CONDITIONS WERE ALSO ENCOUNTERED. USE THE GET DIAGNOSTICS STATEMENT FOR MORE INFORMATION REGARDING THE CONDITIONS THAT WERE ENCOUNTERED**

| **Explanation:** A rowset FETCH statement encountered one or more warning or error conditions. Use the GET DIAGNOSTICS statement to obtain information about the conditions that occurred, and whether data was returned. It is possible that one or more rows of data were returned. In cases where the row information returned for the row that encountered the condition is incomplete, do not use the data for the row that encountered the condition, such as displaying or printing the data.

| **System action:** DB2 process the statement successfully, but with a warning that the fetching of some rows might have encountered warnings or errors.

| **Programmer response:** Analyze the conditions to determine whether follow-up actions are needed. The GET DIAGNOSTICS statement can be used to determine what additional actions might be necessary.

| **Attention:** It is also possible that an end of data condition was detected. SQLERRD3 and GET DIAGNOSTICS can be used to determine if all the requested rows were fetched or if a partial rowset was returned.

| **SQLSTATE:** 01668

| **+394 PART OR ALL USER SPECIFIED OPTIMIZATION HINTS USED DURING ACCESS PATH SELECTION**

| **Explanation:** Part or all user specified optimization hints are used.

| **System action:** Processing continues normally.

| **Programmer response:** Ensure that the access path is correct and produces the correct results.

| **SQLSTATE:** 01629

| **+395 USER SPECIFIED OPTIMIZATION HINTS ARE INVALID (REASON CODE = *reason-code*). THE OPTIMIZATION HINTS ARE IGNORED.**

| **Explanation:** The optimization hints specified for this query are invalid. *Areason-code* in the following table can help identify why the hints were invalid:

reason-code	Description
-------------	-------------

2 TABNO is invalid.
 3 TNAME is not specified.
 4 TNAME is ambiguous.
 5 TABNO doesn't agree with TNAME.
 6 QBLOCKNO doesn't agree with TNAME.
 7 PAGE_RANGE is invalid.
 8 PREFETCH is invalid.
 9 METHOD is invalid.
 10 SORTN_JOIN is invalid.
 11 SORTC_JOIN is invalid.
 12 ACESSTYPE is invalid.
 13 ACCESSCREATOR or ACCESSNAME is invalid.
 15 Specified index cannot be used as requested.
 16 Multi-index access cannot be done.
 17 Invalid ACESSTYPE combination.
 18 METHOD specified for first table accessed.
 19 Nested loop join cannot be done as requested.
 20 Merge join cannot be done as requested.
 21 Hybrid join cannot be done as requested.
 22 PARALLELISM_MODE requested cannot be done.
 23 PARALLELISM_MODE is invalid.
 24 ACCESS_DEGREE is invalid.
 25 JOIN_DEGREE is invalid.
 26 A table is missing.
 27 A table is redundant.
 28 PRIMARY_ACESSTYPE is invalid.
 29 ACCESS_PGROU_ID is not specified.
 30 JOIN_PGROU_ID is not specified.
 31 PARALLELISM_MODE is not specified.
 32 CREATOR or TNAME is invalid.
 33 Join sequence is incorrect.
 34 Full outer join requires merge join method.
 35 WHEN_OPTIMIZE is invalid or inconsistent.
 | 36 Number of dimensions joined before star join
 | fact table exceeds maximum number of
 | dimensions that can be joined by fact table
 | index.
 | 37 Only nested loop join is allowed on fact table
 | when join type of the fact table is 'SJ'.

| 38 Join sequence specified before the fact table
 | does not match the sequence allowed by fact
 | table index.
 | 39 Invalid plan hint values are specified.
 99 Unexpected error.

System action: The user-specified optimization hints are ignored. The access path is determined without the use of hints and processing continues normally.

Programmer response: Correct the problem with the optimization hints, or disable their use for this query.

SQLSTATE: 01628

+402 LOCATION *location* IS UNKNOWN

Explanation: A remote object is referenced and either the table SYSIBM.LOCATIONS is not defined or the referenced 'location' matches no entry in the SYSIBM.LOCATIONS.LOCATION column.

System action: For the CREATE ALIAS statement, the alias is created. For binding a plan or package with the VALIDATE(RUN) option, the plan or package is created.

SQLSTATE: 01521

+403 THE LOCAL OBJECT REFERENCED BY THE CREATE ALIAS STATEMENT DOES NOT EXIST

Explanation: The local object referenced by the CREATE ALIAS statement does not exist when creating the alias.

System action: The alias is created.

SQLSTATE: 01522

+434 OPTION *keyword* IS A DEPRECATED FEATURE

Explanation: *keyword* is a deprecated feature that will not be supported in releases following DB2 Version 8. It is accepted, but continued use of this keyword is not recommended.

For indexes, use type 2 indexes rather than type 1 indexes to avoid any incompatibilities.

System action: Processing continues normally.

Programmer response: No change is required for the current release. However, you should change your SQL statement and remove this feature to prepare for future releases when this feature is not supported.

SQLSTATE: 01608

+445 **VALUE *value* HAS BEEN TRUNCATED**

Explanation: The value *value* was truncated by a cast function, which was called to transform the value in some way. This is a warning situation. The cast function is a result of

- a CAST specification
- a built-in function such as CHAR, VARCHAR, etc.
- a CAST FROM specification on the CREATE FUNCTION statement that created the function
- a user-defined function that is sourced on another function and the result needed to be transformed.

If 'value' has the 'for bit data' subtype, then the 'value' is printed as a hexadecimal string in quotes followed by an X.

System action: The value has been truncated.

Programmer response: Ensure that the output is as expected and that the truncation has not caused any unexpected consequences.

SQLSTATE: 01004

+462 **EXTERNAL FUNCTION OR PROCEDURE *name* (SPECIFIC NAME *specific-name*) HAS RETURNED A WARNING SQLSTATE, WITH DIAGNOSTIC TEXT *text***

Explanation: An SQLSTATE of the form 01Hxx was returned to DB2 by user-defined function or procedure *name*, along with message text *text*.

System action: Processing continues.

Programmer response: See your database administrator, or the author of the function or procedure to find out the meaning of the warning. The significance of the bad SQLSTATE to the invoking application can be learned from the author of the function or procedure.

SQLSTATE: 01Hxx

+464 **PROCEDURE *proc* RETURNED *num* QUERY RESULT SETS, WHICH EXCEEDS THE DEFINED LIMIT *integer***

Explanation: The stored procedure named by *proc* completed normally. However, the stored procedure exceeded the defined limit on the number of query result sets the procedure can return.

- *num* identifies the number of query result sets returned by the stored procedure.
- *integer* identifies the defined limit on the number of query result sets for the stored procedure.

Only the first *integer* query result sets are returned to the SQL program that issued the SQL CALL statement.

The possible causes are as follows:

- The stored procedure is unable to return *num* result sets due to the limit defined for the procedure.
- The stored procedure is unable to return *num* result sets due to the DRDA limitations imposed by the client. The DRDA client establishes this limit with the MAXRSLCNT DDM code point.

System action: The SQL statement is successful. The SQLWARN9 field is set to 'Z'.

SQLSTATE: 0100E

+466 **PROCEDURE *proc* RETURNED *num* QUERY RESULTS SETS**

Explanation: The stored procedure named by *proc* completed normally. The procedure returned the number of SQL query result sets specified in *num*.

System action: The SQL statement is successful. The SQLWARN9 field is set to 'Z'.

SQLSTATE: 0100C

+494 **NUMBER OF RESULT SETS IS GREATER THAN NUMBER OF LOCATORS**

Explanation: The number of result set locators specified on the ASSOCIATE LOCATORS statement is less than the number of result sets returned by the stored procedure. The first "n" result set locator values are returned, where "n" is the number of result set locator variables specified on the SQL statement.

System action: The SQL statement is successful. The SQLWARN3 field is set to 'Z'.

Programmer response: Increase the number of result set locator variables specified on the SQL statement.

SQLSTATE: 01614

+495 **ESTIMATED PROCESSOR COST OF *estimate-amount1* PROCESSOR SECONDS (*estimate-amount2* SERVICE UNITS) IN COST CATEGORY *cost-category* EXCEEDS A RESOURCE LIMIT WARNING THRESHOLD OF *limit- amount* SERVICE UNITS**

Explanation: The prepare of a dynamic INSERT, UPDATE, DELETE, or SELECT SQL statement resulted in a cost estimate that exceeded the warning threshold value specified in the resource limit specification table (RLST). This warning is also issued if DB2's cost category value was "B", and the default action specified in the RLF_CATEGORY_B column in the RLST is to issue a warning.

estimate_amount1

The cost estimate (in processor seconds) if the

prepared INSERT, UPDATE, DELETE or SELECT statement were to be executed.

estimate_amount2

The cost estimate (in service units) if the prepared INSERT, UPDATE, DELETE or SELECT statement were to be executed.

cost-category

DB2's cost-category for this SQL statement. The possible values are A or B.

limit-amount

The warning threshold (in service units) specified in the RLFASUWARN column of the RLST. If you entered any negative number for the RLFASUWARN column, the value for *limit-amount* defaults to zero.

System action: The prepare of the dynamic INSERT, UPDATE, DELETE, or SELECT statement was successful. An SQLCODE -905 might be issued if the execution of the prepared statement exceeds the ASUTIME value specified in the RLST.

Programmer response: Ensure that there is application logic to handle the warning to either allow the statement to execute or to stop the statement from being executed. If this SQLCODE was returned because the cost category value is "B", it might be that the statement is using parameter markers or that some statistics are not available for the referenced tables and columns. Make sure the administrator has run the utility RUNSTATS on the referenced tables. It might also be that UDFs will be invoked when the statement is executed, or for INSERT, UPDATE, or DELETE statements that triggers are defined on the changed table. Check the DSN_STATEMNT_TABLE or the IFCID 22 record for this statement to find the reasons this SQL statement has been put in cost category "B".

User response: If the warning is caused by an SQL statement that is consuming too much processor resource, attempt to rewrite the statement to perform more efficiently. Another option is to ask the administrator to increase the warning threshold value in the RLST.

SQLSTATE: 01616

+535 THE RESULT OF THE POSITIONED UPDATE OR DELETE MAY DEPEND ON THE ORDER OF THE ROWS

Explanation: A positioned update of a primary key or a delete from a table with a self-referencing constraint was requested.

System action: DB2 executes the UPDATE or DELETE statement and the contents of the table are changed.

SQLSTATE: 01591

+541 THE REFERENTIAL OR UNIQUE CONSTRAINT *name* HAS BEEN IGNORED BECAUSE IT IS A DUPLICATE

Explanation: A FOREIGN KEY clause uses the same key and parent table as another FOREIGN KEY clause, or a UNIQUE clause uses the same column list as another UNIQUE or PRIMARY KEY clause. In either case, the duplicate clause is ignored.

name is either the foreign key name or the unique constraint name.

System action: DB2 continues processing.

Programmer response: If the duplication is an error, correct the statement and execute it again.

SQLSTATE: 01543

+551 *auth-id* DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION *operation* ON OBJECT *object-name*

Explanation: Authorization ID *auth-id* has attempted to perform the specified *operation* on object *object-name* without having been granted the proper authority to do so. This error might also occur if the specified object does not exist, or if the object is a read-only view (for UPDATE or INSERT). Additionally, the error may occur if *auth-id* is trying to create a table or view with an authorization ID other than its own. You may create a table or view from an *auth-id* other than your own only if your authorization ID is SYSADM, DBADM, or DBCTRL.

If this error occurs while DB2 is creating or altering a table involving referential constraints, this code reports that the user does not have the necessary ALTER privilege to perform a FOREIGN KEY, DROP FOREIGN KEY, DROP PRIMARY KEY, or DROP UNIQUE operation. The *object-name* identifies the object table of the CREATE or ALTER TABLE statement, not the table for which the user lacks the ALTER privilege.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, ensure that *auth-id* has been granted the authority to perform the desired operation, that *object-name* exists, and that *auth-id* is not trying to create a table with a different authorization ID.

SQLSTATE: 01548

+552 *auth-id* **DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION** *operation*

Explanation: Authorization ID 'auth-id' has attempted to perform the specified 'operation' without having been granted the authority to do so.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, ensure that the authorization-ID has been granted the authority necessary to perform the desired operation.

SQLSTATE: 01542

+558 **THE WITH GRANT OPTION IS IGNORED**

Explanation: The GRANT statement contained one of the following situations:

- PUBLIC was within the list of 'grantee' authorization IDs.
- BINDAGENT privilege was being granted.
- ANY package privilege on collection-id.* was being granted.

The WITH GRANT option may not be used in the above situations.

System action: The offending privilege(s) in the authorization specification are granted without the GRANT option. If the grantee is PUBLIC, all the privileges in the authorization specification are granted without the GRANT option.

SQLSTATE: 01516

+561 **THE ALTER, INDEX, REFERENCES, AND TRIGGER PRIVILEGES CANNOT BE GRANTED PUBLIC AT ALL LOCATIONS**

Explanation: You specified a GRANT statement with either an ALL or ALL PRIVILEGES keyword. ALL and ALL PRIVILEGES imply the granting of ALTER, INDEX, REFERENCES, and TRIGGER privileges that cannot be granted to a remote user.

System action: DB2 executes the GRANT statement. However, it does not grant the ALTER, INDEX, REFERENCES, or TRIGGER privileges to PUBLIC*.

SQLSTATE: 01523

+562 **A GRANT OF A PRIVILEGE WAS IGNORED BECAUSE THE GRANTEE ALREADY HAS THE PRIVILEGE FROM THE GRANTOR**

Explanation: At least one of the privileges in the GRANT statement was ignored because the privilege was already granted to the grantee by the grantor.

System action: The privileges previously granted are ignored; all others are granted.

SQLSTATE: 01560

+585 **THE COLLECTION** *collection-id* **APPEARS MORE THAN ONCE WHEN SETTING THE** *special-register* **SPECIAL REGISTER**

Explanation: The SET statement for special register *special-register* includes *collection-id* more than once.

System action: Duplicates are removed from the list, and the first occurrence of *collection-id* is used. The statement is executed.

Programmer response: Verify the list that contains the duplicate. If the error is only in entering a *collection-id* incorrectly that happens to duplicate another entry, enter the *collection-id* correctly and reissue the statement. If the entry is intended to be a duplicate, no action is required.

SQLSTATE: 01625

+599 **COMPARISON FUNCTIONS ARE NOT CREATED FOR A DISTINCT TYPE BASED ON A LONG STRING DATA TYPE**

Explanation: Comparison functions are not created for a distinct type based on a long string data type (BLOB, CLOB, DBCLOB) since the corresponding function are not available for these built-in data types.

System action: The statement is processed successfully.

Programmer response: No action is required.

SQLSTATE: 01596

+610 **A CREATE/ALTER ON OBJECT** *object-name* **HAS PLACED OBJECT IN** *utility* **PENDING**

Explanation: The identified object is in one of the following states:

- REBUILD pending for an index

The index is in REBUILD PENDING status because CREATE INDEX with DEFER was specified on a populated table. The index is not generally available until the index is removed from the REBUILD pending state.

- REORG pending for a table space partition

The table space is in REORG pending because ALTER INDEX was used to change the limit key

values. The table space partition is not generally available until the REORG pending status is removed.

- REORG pending for a table space

The table space is in REORG pending because ALTER TABLE was used to add an identity column to a populated table. The table space is not generally available until the REORG pending status is removed.

System action: The object was placed in the indicated pending status.

Programmer response: The following actions may be taken:

- For REBUILD pending on an index, use the REBUILD INDEX utility to rebuild the index and remove the REBUILD pending status.
- For REORG pending on a table space partition, perform the following steps:
 1. Issue a DISPLAY DATABASE command for the table space to identify which partitions are in REORG pending.
 2. Run the REORG utility on the partitions that are in REORG pending.
- For REORG pending on a table space, run the REORG utility on the table space.

SQLSTATE: 01566

+645 WHERE NOT NULL IS IGNORED BECAUSE THE INDEX KEY CANNOT CONTAIN NULL VALUES

Explanation: The WHERE NOT NULL clause is ignored on the CREATE INDEX statement because the index key is defined on columns that cannot contain null values.

System action: The option is ignored; processing continues.

Programmer response: Remove the WHERE NOT NULL clause to get rid of the warning.

SQLSTATE: 01528

+650 THE TABLE BEING CREATED OR ALTERED CANNOT BECOME A DEPENDENT TABLE

Explanation: This table is defined with the maximum number of columns. It cannot be altered to be a dependent table later.

System action: The table is created. Check to see if the table will become a dependent table at a later time. If yes, drop and recreate the table with fewer than 750 columns.

SQLSTATE: 01538

+653 TABLE *table-name* IN PARTITIONED TABLESPACE *tspacename* IS NOT AVAILABLE BECAUSE ITS PARTITIONED INDEX HAS NOT BEEN CREATED

Explanation: An attempt has been made to insert or manipulate data in or create a view on a partitioned table (that is, a table residing in a partitioned table space) before the partitioned index for that table has been created.

A table residing in a partitioned table space cannot be referenced in any SQL manipulative statement or a CREATE VIEW statement before the partitioned index for that table has been created.

System action: A valid plan or package will be created if no errors are detected. The statement is bound dynamically on each execution of the statement.

Programmer response: For better performance, rebind the plan or package after correcting the statement. To correct the statement, verify that the correct table was specified in the statement. If so, ensure that the partitioned index for the table has been created successfully before attempting to execute any SQL manipulative statements that reference that table.

SQLSTATE: 01551

+655 STOGROUP *stogroup_name* HAS BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS. IT WILL NOT BE ALLOWED IN FUTURE RELEASES

Explanation: The CREATE/ALTER STOGROUP statement has caused the STOGROUP with 'stogroup_name' to have both specific and non-specific (**) volume Ids. This warning code is used to specify that the mixing of different types of volume Ids will not be allowed in future releases.

System action: DB2 continues processing.

Programmer response: Plan to use either specific or non-specific volume ids to avoid future release migration impact. ALTER STOGROUP may be used to drop all specific volume ids or all non-specific volume ids.

SQLSTATE: 01597

+658 THE SUBPAGES VALUE IS IGNORED FOR THE CATALOG INDEX *index-name*

Explanation: Only SUBPAGES 1 is allowed for this catalog index.

System action: The index was altered successfully using SUBPAGES 1. If you are also altering the TYPE option to a new value, the index is placed in recovery pending status.

SQLSTATE: 01600

+738 **DEFINITION CHANGE OF *object*
object_name MAY REQUIRE SIMILAR
CHANGE ON READ-ONLY SYSTEMS**

Explanation: A change was made to the definition of the specified object that may also require a similar change to any read-only shared systems.

System action: The statement is successfully executed.

Programmer response: Check the read-only shared systems that have the specified object defined, and determine if a change must be made to the object on those systems.

SQLSTATE: 01530

+799 **A SET STATEMENT REFERENCES A
SPECIAL REGISTER THAT DOES NOT
EXIST AT THE SERVER SITE**

Explanation: A DB2 server received a SET statement that it does not understand.

System action: The SET SPECIAL REGISTER request is ignored.

Programmer response: This SQLCODE can be returned to an application for any SQL statement. This SQLCODE may be masked by other negative SQLCODEs that the SQL statement receives. Processing continues at the server.

SQLSTATE: 01527

+802 **EXCEPTION ERROR *exception-type* HAS
OCCURRED DURING *operation-type*
OPERATION ON *data-type* DATA,
POSITION *position-number***

Explanation: The exception error *exception-type* occurred while doing an ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION, NEGATION, or BUILT-IN FUNCTION operation on a field whose *data-type* is DECIMAL, FLOAT, SMALLINT, or INTEGER. The error occurred while processing an arithmetic expression in the SELECT list of an outer SELECT statement, and the position in the select list is denoted by *position-number*. The possible exception types are FIXED POINT OVERFLOW, DECIMAL OVERFLOW, DIVIDE EXCEPTION, EXPONENT OVERFLOW, ZERO DIVIDE, or OUT OF RANGE. The data type displayed in the message may indicate the data type of the temporary internal copy of the data, which may differ from the actual column or literal data type due to conversions by DB2.

A fixed point overflow can occur during any arithmetic operation on either INTEGER or SMALLINT fields.

A decimal overflow exception can occur when one or more nonzero digits are lost because the destination field in any decimal operation is too short to contain the result.

A divide exception can occur on a decimal division operation when the quotient exceeds the specified data-field size. A zero divide exception occurs on any division by zero.

An exponent overflow can occur when the result characteristic of any floating-point operation exceeds 127 and the result fraction is not zero, i.e. the magnitude of the result exceeds approximately 7.2E+75.

Any of the exceptions/overflows can occur during the processing of a built-in function. If the *operation-type* is FUNCTION then the error occurred while processing an input, intermediate, or final value. The cause could be that the value of a parameter is *out of range*.

Attention: Parts of *exception-type*, *data-type*, *operation-type*, and *position-number* might or might not be returned in SQLCA, depending upon when the error was detected.

System action: For each expression in error the indicator variable is set to negative two (-2) to indicate a null value returned. The data variable is unchanged. Execution of the statement continues with all nonerror columns and expressions of the outer SELECT list being returned. If the statement is cursor controlled then the CURSOR will remain open.

Programmer response: Examine the expression for which the warning occurred to see if the cause (or the likely cause) of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was being processed at the time the error occurred.

See the explanation of SQLCODE -405 for allowed ranges of numeric data types.

SQLSTATE: 01519

+806 **BIND ISOLATION LEVEL RR
CONFLICTS WITH TABLESPACE
LOCKSIZE PAGE OR LOCKSIZE ROW
AND LOCKMAX 0**

Explanation: The specification of isolation level RR is incompatible with the LOCKSIZE PAGE or LOCKSIZE ROW and LOCKMAX 0 specification for a table space accessed by the application. Table space locking is used to protect the integrity of the application.

System action: A valid package/plan is created if no errors are detected. Table space locking is used. RR isolation level is preserved.

Programmer response: If you do not want table space locking, use isolation level UR, CS, or RS.

SQLSTATE: 01553

**+807 THE RESULT OF DECIMAL
MULTIPLICATION MAY CAUSE
OVERFLOW**

Explanation: An arithmetic expression contains a decimal multiplication that may cause an overflow condition when the statement is executed. The problem may be corrected by restructuring the arithmetic expression so that decimal multiplication precedes decimal division or by changing the precision and scale of the operands in the arithmetic expression. Refer to Chapter 2 of *DB2 SQL Reference* for the precision and scale of the decimal multiplication and division results.

System action: A valid package will be created if no errors are detected.

SQLSTATE: 01554

**+863 THE CONNECTION WAS
SUCCESSFUL BUT ONLY SBCS WILL
BE SUPPORTED**

Explanation: The target AS supports only the DB2 SBCS CCSID. The DB2 Mixed CCSID or GRAPHIC CCSID or both are not supported by the target AS. DB2 character data sent to the target AS must be restricted to SBCS.

System action: The CONNECT statement is successful. The release level of the target AS has been placed into the SQLERRP field of the SQLCA (see *DB2 SQL Reference* for the CONNECT statement).

Programmer response: Do not execute any SQL statements which pass either mixed data or graphic data as input host variables.

SQLSTATE: 01539

**+883 ROLLBACK TO SAVEPOINT
OCCURED WHEN THERE WERE
OPERATIONS THAT CANNOT BE
UNDONE, OR AN OPERATION THAT
CANNOT BE UNDONE OCCURRED
WHEN THERE WAS A SAVEPOINT
OUTSTANDING**

Explanation: The operations that are referred to are updates (inserts into or deletes from) a created global temporary table. If this SQL warning code is received as the result of a ROLLBACK TO SAVEPOINT statement, the rollback is performed; however, the changes that were made to the temporary table are not undone. If this SQL warning code is received as the result of an operation to a created global temporary table, the operation is performed; however, be advised that a savepoint is outstanding, and the update will not be backed out if a rollback to the savepoint is performed.

System action: The SQL statement is processed.

Programmer response: Verify that this is what you meant.

SQLSTATE: 01640

**+20002 THE *clause* SPECIFICATION IS
IGNORED FOR OBJECT *object-name***

Explanation: This message is issued in response to a *clause* specification that was ignored on a CREATE or ALTER statement:

- GBPCACHE: The GBPCACHE clause specified conflicts with the group buffer pool specification GBPCACHE NO.
- PADDED: The PADDED clause was specified on a CREATE or ALTER of index *object-name* that does not have any varying-length character or graphic columns in the index key. The PADDED attribute does not apply in this case and is ignored.
- NOT PADDED: The NOT PADDED clause was specified on a CREATE or ALTER of index *object-name* that does not have any varying-length character or graphic columns in the index key. The NOT PADDED attribute does not apply in this case and is ignored.

System action: The statement is processed.

User response: If you want to use one of the GBPCACHE options other than NONE, you must alter the table space or index to use a group buffer pool that is defined with GBPCACHE YES. For index padding, no action is necessary as the PADDED or NOT PADDED clause was ignored.

To stop receiving this message, remove the PADDED or NOT PADDED clause from the CREATE or ALTER index statement.

SQLSTATE: 01624

**+20007 USE OF OPTIMIZATION HINTS IS
DISALLOWED BY A DB2 SUBSYSTEM
PARAMETER. THE SPECIAL
REGISTER 'OPTIMIZATION HINT' IS
SET TO AN EMPTY STRING.**

Explanation: DB2 is not enabled to use optimization hints. The special register OPTIMIZATION HINT is set to an empty string.

System action: The user-specified optimization hints are ignored. The access path is determined without the use of hints and processing continues normally.

Programmer response: Enable the use of OPTIMIZATION HINT by changing the value of OPTIMIZATION HINTS on the DB2 Installation panel DSNTIP4.

If, after further consideration, you do not want to use an OPTIMIZATION HINT, use the SET CURRENT OPTIMIZATION HINT statement to disable the use of optimization hints.

| Specify an empty string, or a string of blanks, on a SET
| CURRENT OPTIMIZATION HINT statement to cause
| DB2 to use normal optimization techniques and ignore
| optimization hints.

SQLSTATE: 01602

**+20122 DEFINE NO OPTION IS NOT
APPLICABLE IN THE CONTEXT
SPECIFIED**

Explanation: The DEFINE NO option was specified, however it is not applicable in the context specified. DEFINE NO was specified in one of the following situations:

- a CREATE INDEX statement that included the VCAT clause
- a CREATE INDEX statement for a non-empty table
- a CREATE LOB TABLESPACE statement
- a CREATE TABLESPACE statement that included the VCAT clause

System action: DB2 ignored the DEFINE NO option and created the object with the DEFINE YES option instead.

SQLSTATE: 01644

**+20237 FETCH PRIOR ROWSET FOR CURSOR
cursor-name RETURNED A PARTIAL
ROWSET**

Explanation: A FETCH PRIOR ROWSET statement was issued, but there were not enough rows prior to the current cursor position to reposition the cursor on a full rowset. The cursor has been positioned on a partial rowset. If a target was specified, then data has only been returned for the number of rows that were actually fetched for the partial rowset.

System action: The cursor is positioned on a partial rowset.

Programmer response: Analyze the situation to determine if anything should be rolled back.

SQLSTATE: 02504

**+20141 TRUNCATION OF VALUE WITH
LENGTH *length* OCCURRED FOR
*lv-or-parm-number***

Explanation: A value that was assigned to a host variable or parameter was truncated. However, the length of the value that was truncated is too large to be returned in the indicator variable. This situation can occur when truncation occurs on assignment of:

- a value to a parameter of a remote stored procedure if the value being truncated is greater than 127 bytes. In this case, the indicator variable will contain a value of 127.

- a LOB value to a host variable if the value being truncated is greater than 32K bytes. In this case, the indicator variable will contain a value of 32K.

In these cases, the actual length of the truncated value cannot be returned to the application that uses the indicator variable. The actual length of the value is returned as message token *length*.

System action: The assignment was made, but the data was truncated.

Programmer response: Change the declaration of *lv-or-parm-number* to avoid truncation.

SQLSTATE: 01004

**+20245 NOT PADDED CLAUSE IS IGNORED
FOR INDEXES CREATED ON
AUXILIARY TABLES**

| **Explanation:** The NOT PADDED clause is ignored on
| the CREATE INDEX statement because auxiliary
| indexes are always PADDED.

| **System action:** The option is ignored; processing
| continues.

| **Programmer response:** Remove the NOT PADDED
| clause to avoid this warning.

| SQLSTATE: 01663

**+20270 OPTION NOT SPECIFIED
FOLLOWING ALTER PARTITION
CLAUSE**

Explanation: An ALTER INDEX statement, which included the ALTER PARTITION clause, did not contain an option following the ALTER PARTITION keywords.

System action: The SQL statement is processed.

Programmer response: Specify a partition option after the ALTER PARTITION keywords to avoid this warning in the future. For an ALTER INDEX statement, if *partition-element* is specified, specify either the ENDING clause of:

- *partition-element*
- *using-block*
- *free-block*
- *gbcaches-block*

SQLSTATE: 01664

**+20272 TABLE SPACE *table-space-name* HAS
BEEN CONVERTED TO USE
TABLE-CONTROLLED PARTITIONING
INSTEAD OF INDEX-CONTROLLED
PARTITIONING, ADDITIONAL
INFORMATION: *old-limit-key-value***

| **Explanation:** When one of the following statements

| executed, *table-space-name* was converted to use
| table-controlled partitioning instead of index-controlled
| partitioning:

- | • ALTER INDEX with the CLUSTER NO clause
- | • ALTER TABLE...ADD PARTITION
- | • ALTER TABLE...ALTER PARTITION
- | • ALTER TABLE...ROTATE PARTITION
- | • CREATE INDEX...ENDING AT without the
| CLUSTER clause
- | • CREATE PARTITIONED INDEX
- | • DROP INDEX for a partitioning index

| If the statement was ALTER INDEX, CREATE
| PARTITIONED INDEX, or DROP INDEX, the last
| partition's old value of *old-limit-key-value* was set to the
| highest possible value for an ascending index key
| column, or the lowest possible value for a descending
| index key column. For all other statements, *N is
| returned for *old-limit-key-value*.

| **System action:** The statement is successfully executed.
| If the statement was ALTER INDEX, CREATE
| PARTITIONED INDEX, or DROP INDEX, the
| LIMITKEY column in SYSIBM.SYSTABLEPART was set
| to the highest possible value for an ascending index
| key column, or the lowest possible value for a
| descending index key column.

| **SQLSTATE:** 01666

| **+20267** **OPTION *clause* IS NOT SUPPORTED**
| **IN THE CONTEXT IN WHICH IT WAS**
| **SPECIFIED**

| **Explanation:** The *clause* in the statement is not
| supported in the context in which has been specified.
| The *clause* is ignored.

| **System action:** Processing continues normally.

| **Programmer response:** No change is required for the
| current release; however, it is recommended that the
| statement be modified to conform to valid SQL syntax.

| **SQLSTATE:** 01680

+30100 **OPERATION COMPLETED**
SUCCESSFULLY BUT A
DISTRIBUTION PROTOCOL
VIOLATION HAS BEEN DETECTED.
ORIGINAL SQLCODE=*original-sqlcode*
AND ORIGINAL SQLSTATE=*original-*
sqlstate

Explanation: The application requested operation
(either COMMIT or ROLLBACK) has completed
successfully but the response from the remote server
and the SQLCODE that was returned from the remote
server are inconsistent. For example, the reply message
from the remote server indicates that a COMMIT
operation completed successfully but the SQLCODE

returned from the AS was negative.

System action: An alert was generated. A DSNL031I
message may have been written to the console. Refer to
the description of this message for further information.

The SQLCODE returned by the remote server is
replaced with +30100 and the SQLSTATE returned by
the remote server is replaced with 01558.

The SQLCODE and SQLSTATE values that were
returned from the AS are stored in the SQLERRM field
in a string of the following format:

'original-sqlcode 'FF'X original-sqlstate'

Programmer response: Notify the System Programmer
for assistance in analyzing the trace data that was
generated.

SQLSTATE: 01558

Chapter 4. Error SQL codes

-007 STATEMENT CONTAINS THE ILLEGAL CHARACTER *character*

Explanation: The specified 'character' is not a valid character in SQL statements.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement. Refer to Chapter 2 of *DB2 SQL Reference* for information about the valid SQL character set.

SQLSTATE: 42601

-010 THE STRING CONSTANT BEGINNING *string* IS NOT TERMINATED

Explanation: The statement contains a string constant, beginning with 'string', that is not terminated properly.

System action: The statement cannot be executed.

Programmer response: Examine the statement for missing quotation marks or apostrophes in the indicated string constant.

SQLSTATE: 42603

-029 INTO CLAUSE REQUIRED

Explanation: SELECT statements embedded in an application program must have an INTO clause to denote where the results of the SELECT are to be placed. Dynamic SELECT statements do not permit the INTO clause.

System action: The statement cannot be executed.

Programmer response: Add the INTO clause to the SELECT statement and precompile the application program again.

SQLSTATE: 42601

-58 An integer expression must be specified on a RETURN statement in an SQL procedure. The data type of the RETURN statement value in an SQL procedure must be INTEGER.

Explanation: A RETURN statement is specified in the SQL procedure with a value or expression that is not of the INTEGER data type.

System action: The statement cannot be processed.

User response: Specify a value on the RETURN statement that has a data type of INTEGER.

| **SQLSTATE:** 428F2

-060 INVALID *type* SPECIFICATION : *spec*

Explanation: 'type' is either LENGTH or SCALE. 'spec' is the specified length or scale. Length or scale must be specified by an unsigned integer constant and the value must be in the range allowed by the data type.

System action: The statement cannot be executed.

Programmer response: Correct the statement. Refer to Chapter 2 of *DB2 SQL Reference* for rules for length and scale.

SQLSTATE: 42815

-079 QUALIFIER FOR DECLARED GLOBAL TEMPORARY TABLE *table-name* MUST BE SESSION, NOT *qualifier*

Explanation: The qualifier for a declared temporary table must be SESSION. The DECLARE GLOBAL TEMPORARY TABLE statement defines a new temporary table named *table-name* with an explicit qualifier of *qualifier*. Specifying a qualifier other than SESSION is not allowed.

System action: The statement was not executed.

Programmer response: Change the statement in one of the following ways:

- Change the qualifier to SESSION.
- Remove the qualifier, and let DB2 default it to SESSION.

SQLSTATE: 428EK

-084 UNACCEPTABLE SQL STATEMENT

Explanation: This SQL statement is unacceptable to DB2. One of the following has occurred:

- An attempt has been made to PREPARE or EXECUTE IMMEDIATE an SQL statement that cannot be prepared; refer to the proper SQL statement in *DB2 SQL Reference*
- The embedded SQL statement is not an SQL statement supported by DB2.
- The statement referenced an undeclared cursor.
- An attempt was made to prepare an ALLOCATE CURSOR statement but the statement identifier is already associated with a declared cursor.

System action: The statement cannot be executed.

Programmer response: If the situation involves an SQL statement that cannot be prepared, the problem is in the source of the SQL statement, not the application

program. Thus, no action is necessary unless the source of the SQL statement is the application program itself.

If the situation involves an SQL statement that is not supported by DB2, remove it from the application program and precompile again.

If the situation involves an invalid PREPARE of an ALLOCATE CURSOR statement, change the application program to use a statement identifier that is not associated with a declared cursor.

SQLSTATE: 42612

-096 VARIABLE *variable-name* DOES NOT EXIST OR IS NOT SUPPORTED BY THE SERVER AND A DEFAULT VALUE WAS NOT PROVIDED

Explanation: The GETVARIABLE function was invoked for variable *variable-name*. However, a value does not exist for a variable with that name, and a default value was not provided.

- If the qualifier is SESSION, a user-defined variable with name *variable-name* has not been set.
- If the qualifier is SYSIBM, the server does not support a built-in session variable with name *variable-name*.

System action: The statement cannot be executed.

Programmer response: Change the invocation of the function to specify a default variable for *variable-name*, or change the name of a variable that does exist.

SQLSTATE: 42704

-097 THE USE OF LONG VARCHAR OR LONG VARGRAPHIC IS NOT ALLOWED IN THIS CONTEXT

Explanation: The statement attempted to use the LONG VARCHAR or LONG VARGRAPHIC syntax. This syntax cannot be used for the following statements:

- CAST specification syntax
- CREATE DISTINCT TYPE
- CREATE FUNCTION
- CREATE PROCEDURE
- ALTER FUNCTION
- COMMENT ON FUNCTION
- GRANT EXECUTE ON FUNCTION
- REVOKE EXECUTE ON FUNCTION
- DROP

Use the VARCHAR or VARGRAPHIC syntax specifying an explicit length as required.

System action: The statement cannot be executed.

Programmer response: Correct the statement.

SQLSTATE: 42601

-101 THE STATEMENT IS TOO LONG OR TOO COMPLEX

Explanation: DB2 cannot process the statement because it exceeds the system limits for length or complexity. Enabling parallelism will increase the complexity of the statement.

System action: DB2 cannot process the statement.

Programmer response: Divide the statement into shorter or less complex SQL statements.

If the statement enables parallelism, try disabling parallelism. You may do this by using the DEGREE(1) bind option for static SQL, or by setting the CURRENT DEGREE special register to '1' for dynamic SQL.

SQLSTATE: 54001

-102 LITERAL STRING IS TOO LONG. STRING BEGINS *string*

Explanation: The string constant beginning with *string* has a length greater than the maximum allowed length. Most strings have these limits:

- For a hexadecimal constant (X, GX, or UX), the number of hexadecimal digits must not exceed 32704.
- Any other character string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.
- Any other graphic string constant must be short enough so that its UTF-8 representation requires no more than 32704 bytes.

In some contexts, however, the limit is smaller; see the *DB2 SQL Reference* for the specific cases.

For special registers, the allowable length depends on the particular special register. A string that exceeds the limit can be specified only through assignment from a host variable. If this release of DB2 increases the maximum allowed length of a string constant, then an attempt to exploit the new length before using the New Function Mode produces this SQL return code.

Two consecutive string delimiters are used to represent one string delimiter within the character string, but these count as 2 bytes when calculating the lengths of character string constants.

System action: The statement cannot be executed.

Programmer response: The requested function is not available interactively. If the error occurred in the context of an SQL statement embedded in an application program, the desired result can be achieved by assigning the long string to a host variable, and substituting that variable for the string literal in the SQL statement.

SQLSTATE: 54002

-103 *literal* **IS AN INVALID NUMERIC LITERAL**

Explanation: The indicated 'literal' begins with a digit, but is not a valid integer, decimal, or float literal.

System action: The statement cannot be executed.

Programmer response: Correct the invalid literal.

SQLSTATE: 42604

-104 **ILLEGAL SYMBOL "*token*". SOME SYMBOLS THAT MIGHT BE LEGAL ARE: *token-list***

Explanation: A syntax error was detected where the symbol "*token*" occurs in the SQL statement. The list of symbols that might be legal shows some alternate symbols that could possibly be correct at that point, if the preceding part of the statement is entirely correct.

However, the preceding part of the statement might be incorrect. For example, if an important keyword is omitted, DB2 detects the error later, and not always immediately after the point where the keyword should appear. The list of alternate symbols are only suggestions. Some of those symbols might not even be legal for statements to be executed by DB2. Those symbols are possibly correct for statements sent to other database management systems.

This SQL code will also be issued if the RELEASE TO SAVEPOINT statement is specified without a savepoint name.

System action: The statement cannot be executed.

Programmer response: Correct the statement and execute it again.

SQLSTATE: 42601

-105 **INVALID STRING**

Explanation: The statement contains an invalid string. It is neither a character string nor a graphic string.

System action: The statement cannot be executed.

Programmer response: Specify the correct format of the string. Check for a graphic string, paired delimiters, the character G or N, and an even number of bytes within the string.

SQLSTATE: 42604

-107 **THE NAME *name* IS TOO LONG. MAXIMUM ALLOWABLE SIZE IS *size***

Explanation: The *name* is too long. The maximum permissible length for names of that type is indicated by *size*. For each type of *name*, the DB2 SQL Reference lists the maximum allowed length. If this release of DB2 increases the maximum allowed length of a name, then an attempt to exploit the new length before using

the New Function Mode produces this SQL return code.

System action: The statement cannot be processed.

Programmer response: Choose a shorter name for the object.

SQLSTATE: 42622

-108 **THE NAME *name* IS QUALIFIED INCORRECTLY**

Explanation: The name *name* is improperly qualified.

A target name on the RENAME statement may not have a qualifier.

System action: The statement cannot be executed.

Programmer response: Remove the qualifier and reissue the statement.

SQLSTATE: 42601

-109 *clause* **CLAUSE IS NOT PERMITTED**

Explanation: The indicated clause is not permitted in the context in which it appears in this SQL statement for the following reasons:

- A subselect cannot have an INTO clause.
- A CREATE VIEW statement cannot have INTO, ORDER BY, or FOR UPDATE clauses.
- A SELECT INTO statement cannot have ORDER BY or FOR UPDATE clauses.
- SELECT statements used in cursor declarations cannot have an INTO clause.
- A SELECT INTO statement cannot specify KEEP UPDATE LOCKS, except in USE AND KEEP UPDATE LOCKS.
- A RAISE_ERROR function can only be used as a select list item if it is cast to some data type using the CAST specification.
- DESCRIBE INPUT statement can not have USING clause.
- QUERYNO cannot be specified as part of an EXPLAIN statement when the EXPLAIN statement contains an 'explainable-sql-statement'.
- The table being updated in a POSITIONED UPDATE statement cannot be assigned a correlation name.
- INPUT SEQUENCE cannot be specified if the *table-spec* is not included in a *select-statement* that contains an INSERT statement.
- A SET DATA TYPE clause cannot be specified on ALTER TABLE for an identity column.

If the clause is part of a CREATE INDEX, CREATE TABLE, CREATE TABLESPACE or ALTER TABLESPACE statement, see the appropriate section of the SQL Reference for a description of the valid use of clauses for the statement.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 42601

**-110 INVALID HEXADECIMAL LITERAL
BEGINNING *string***

Explanation: The string constant that begins with the specified *string* is invalid because it has at least one of the following errors:

- the string constant contains one or more characters that are not valid hexadecimal digits
- the string constant does not have an even number of digits
- for a UX or GX string constant, the number of digits is not a multiple of 4

System action: The statement cannot be executed.

Programmer response: Correct the invalid string constant.

SQLSTATE: 42606

**-111 AN AGGREGATE FUNCTION DOES
NOT INCLUDE A COLUMN NAME**

Explanation: The specification of an aggregate function (for example: AVG, MAX, MIN, or SUM) was invalid because such functions must include a column name in the operand. In a trigger definition, a transition variable specification does not qualify as a column name for this purpose.

This message is still issued with Version 8 prior to New Function Mode.

System action: The statement cannot be executed.

Programmer response: A column name must be specified as an operand to the function. Refer to Chapter 3 of *DB2 SQL Reference* for information about the proper usage of aggregate functions.

SQLSTATE: 42901

**-112 THE OPERAND OF A AGGREGATE
FUNCTION INCLUDES AN
AGGREGATE FUNCTION OR A
SCALAR FULLSELECT**

Explanation: The operand of an aggregate function can be either an expression or DISTINCT followed by an expression. The operand cannot be another aggregate function or a scalar fullselect.

System action: The statement cannot be executed.

Programmer response: Correct the function specification. Refer to Chapter 3 of *DB2 SQL Reference* for information about the proper usage of aggregate functions.

SQLSTATE: 42607

**-113 INVALID CHARACTER FOUND IN:
string, REASON CODE *nnn***

Explanation: The *string* contains an invalid character. It can be an SQL ordinary identifier name, a host variable name, or a DBCS comment.

For SBCS SQL ordinary identifiers, names of buffer pools, databases, plans, and storage groups must contain only uppercase alphabetic or national characters and numerics when CHARSET is KATAKANA; the first character must be alphabetic or national.

In some cases, the name of an SQL procedure can contain an underscore character. Please see the *DB2 SQL Reference* for more information.

The following reason codes apply to SBCS identifiers:

- 000** An invalid character was found in the SBCS identifier (including the case in which a DBCS identifier was used where only an SBCS identifier is allowed.)

The following reason codes apply to DBCS identifiers or comments:

- 101** An odd number of bytes exists between the shift-out and the shift-in character.
- 102** Either a shift-in or shift-out character is missing.
- 103** DBCS blanks X'4040' are not allowed.
- 104** There are no characters between the shift-out and the shift-in characters.
- 105** Shift-out cannot be the first byte of the DBCS character between the shift-out and the shift-in characters.

System action: Processing is terminated.

User response: Correct the name.

SQLSTATE: 42602

**-114 THE LOCATION NAME *location* DOES
NOT MATCH THE CURRENT SERVER**

Explanation: A 3-part SQL procedure name was provided for one of the following SQL statements:

ASSOCIATE LOCATORS
CALL
DESCRIBE PROCEDURE

The first part of the SQL procedure name, which specifies the location where the stored procedure resides, did not match the value of the SQL CURRENT SERVER special register.

System action: The statement cannot be executed.

Programmer response: Take one of these actions to resolve the mismatch:

- Change the location qualifier to match the CURRENT SERVER special register.
- Issue an SQL CONNECT to the location where the stored procedure resides before issuing the SQL statement. Ensure that the SQL CALL statement is issued before the ASSOCIATE LOCATORS or DESCRIBE PROCEDURE.
- Bind the package containing the 3-part SQL procedure name with the BIND option DBPROTOCOL(DRDA). With this option, DB2 implicitly uses the DRDA protocol for remote access to the stored procedure.
- Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR and/or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location.

SQLSTATE: 42961

-115 **A PREDICATE IS INVALID BECAUSE THE COMPARISON OPERATOR *operator* IS FOLLOWED BY A PARENTHEZIZED LIST OR BY ANY OR ALL WITHOUT A SUBQUERY**

Explanation: A simple comparison like '>' must not be followed by a list of items. ANY and ALL comparisons must be followed by a subselect, rather than an expression or a list of items.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement. Refer to Chapter 5 of *DB2 SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 42601

-117 **THE NUMBER OF VALUES ASSIGNED IS NOT THE SAME AS THE NUMBER OF SPECIFIED OR IMPLIED COLUMNS**

Explanation: The number of insert values in the value list of the INSERT statement is not the same as the number of object columns specified. Alternatively, the number of values on the right side of an assignment in a SET assignment statement or the SET clause of an UPDATE statement does not match the number of columns on the left side.

System action: The statement cannot be executed. No data was inserted into the object table.

Programmer response: Correct the statement to specify one and only one value for each of the specified object columns.

SQLSTATE: 42802

-118 **THE OBJECT TABLE OR VIEW OF THE DELETE OR UPDATE STATEMENT IS ALSO IDENTIFIED IN A FROM CLAUSE**

Explanation: The table or view specified as the object of a DELETE or UPDATE statement also appears in the FROM clause of a subselect within the statement.

The table or view that is the object of a UPDATE or DELETE cannot also be used to supply the values to be inserted or to qualify the rows to be updated or deleted.

System action: The statement cannot be executed. No data was updated or deleted.

Programmer response: The implied function is not supported by DB2. It may be possible to obtain the desired result by creating a temporary copy of the object table or view and addressing the subselect to that copy. Refer to Chapter 5 of *DB2 SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 42902

-119 **A COLUMN IDENTIFIED IN A HAVING CLAUSE IS NOT INCLUDED IN THE GROUP BY CLAUSE**

Explanation: A column identified in a HAVING clause (possibly within a scalar function) does not appear in the GROUP BY clause. Columns specified in a HAVING clause must appear within aggregate functions or also be specified in the GROUP BY clause.

| Grouping expressions can be used in a search condition
| in a HAVING clause. A grouping expression specifies
| only one value for each group. A grouping expression
| specified in this context must exactly match a grouping
| expression specified in the GROUP BY clause, except
| that blanks are not significant.

System action: The statement cannot be executed.

| **Programmer response:** Refer to Chapter 4 of *DB2 SQL*
| *Reference* for information about the proper usage of
| HAVING and GROUP BY clauses.

SQLSTATE: 42803

-120 **AN AGGREGATE FUNCTION IS NOT VALID IN THE CONTEXT IN WHICH IT WAS INVOKED**

| **Explanation:** An aggregate function or a user-defined
| function that is sourced on an aggregate function is not
| permitted in a SET clause, VALUES clause, SET
| host-variable statement, SET transition-variable

| statement, assignment statement, or as the expression
| of a RETURN statement. An aggregate function or a
| user-defined function that is sourced on an aggregate
| function is allowed in a WHERE clause only if the
| WHERE clause appears within a subquery of a
| HAVING clause.

System action: The statement cannot be executed.

| **Programmer response:** The implied function is not
| supported by DB2. Refer to Chapter 4 of *DB2 SQL*
| *Reference* for information about restrictions on operands
| that can be specified within a WHERE clause, SET
| clause, VALUES clause, SET host-variable statement,
| SET transition-variable statement, assignment
| statement, or as the expression of a RETURN statement.

SQLSTATE: 42903

**-121 THE COLUMN *name* IS IDENTIFIED
MORE THAN ONCE IN THE INSERT
OR UPDATE OR SET TRANSITION
VARIABLE STATEMENT**

Explanation: The same column '*name*' is specified
more than once, either in the list of object columns of
an INSERT statement, in the SET clause of an UPDATE
statement, or in a SET transition variable statement.

System action: The statement cannot be executed. No
data was inserted or updated in the object table.

Programmer response: Correct the syntax of the
statement so that each column name is specified only
once.

SQLSTATE: 42701

**-122 A SELECT STATEMENT WITH NO
GROUP BY CLAUSE CONTAINS A
COLUMN NAME AND AN
AGGREGATE FUNCTION IN THE
SELECT CLAUSE OR A COLUMN
NAME IS CONTAINED IN THE
SELECT CLAUSE BUT NOT IN THE
GROUP BY CLAUSE**

Explanation: The SELECT statement contains one of
these errors:

- The statement contains a column name and a
aggregate function in the SELECT clause, but no
GROUP BY clause.
- A column name is contained in the SELECT clause
(possibly within a scalar function) but not in the
GROUP BY clause. Grouping expressions can be
used in a SELECT list. A grouping expression
specifies only one value for each group. A grouping
expression that is specified in this context must
exactly match a grouping expression that is specified
in the GROUP BY clause, except that blanks are not
significant.

Attention: A HAVING clause specified without a
GROUP BY clause implies a GROUP BY with no
columns. Thus, no column names are allowed in the
SELECT clause.

- A *sort-key-expression* was specified in the ORDER BY
clause, the result table contains grouped data, but the
select-clause and ORDER BY clause contain a mixture
of grouped data and non-grouped data. Grouping
expressions can be used in a *sort-key-expression* of an
ORDER BY clause. A grouping expression specifies
only one value for each group. A grouping
expression that is specified in this context must
exactly match a grouping expression that is specified
in the GROUP BY clause, except that blanks are not
significant.

System action: The statement cannot be executed.

Programmer response: You can correct the statement
by:

- including the columns in the GROUP BY clause that
are in the SELECT clause, or
- removing the columns from the SELECT clause.

Refer to Chapter 4 of *DB2 SQL Reference* for information
about the use of GROUP BY clauses in SQL statements.

SQLSTATE: 42803

**-123 THE PARAMETER IN POSITION *n* IN
THE FUNCTION *name* MUST BE A
CONSTANT OR KEYWORD**

Explanation: The parameter in position *n* in the
function *name* is not a constant when it is required to
be a constant or a keyword when it is required to be a
keyword.

System action: The statement could not be processed.

Programmer response: Action: Ensure that each
argument of the function conforms to the definition of
the corresponding parameter.

SQLSTATE: 42601

**-125 AN INTEGER IN THE ORDER BY
CLAUSE DOES NOT IDENTIFY A
COLUMN OF THE RESULT**

Explanation: The ORDER BY clause in the statement
contains a column number that is either less than one,
or greater than the number of columns of the result
table (the number of items in the SELECT clause).

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the
ORDER BY clause such that each column identifier
properly denotes a column of the result table.

SQLSTATE: 42805

-126 THE SELECT STATEMENT CONTAINS BOTH AN UPDATE CLAUSE AND AN ORDER BY CLAUSE

Explanation: The SELECT statement in the declaration for a cursor contains both an UPDATE clause and an ORDER BY clause. Unless you use a static sensitive scrollable cursor, an ORDER BY clause cannot be specified in the declaration for a cursor that is to be used for UPDATE.

System action: The statement cannot be processed. The cursor remains undefined in the application program.

Programmer response: The implied function is not supported by DB2. A cursor that is to be used for update cannot be defined to fetch the rows of the object table in a specific order.

Refer to Chapter 4 of *DB2 SQL Reference* for information about restrictions on the declarations for cursors to be used for update.

SQLSTATE: 42829

-127 DISTINCT IS SPECIFIED MORE THAN ONCE IN A SUBSELECT

Explanation: The DISTINCT qualifier can be used only once in a SELECT statement or a subselect.

Note: This message is still issued with Version 8 prior to New Function Mode.

System action: The statement cannot be executed.

Programmer response: The implied function is not supported by DB2. Refer to Chapter 4 of *DB2 SQL Reference* for information about restriction on the use of the DISTINCT qualifier.

SQLSTATE: 42905

-128 INVALID USE OF NULL IN A PREDICATE

Explanation: The use of NULL in the search condition does not conform to the rules of SQL syntax.

System action: The statement cannot be executed.

Programmer response: The implied function is not supported by DB2. Refer to Chapter 2 of *DB2 SQL Reference* for information about the proper use of the NULL operand.

SQLSTATE: 42601

-129 THE STATEMENT CONTAINS TOO MANY TABLE NAMES

Explanation: A subselect (including all subqueries) can have a maximum of 225 references to table names.

System action: The statement cannot be executed.

Programmer response: Break the SQL statement into two or more simpler statements with less than 225 table references in each. The count will include the number of base table occurrences from each table or view on the FROM list. Refer to Chapter 4 of *DB2 SQL Reference* for the definition of a subselect.

SQLSTATE: 54004

-130 THE ESCAPE CLAUSE CONSISTS OF MORE THAN ONE CHARACTER, OR THE STRING PATTERN CONTAINS AN INVALID OCCURRENCE OF THE ESCAPE CHARACTER

Explanation: The ESCAPE character must be a single character, either SBCS or DBCS as appropriate. For 'column-name LIKE pattern', the ESCAPE character can only appear in the character string if it is followed by itself, %, or _ (underscore). The Escape Clause cannot be specified if the column name at the left of the LIKE or NOT LIKE has the MIXED subtype.

System action: The statement cannot be executed.

Programmer response: Correct the string pattern, or choose a different ESCAPE character and change the pattern accordingly, or eliminate the use of the Escape Clause on the LIKE or NOT LIKE predicate where the column name to the left has the MIXED subtype.

SQLSTATE: 22019 if other than invalid ESCAPE pattern. 22025 if invalid ESCAPE pattern.

-131 STATEMENT WITH LIKE PREDICATE HAS INCOMPATIBLE DATA TYPES

Explanation: If the column name at the left of LIKE or NOT LIKE is of type character, the expression at the right and the ESCAPE character must be of type character. If the column name is of type graphic, the expression at the right and the ESCAPE character must be of type graphic.

System action: The statement cannot be executed.

Programmer response: Check the data type of every operand.

SQLSTATE: 42818

-132 AN OPERAND OF *value* IS NOT VALID

Explanation: The operation value can be the LIKE predicate, the ESCAPE clause, the LOCATE scalar function, or the POSSTR scalar function. The operand or argument of *value* was not valid for one of the following reasons:

- The match-expression operand of a LIKE or NOT LIKE predicate must be a string expression.
- The pattern-expression operand of the LIKE or NOT LIKE predicate, or search-string argument of the

| LOCATE or POSSTR function must be a string
| expression that can be specified by any one of the
| following:

- | – A constant
- | – A special register
- | – A host variable (including a LOB locator variable)
- | – A scalar function whose arguments are any of the
| above (though nested function invocations cannot
| be used)
- | – A CAST specification whose arguments are any of the
| above
- | – An expression that concatenates (using CONCAT
| or ||) any of the above

| • The source-string argument of the LOCATE or
| POSSTR function must be a string expression that
| can be specified by any of the following:

- | – A constant
- | – A special register
- | – A host variable (including a LOB locator variable)
- | – A scalar function whose arguments are any of the
| above (though nested function invocations cannot
| be used)
- | – A CAST specification whose arguments are any of the
| above
- | – A column name
- | – An expression that concatenates (using CONCAT
| or ||) any of the above

| • The escape-expression operand of the LIKE or NOT
| LIKE predicate must be a string expression that can
| be specified by any of the following:

- | – A constant
- | – A host variable (including a LOB locator variable)
- | – A scalar function whose arguments are any of the
| above (though nested function invocations cannot
| be used)
- | – A CAST specification whose arguments are any of the
| above

| See the *DB2 SQL Reference* for the rules of what can be
| specified in each context.

A LIKE predicate, ESCAPE clause, LOCATE scalar
function or POSSTR scalar function cannot be used
with DATE, TIME, or TIMESTAMP.

System action: The statement cannot be processed.

| **Programmer response:** Check and correct the syntax
| of the LIKE predicate, or LOCATE or POSSTR scalar
| function.

SQLSTATE: 42824

-133 **AN AGGREGATE FUNCTION IN A
SUBQUERY OF A HAVING CLAUSE IS
INVALID BECAUSE ALL COLUMN
REFERENCES IN ITS ARGUMENT
ARE NOT CORRELATED TO THE
GROUP BY RESULT THAT THE
HAVING CLAUSE IS APPLIED TO**

Explanation: If an aggregate function has a correlated
column reference, it must be correlated from within a
HAVING clause to the GROUP BY result that the
HAVING clause is applied to. All column references in
the argument must satisfy this condition.

System action: The statement cannot be executed.

Programmer response: Refer to Chapter 4 of *DB2 SQL
Reference* for information about restrictions on the
syntax of the HAVING clause.

SQLSTATE: 42906

-134 **IMPROPER USE OF LONG STRING
COLUMN OR AN EXPRESSION THAT
RESOLVES TO A LONG STRING**

| **Explanation:** The SQL statement references a long
| string, but DB2 does not allow the use of long strings
| in the context that was specified.

System action: DB2 cannot process the statement.

Attention: The *column-name* might not be returned in
the SQLCA, depending on the nature of the error and
the syntax in which it occurred.

Programmer response: DB2 does not support the
requested operation on a long string value. Refer to
Chapter 2 of *DB2 SQL Reference* for information about
restrictions on the specification and manipulation of
long string values.

SQLSTATE: 42907

-136 **SORT CANNOT BE EXECUTED
BECAUSE THE SORT KEY LENGTH IS
GREATER THAN 16000 BYTES**

| **Explanation:** A sort key is derived from the list of
| columns specified following a DISTINCT qualifier, or in
| an ORDER BY or GROUP BY clause. If both a
| DISTINCT qualifier and an ORDER BY or GROUP BY
| clause are present, the sort key is derived from the
| combination of both lists of columns.

| The internal length of the sort key cannot exceed 16000
| bytes. In attempting to process the SQL statement, the
| internal length of the sort key derived from the
| DISTINCT and ORDER BY (or GROUP BY) or the
| DISTINCT or ORDER BY (or GROUP BY) specifications
| was found to exceed that maximum limit.

System action: The statement cannot be executed.

Programmer response: The statement must be

modified such that the internal length of the sort key will not exceed the maximum limit. In general, this means that one or more column names must be deleted from the ORDER BY or GROUP BY clause, or the list following the DISTINCT qualifier.

SQLSTATE: 54005

**-137 THE LENGTH RESULTING FROM
operation IS GREATER THAN
maximum-length**

Explanation: The length of the result of concatenation or a function exceeds the defined maximum. The operation that resulted in the error is *operation*.

- For concatenation, the length cannot exceed 32,764 (if character operands) or 16,382 (if graphic operands).
- For other functions, see *DB2 SQL Reference* for the maximum result length.

System action: The statement cannot be executed.

Programmer response: Ensure that the length of the result does not exceed the defined maximum.

SQLSTATE: 54006

**-138 THE SECOND OR THIRD
ARGUMENT OF THE SUBSTR OR
SUBSTRING FUNCTION IS OUT OF
RANGE**

Explanation: One of the following conditions exists:

- The value of the second argument of the SUBSTR or SUBSTRING function is less than 1 or greater than M.
- The value of the third argument of the SUBSTR or SUBSTRING function is an integer constant 0 or greater than M–N+1.

M is the length of the first argument if it is of fixed-length, or, M is the maximum length of the first argument if it is of varying-length. N is the value of the second argument.

System action: The statement cannot be executed.

Programmer response: Ensure that the second and third arguments of the SUBSTR or SUBSTRING function have legal values according to the rules listed in the Explanation.

SQLSTATE: 22011

**-142 THE SQL STATEMENT IS NOT
SUPPORTED**

Explanation: An SQL statement was detected that is not supported by the database. The statement might be valid for other IBM relational database products or it might be valid in another context. For example, statements such as VALUES and SIGNAL or RESIGNAL SQLSTATE can appear only in certain

contexts, such as in a trigger body or in an SQL Procedure.

Additionally, This SQL code will also be issued if a distributed private protocol application uses SQL statements that were implemented after Version 7. DB2 limits the SQL statements that a distributed private protocol application can use to Version 7 or lower SQL statements. See Part 4 of *DB2 Application Programming and SQL Guide* for more information.

System action: The statement cannot be executed.

Programmer response: Change the syntax of the SQL statement or remove the statement from the program.

SQLSTATE: 42612

-144 INVALID SECTION NUMBER *number*

Explanation: One of the following:

1. The user attempted to execute an invalid section.
2. This release of DB2 does not support the SQL statement.
3. The section number in the call parameter list is one of these:
 - Negative
 - An invalid duplicate
 - Greater than the maximum section number of the DBRM or package.

System action: The statement is not executed.

Programmer response: For case 1: If you are executing a package that was bound with SQLERROR(CONTINUE), determine whether the statement in question was bound as a valid section. You can use the following statements to query the DB2 catalog:

```
SELECT SQLERROR
FROM SYSIBM.SYSPACKAGE
WHERE COLLID = collection-id AND
NAME = package-id AND
VERSION = version-name;
```

If that query returns 'C', the package was bound with SQLERROR(CONTINUE).

```
SELECT STMTNO, TEXT
FROM SYSIBM.SYSPACKSTMT
WHERE COLLID = collection-id AND
NAME = package-id AND
VERSION = version-name AND
SECTNO = number AND
BINDERROR = 'Y';
```

If that query returns any rows, the section is invalid. Refer to the error messages issued during the bind to determine the cause. Correct any errors and bind the package again, using the REPLACE option.

For case 2: If the DB2 system has fallen back to a previous release, determine whether there are any SQL statements with a section number of zero that are not

supported by that release. You can use the following statements to query the DB2 catalog.

When executing from a DBRM, use:

```
SELECT *
FROM SYSIBM.SYSSTMT
WHERE SECTNO = 0
ORDER BY NAME, PLNAME, STMTNO, SEQNO;
```

When executing from a package, use:

```
SELECT *
FROM SYSIBM.SYSPACKSTMT
WHERE SECTNO = 0
ORDER BY COLLID, NAME, VERSION, STMTNO, SEQNO;
```

For case 3: Examine the application to determine whether the call parameter list was changed in some way. In general, you should not attempt to change the output of the precompiler.

SQLSTATE: 58003

-147 **ALTER FUNCTION** *function-name*
FAILED BECAUSE SOURCE
FUNCTIONS CANNOT BE ALTERED

Explanation: The function cannot be altered because it is a source function. Only external scalar functions, or external table functions can be altered.

To change an existing source function, you must DROP the function and recreate it.

System action: The statement cannot be executed.

Programmer response: Change the statement to refer to a function that can be altered, or recreate the function by dropping it and then creating a new version of it.

SQLSTATE: 42809

-148 **THE SOURCE TABLE** *source-name*
CANNOT BE RENAMED OR ALTERED

Explanation: The RENAME or ALTER statement issued could not resolve for one of the following cases:

- | | |
|---|---|
| <p> 1</p> <p> </p> <p> </p> | <p>The RENAME statement cannot be used to rename a view, an active RLST table, or a table for which a synonym is defined.</p> |
| <p> 2</p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> <p> </p> | <p>The ALTER statement cannot be used to alter the length of the column because the column is referenced in a referential integrity relation, a user exit (field procedure, edit procedure, valid procedure, stored procedure or user defined function), a global temporary table, or a table defined with data capture changes. If the table name specified in the alter is a view or if there exists a row in SYSVIEWDEP that has <i>source-name</i> as a base table name, then this ALTER statement will fail.</p> |

System action: The statement cannot be executed.

| **Programmer response:** To resolve this error, follow the directions for the corresponding case:

- | | |
|---------------------|---|
| <p> 1</p> <p> </p> | <p>Drop all views, inactivate the RLST table, or drop the synonym.</p> |
| <p> 2</p> <p> </p> | <p>Avoid referential integrity relations, user exits, or global temporary tables.</p> |

SQLSTATE: 42809

| **-150** **THE OBJECT OF THE INSERT,**
| **DELETE, OR UPDATE STATEMENT IS**
| **A VIEW, SYSTEM-MAINTAINED**
| **MATERIALIZED QUERY TABLE, OR**
| **TRANSITION TABLE FOR WHICH**
| **THE REQUESTED OPERATION IS**
| **NOT PERMITTED**

Explanation: One of the following occurred:

- A transition table was named in an INSERT, UPDATE, or DELETE statement in a triggered action. Transition tables are read-only.

The view named in the INSERT, UPDATE, or DELETE statement is defined in such a way that the requested insert, update, or delete operation cannot be performed upon it.

Inserts into a view are prohibited if:

- The view definition contains a join, a GROUP BY, or a HAVING clause.
- The SELECT clause in the view definition contains the DISTINCT qualifier, an arithmetic expression, a string expression, a built-in function, or a constant.
- Two or more columns of the view are derived from the same column.
- A base table of the view contains a column that does not have a default value and is not included in the view.

Updates to a view are prohibited if:

- The view definition contains a join, a GROUP BY, or a HAVING clause.
- The SELECT clause in the view definition contains the DISTINCT qualifier or a function.

Also, a given column in a view cannot be updated (that is, the values in that column cannot be updated) if the column is derived from an arithmetic expression, a constant, a column that is part of the key of a partitioned index, or a column of a catalog table that cannot be updated.

Deletes against a view are prohibited if:

- The view definition contains a join, a GROUP BY, or a HAVING clause.

- The SELECT clause in the view definition contains the DISTINCT qualifier or a built-in function.

• A system-maintained materialized query table was named in an INSERT, UPDATE, or DELETE statement. System-maintained materialized query tables are refreshed using the REFRESH TABLE statement.

System action: The statement cannot be executed. No data was inserted, updated, or deleted.

Programmer response: The requested function cannot be performed on the view. Refer to Chapter 5 of *DB2 SQL Reference* for further information regarding inserting, deleting, and updating views.

If the error occurred on a CREATE TRIGGER statement, remove the INSERT, UPDATE, or DELETE reference to the transition table.

If the table is a system-maintained materialized query table, the requested function cannot be performed on that table. Refer to the description of the REFRESH TABLE statement in Chapter 5 of .

SQLSTATE: 42807

-151 THE UPDATE STATEMENT IS INVALID BECAUSE THE CATALOG DESCRIPTION OF COLUMN *column-name* INDICATES THAT IT CANNOT BE UPDATED

Explanation: The specified column cannot be updated for one of the following reasons:

- The values for columns occurring in the partitioning key of a partitioned table cannot be updated.
- The object table is a view and the specified column is defined (in the definition of the view) in such a way that it cannot be updated.
- The object table is a catalog table with no columns that can be updated.
- The object column is a ROWID column.
- The object column is defined with the AS IDENTITY and GENERATED ALWAYS attributes.
- The specified column of catalog tables cannot be updated because the column itself is not updatable.

Individual columns in a view cannot be updated for one of the following reasons:

- The column is derived from an SQL function, an arithmetic expression, or a constant.
- The column is defined for a column of an underlying view that cannot be updated.
- The column is defined for a read-only view.
- The column is defined for a column that is in the partitioning key of a partitioned table.

System action: The statement cannot be executed. No data was updated in the object table or view.

Programmer response: The requested function is not supported by DB2. Refer to the description of the UPDATE statement in Chapter 5 of *DB2 SQL Reference* for information about restrictions on the ability to update ROWID columns, identity columns, and columns in partitioned tables and views.

SQLSTATE: 42808

-152 THE DROP *clause* CLAUSE IN THE ALTER STATEMENT IS INVALID BECAUSE *constraint-name* IS A *constraint-type*

Explanation: The DROP *clause* of an ALTER TABLE statement tried to drop a constraint that does not match the *constraint-type* in the DROP clause. *clause* must identify an appropriate *constraint-type* as follows:

REFERENTIAL CONSTRAINT

The identified constraint must be a referential constraint.

CHECK CONSTRAINT

The identified constraint must be a check constraint.

PRIMARY KEY CONSTRAINT

The identified constraint must be a primary key constraint.

UNIQUE KEY CONSTRAINT

The identified constraint must be a unique key constraint.

System action: The ALTER TABLE DROP statement cannot be executed. No object was dropped.

Programmer response: Drop the existing object with the correct DROP clause of the ALTER TABLE statement.

SQLSTATE: 42809

-153 THE STATEMENT IS INVALID BECAUSE THE VIEW OR TABLE DEFINITION DOES NOT INCLUDE A UNIQUE NAME FOR EACH COLUMN

Explanation: You must specify a list of column names if the result table of the fullselect that is specified in the CREATE VIEW, CREATE TABLE, or DECLARE GLOBAL TEMPORARY TABLE statement has duplicate column names or an unnamed column (a column from a constant, function, or expression).

System action: The statement cannot be executed. The specified view or table was not created, or the declared temporary table was not declared.

Programmer response: Correct the statement by providing a list of names for the columns of the view or table. Refer to Chapter 5 of *DB2 SQL Reference* for information about the syntax of the CREATE VIEW statement, the CREATE TABLE statement, or the

| DECLARE GLOBAL TEMPORARY TABLE statement.

SQLSTATE: 42908

-154 THE STATEMENT FAILED BECAUSE VIEW OR TABLE DEFINITION IS NOT VALID

| **Explanation:** The view defined in the CREATE VIEW statement, the table defined in the CREATE TABLE statement, or the table declared in the DECLARE GLOBAL TEMPORARY TABLE statement is not valid because the view or table definition references a remote object.

System action: The statement cannot be executed. The specified object is not defined.

| **Programmer response:** Refer to Chapter 5 of *DB2 SQL Reference* for information about restrictions on the definitions for views, materialized query tables, or declared temporary tables.

SQLSTATE: 42909

-156 THE STATEMENT DOES NOT IDENTIFY A TABLE

Explanation: The statements ALTER TABLE, DROP TABLE, LOCK TABLE, CREATE INDEX, and CREATE TRIGGER apply only to tables. Indexes and triggers can be defined only on tables.

System action: The statement cannot be executed. The specified view or remote object was not altered, dropped, or locked, or the index or trigger was not created.

Programmer response: Verify that the proper name was specified in the statement.

SQLSTATE: 42809

-157 ONLY A TABLE NAME CAN BE SPECIFIED IN A FOREIGN KEY CLAUSE. *object-name* IS NOT THE NAME OF A TABLE.

Explanation: The indicated object was identified in a FOREIGN KEY clause of a CREATE or ALTER TABLE statement. A FOREIGN KEY clause must identify a table.

System action: The statement cannot be executed.

Programmer response: Correct the statement to specify a table name in the foreign key clause.

SQLSTATE: 42810

-158 THE NUMBER OF COLUMNS SPECIFIED FOR THE VIEW OR TABLE IS NOT THE SAME AS THE NUMBER OF COLUMNS SPECIFIED BY THE FULLSELECT, OR THE NUMBER OF COLUMNS SPECIFIED IN THE CORRELATION CLAUSE IN A FROM CLAUSE IS NOT THE SAME AS THE NUMBER OF COLUMNS IN THE CORRESPONDING TABLE, VIEW, TABLE EXPRESSION, OR TABLE FUNCTION

| **Explanation:** There are three potential reasons for this SQL code:

- | • The number of column names that are specified for a view in a CREATE VIEW statement must equal the number of elements that are specified in the SELECT clauses of the following fullselect. These elements may be column names, SQL functions, and expressions, for example.
- | • The number of column names that are specified for a table in a CREATE TABLE statement must equal the number of columns in the result table of the following fullselect.
- | • The number of column names that are specified in a correlation clause must equal the number of columns in the corresponding table, view, table expression or table function.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the statement to specify a column name for each column in the corresponding object (table, view, etc.). Refer to Chapter 5 of *DB2 SQL Reference* for information about the syntax of the statement.

SQLSTATE: 42811

-159 THE STATEMENT REFERENCES *object-name* WHICH IDENTIFIES AN *object-type* RATHER THAN AN *expected-object-type*

| **Explanation:** The object *object-name* was specified as part of a statement, and refers to an object of type *object-type* instead of the expected type *expected-object-type*. The type of the object that is provided with the statement must match the type that is identified by *expected-object-type*. For example, if the statement is DROP ALIAS TED.T1, then TED.T1 must be an alias name.

| If *object-type* or *expected-object-type* is TABLE, and *object-type* or *expected-object-type* is a particular type of table, then the type of table was not valid for the statement that was specified.

System action: The statement cannot be executed.

| **Programmer response:** Change the statement to match the type of object that is identified by

expected-object-type. For example:

- An ALTER VIEW statement must reference an existing view.
- A COMMENT ON ALIAS statement must specify the name of an alias, and not the name of a table or view.
- A COMMENT ON TABLE statement must reference an existing table or view.
- A CREATE INDEX statement with the UNIQUE keyword must specify a table that is not a materialized query table.
- A CREATE TRIGGER statement must specify a table in the ON clause that is not a materialized query table. That is, a trigger cannot be defined for a materialized query table.
- A DROP ALIAS statement must specify the name of an alias, and not the name of a table or view.
- A DROP TABLE statement must reference an existing table. If an alias is specified, then the table that the alias refers to is dropped. Use the DROP ALIAS statement to drop the alias.
- A DROP VIEW statement must reference an existing view.
- A REFRESH TABLE statement must refer to a materialized query table.

SQLSTATE: 42809

-160 THE WITH CHECK OPTION CANNOT BE USED FOR THE SPECIFIED VIEW

Explanation: The WITH CHECK OPTION does not apply to a view definition under either of the following circumstances:

- The view is read-only (for example, the view definition includes DISTINCT GROUP BY, or JOIN).
- The view definition includes a subquery.

System action: The statement cannot be executed. The specified view was not created.

Programmer response: Refer to Chapter 5 of *DB2 SQL Reference* for rules regarding use of the WITH CHECK OPTION in view definitions.

SQLSTATE: 42813

-161 THE INSERT OR UPDATE IS NOT ALLOWED BECAUSE A RESULTING ROW DOES NOT SATISFY THE VIEW DEFINITION

Explanation: The WITH CHECK OPTION applies to the view that is the object of the INSERT or UPDATE statement. Consequently, all attempts to insert or update rows in that view are checked to ensure that the results will conform to the view definition.

System action: The statement cannot be executed. No inserts or updates were performed, and the contents of

the object view (and underlying base table) remain unchanged.

Programmer response: Examine the view definition to determine why the requested INSERT or UPDATE was rejected. Note that this may be a data-dependent condition.

SQLSTATE: 44000

-164 *auth-id1* DOES NOT HAVE THE PRIVILEGE TO CREATE A VIEW WITH QUALIFICATION *authorization-ID*

Explanation: The authorization ID *auth-id1* does not have the authority necessary to create views with qualifiers other than its own authorization ID. Specifically, the attempt to create a view with qualifier *authorization-ID* is rejected.

System action: The statement cannot be executed. The specified view was not created.

Programmer response: Do not attempt to create views with other than your own ID as a qualifier. Only an authorization ID that holds 'SYSADM' or 'DBADM' authority can create views for other authorization IDs. The DBADM privilege should be granted on any of the databases that contain at least one of the tables on which this CREATE VIEW is based.

SQLSTATE: 42502

-170 THE NUMBER OF ARGUMENTS SPECIFIED FOR *function-name* IS INVALID

Explanation: An SQL statement includes the scalar function '*function-name*' with either too many or too few arguments.

System action: The statement cannot be executed.

Programmer response: Correct the statement. Refer to Chapter 3 of *DB2 SQL Reference* for information about the number of arguments required by the scalar function '*function-name*'.

SQLSTATE: 42605

-171 THE DATA TYPE, LENGTH, OR VALUE OF ARGUMENT *nn* OF *function-name* IS INVALID

Explanation: Either the data type, the length or the value of argument *nn* of scalar function *function-name* is incorrect.

If the encoding scheme is EBCDIC or ASCII, a possible reason for this error is that a character argument was specified for a built-in function that expects a graphic argument, or a graphic argument was specified for a built-in function that expects a character argument. The UNICODE encoding scheme does support the mixing of character and graphic arguments.

System action: The statement cannot be executed.

Programmer response: Correct the statement. Refer to Chapter 3 of *DB2 SQL Reference* for rules for each argument of the scalar function *function-name*.

SQLSTATE: 42815

-173 UR IS SPECIFIED ON THE WITH CLAUSE BUT THE CURSOR IS NOT READ-ONLY

Explanation: The cursor is not a read-only cursor. WITH UR can be specified only if DB2 can determine that the cursor is read-only.

System action: Statement execution fails.

Programmer response: If the cursor is intended to be read-only but is ambiguous, add the FOR FETCH ONLY clause. If the cursor is updateable, change the isolation level specified on the WITH clause.

SQLSTATE: 42801

-180 THE DATE, TIME, OR TIMESTAMP VALUE *value* IS INVALID

Explanation: The length or string representation of a DATE, TIME, or TIMESTAMP value does not conform to any valid format.

The value can contain one of the following:

- For a host variable, the position number of the input host variable. If the position number cannot be determined, a blank is displayed.
- For a character string constant, the character string constant. The maximum length that is displayed is the length of SQLERRM.
- For a character column, the column name. If the column is a VIEW column and it has a corresponding base column, the VIEW column name is displayed. If the column is a VIEW column but it does not have a corresponding base column, a string of '*N' is displayed.

Otherwise, value is a string of '*N'.

System action: The statement cannot be executed.

Programmer response: Correct the program to ensure the specified value conforms to the syntax of DATE, TIME, and TIMESTAMP. Refer to Chapter 2 of *DB2 SQL Reference* for a list of valid DATE and TIME formats.

SQLSTATE: 22007

-181 THE STRING REPRESENTATION OF A DATETIME VALUE IS NOT A VALID DATETIME VALUE

Explanation: The string representation of a datetime is not in the acceptable range or is not in the correct format. The proper ranges for datetime values are as

follows:

Table 2. Range of datetime values

Datetime		Numeric Range
Years		0001 to 9999
Months		1 to 12
Days	April, June, September, November (months 4, 6, 9, 11)	1 to 30
	February (month 2)	1 to 28 (Leap year 1 to 29)
	January, March, May, July, August, October, December (months 1, 3, 5, 7, 8, 10, 12)	1 to 31
Hours		0 to 24 (If hour is 24, other parts of time values are zeroes. If hour is USA, maximum hour is 12.)
Minutes		0 to 59
Seconds		0 to 59
Microseconds		0 to 999999

System action: The statement cannot be executed.

Programmer response: Check whether the value is within the valid range and is in the proper format. Refer to Chapter 2 of *DB2 SQL Reference* for information on string data formats.

SQLSTATE: 22007

-182 AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE IS INVALID

Explanation: The specified arithmetic expression contains an improperly used datetime value or labeled duration.

System action: The statement cannot be executed.

Programmer response: Correct the indicated arithmetic expression.

SQLSTATE: 42816

-183 AN ARITHMETIC OPERATION ON A DATE OR TIMESTAMP HAS A RESULT THAT IS NOT WITHIN THE VALID RANGE OF DATES

Explanation: The result of an arithmetic operation is a date or timestamp that is not within the valid range of dates which are between 0001-01-01 and 9999-12-31.

System action: The statement cannot be executed.

Programmer response: Examine the SQL statement to see if the cause of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was processed at the time the error occurred.

SQLSTATE: 22008

-184 AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE CONTAINS A PARAMETER MARKER

Explanation: The specified arithmetic expression contains a parameter marker improperly used with a datetime value.

System action: The statement cannot be executed.

Programmer response: Correct the indicated arithmetic expression.

SQLSTATE: 42610

-185 THE LOCAL FORMAT OPTION HAS BEEN USED WITH A DATE OR TIME AND NO LOCAL EXIT HAS BEEN INSTALLED

Explanation: The local format option has been used with a datetime value and no datetime exit has been installed. This may occur if the LOCAL DATE LENGTH or LOCAL TIME LENGTH on the Installation Application Programming Defaults Panel indicated that an exit for datetime was supplied, but in fact the exit supplied by DB2 was not replaced. This may also occur if the datetime exit was replaced and the corresponding LOCAL DATE LENGTH or LOCAL TIME LENGTH on the Installation Application Programming Defaults Panel was not set to a nonzero value.

System action: The statement cannot be executed.

Programmer response: Contact the system programmer about installation of the date or time exit.

SQLSTATE: 57008

-186 THE LOCAL DATE LENGTH OR LOCAL TIME LENGTH HAS BEEN INCREASED AND EXECUTING PROGRAM RELIES ON THE OLD LENGTH

Explanation: The local format option has been used with a datetime value and DB2 has discovered that the datetime exit routine has been changed to produce a longer local format.

System action: The statement cannot be executed.

Programmer response: If the statement receiving this error is embedded in the application program, then a REBIND command must be issued for the application

plan. If the statement was dynamic SQL, then the statement can be reentered.

SQLSTATE: 22505

-187 A REFERENCE TO A CURRENT DATETIME SPECIAL REGISTER IS INVALID BECAUSE THE MVS TOD CLOCK IS BAD OR THE MVS PARMTZ IS OUT OF RANGE

Explanation: DB2 has encountered an invalid time-of-day (TOD) clock. The user referenced one of the special registers: CURRENT DATE, CURRENT TIME, CURRENT TIMESTAMP, or CURRENT TIMEZONE. If the user referenced CURRENT TIMEZONE, the MVS parameter PARMTZ was out of range.

System action: The statement cannot be executed.

Programmer response: For CURRENT TIMEZONE, check that the MVS parameter PARMTZ is between -24 and +24 hours. For the other CURRENT special registers, check that the MVS TOD clock has been set correctly.

SQLSTATE: 22506

-188 THE STRING REPRESENTATION OF A NAME IS INVALID

Explanation: The host variable referenced in the DESCRIBE statement does not contain a valid string representation of a name. One of the following error conditions has occurred.

- The first byte of the variable is a period or a blank.
- The number of identifiers is greater than 3.
- An identifier is too long.
- A period not contained in a delimited identifier is followed by a period or a blank.
- A delimited identifier is followed by a character other than a period or a blank.
- A delimited identifier is not terminated by a quotation mark.

System action: The statement cannot be executed.

Programmer response: Correct the value of the host variable so that it is a valid string representation of a name.

SQLSTATE: 22503

-189 CCSID *ccsid* IS INVALID

Explanation: To determine the subtype of an input host variable or result column, the SYSSTRINGS catalog table was accessed with the specified CCSID and:

- The CCSID is not a value of either INCCSID or OUTCCSID, or

- The TRANSTYPE column classifies the CCSID as GRAPHIC rather than CHARACTER, or
- A graphic CCSID has not been specified on your system.
- The CCSID is outside the acceptable range of values. The CCSID must be between 1 and 65533, inclusive, or the value 65535.
- A DBCS CCSID was specified when casting to CHAR, VARCHAR or CLOB.
- An SBCS or mixed CCSID, or 65535 was specified when casting to a graphic data type.
- CCSID 65535, which is valid only for data with the FOR BIT DATA attribute, was specified when casting to a CLOB.

This error can occur when SYSSTRINGS is accessed with a pair of CCSIDs to determine if a translation is defined for the pair. In this case, the error is the inconsistency between the data type of a string and the TRANSTYPE classification of its CCSID (one is GRAPHIC and the other is CHARACTER).

This error can also occur when a CCSID specified in DECP does not exist as a value in the INCCSID or OUTCCSID columns of SYSSTRINGS.

Another reason this error can occur is that you may be using one of the graphic built-in functions but a graphic CCSID was not specified during system installation.

System action: The statement cannot be bound or executed.

Programmer response: Ensure that the CCSID is valid and consistent with the data type of the string. If a valid CCSID is not listed in a built-in row of SYSSTRINGS, it can be defined by inserting a user-provided row. If a valid CCSID is misclassified in a user-provided row, that row can be updated to correct the mistake. Refer to the appendices of *DB2 Installation Guide* for more information on CCSIDs and to *DB2 SQL Reference* for more information on the SYSSTRINGS catalog table.

If a graphic CCSID had not been specified at system installation, update your DECP to include a graphic CCSID and recycle your DB2.

SQLSTATE: 22522

-190 THE ATTRIBUTES SPECIFIED FOR THE COLUMN *column-name* ARE NOT COMPATIBLE WITH THE EXISTING COLUMN DEFINITION

Explanation: The attributes that were specified in the ALTER COLUMN clause for the column *column-name* of the table *table-name* in an ALTER TABLE statement are not compatible with the attributes of the existing

column. The error was returned for one of the following reasons:

- If a SET DATA TYPE clause is specified, the existing column is not compatible with the new data type that was specified, or is of a data type that cannot be changed. The ALTER TABLE ALTER COLUMN SET DATA TYPE statement only allows changing columns of data type character or numeric.
- If a RESTART, SET GENERATED, SET INCREMENT BY, SET MINVALUE, SET NO MINVALUE, SET MAXVALUE, SET NO MAXVALUE, SET CYCLE, SET NO CYCLE, SET CACHE, SET NO CACHE, SET ORDER, or SET NO ORDER clause is specified, the existing column is not defined as an identity column. These clauses can only be specified for a column that is defined as an identity column.

System action: The statement cannot be executed.

Programmer response: Make the attributes that are specified in the statement compatible with the existing column definition, remove the attribute specification, or specify a different column name.

SQLSTATE: 42809

-191 A STRING CANNOT BE USED BECAUSE IT IS INVALID MIXED DATA

Explanation: The operation required the translation of a mixed data character string to a different coded character set. The string could not be translated because it does not conform to the rules for well-formed mixed data. For example, the string contains EBCDIC shift codes that are not properly paired.

System action: The statement cannot be executed.

Programmer response: If the string contains the intended information, the description of the column or host variable should be changed from MIXED DATA to BIT or SBCS DATA. If the description of the column or host variable is correct, the string is the problem and it must be changed to conform to the rules for well-formed mixed data. For more information about well-formed MIXED DATA refer to Chapter 2 of *DB2 SQL Reference*.

SQLSTATE: 22504

-197 QUALIFIED COLUMN NAMES IN ORDER BY CLAUSE NOT PERMITTED WHEN UNION OR UNION ALL SPECIFIED

Explanation: A SELECT statement that specifies both the union of two or more tables and the ORDER BY clause cannot use qualified column names in the ORDER BY clause.

Programmer response: Change the statement so that

qualified names are not necessary in the ORDER BY clause.

System action: The statement is not executed.

SQLSTATE: 42877

-198 THE OPERAND OF THE PREPARE OR EXECUTE IMMEDIATE STATEMENT IS BLANK OR EMPTY

Explanation: The operand (host variable or literal string) that was the object of the PREPARE or EXECUTE IMMEDIATE statement either contained all blanks or was an empty string. A DBRM built in Version 2 Release 3 cannot be used on a Version 2 Release 2 system if the distributive functions were used. If this error appears on Version 2 Release 2 and the DBRM was built on Version 2 Release 3, the program needs to be precompiled again to correct the problem.

System action: The statement cannot be executed.

Programmer response: Correct the logic of the application program to ensure that a valid SQL statement is provided in the operand of the PREPARE or EXECUTE IMMEDIATE statement before that statement is executed.

SQLSTATE: 42617

-199 ILLEGAL USE OF KEYWORD *keyword*. TOKEN *token-list* WAS EXPECTED

Explanation: A syntax error was detected in the statement at the point where the keyword *keyword* appears.

As an aid to the programmer, a partial list of valid tokens is provided in SQLERRM as *token-list*. Only those tokens that will fit are listed. Some tokens in the list might not be valid in statements to be executed by DB2; those tokens are valid for sending to other database management systems.

System action: The statement cannot be executed.

Programmer response: Examine the statement in the area of keyword *keyword*. A colon or SQL delimiter might be missing.

Verify that the clauses are in the correct order. If the reserved word that is identified in the messages is listed as a reserved word, make the word a delimited identifier.

SQLSTATE: 42601

-203 A REFERENCE TO COLUMN *column-name* IS AMBIGUOUS

Explanation: An unqualified column name is ambiguous if more than one table or view identified in the FROM clause has a column with that name, or if

more than one column of a nested table expression has that name.

A qualified column name is ambiguous only if the qualifier is the correlation name for a nested table expression and the column name is not unique.

A reference to a column of the triggering table in a CREATE TRIGGER statement is ambiguous if it does not use the correlation name to indicate if it refers to the old or new transition variable.

System action: The statement cannot be executed.

Programmer response: If the problem is caused by a nonunique column name in a nested table expression, change the nested table expression so that the column name is unique. If the problem is caused by the use of an unqualified name, qualify it with a table, view, or correlation name.

SQLSTATE: 42702

-204 *name* IS AN UNDEFINED NAME

Explanation: The object identified by *name* is not defined in the DB2 subsystem. This SQLCODE can be generated for any type of DB2 object.

System action: The statement cannot be executed.

| **Programmer response:** Verify that the object name
| was correctly specified in the SQL statement, including
| any required qualifiers. If it is correct, ensure that the
| object exists in the system before resubmitting the
| statement.

| If the specified object is a routine, execute the CREATE
| PROCEDURE or CREATE FUNCTION statement to
| define the routine to DB2. Issue the -START
| PROCEDURE command to activate the new definition.

SQLSTATE: 42704

-205 *column-name* IS NOT A COLUMN OF TABLE *table-name*

| **Explanation:** For ALTER TABLE ALTER COLUMN,
| column *column-name* is not a column in table *table-name*.

System action: The statement cannot be executed.

Programmer response: Verify that the column and table names are specified correctly (including any required qualifiers) in the SQL statement.

SQLSTATE: 42703

-206 *column-name* IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, OR ANY TABLE IDENTIFIED IN A FROM CLAUSE, OR IS NOT A COLUMN OF THE TRIGGERING TABLE OF A TRIGGER

Explanation: This return code is used to report one of the following errors:

- In the case of an INSERT or UPDATE statement, the specified column is not a column of the table or view that was specified as the object of the insert or update.
- In the case of an INSERT with VALUES clause, there is a column referenced and columns are not allowed in the VALUES clause.
- In the case of a SELECT or DELETE statement, the specified column is not a column of any of the tables or views identified in a FROM clause in the statement.
- There is a correlated reference in the GROUP BY clause in the select list of a subselect, or a correlated reference is not used in a search condition.
- There is an unresolved qualified reference in HAVING.
- For a CREATE TRIGGER statement:
 - A reference is made to a column using an OLD or NEW correlation name. The column name is not defined in the triggering table.
 - The left side of an assignment in the SET transition-variable statement in the triggered action specifies an old transition variable where only a new transition variable is supported or trigger was not created.

System action: The statement cannot be executed. No data was retrieved, inserted, or updated or the trigger was not created.

Programmer response: Verify that the column and table names are specified correctly in the SQL statement. In the case of a SELECT statement, check to be sure that all of the required tables were named in the FROM clause.

In the case of a CREATE TRIGGER statement, ensure that only new transition variables are specified on the left side of assignments in the SET transition-variable statement and that any reference to columns of the triggering table are qualified with a transition variable correlation name.

SQLSTATE: 42703

-208 THE ORDER BY CLAUSE IS INVALID BECAUSE COLUMN *name* IS NOT PART OF THE RESULT TABLE

Explanation: The statement is invalid because a column ('name') specified in the ORDER BY list does not appear in the result table (that is, it is not specified in the SELECT-list). Only columns in the result table can be used to order that result when the *fullselect* of the *select-statement* is not a *subselect*.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the statement, either by adding the specified column to the

result table, or deleting it from the ORDER BY clause. Refer to Chapter 4 of *DB2 SQL Reference* for information about restrictions on the use of the ORDER BY clause to order the result of an SQL SELECT.

SQLSTATE: 42707

-212 *name* IS SPECIFIED MORE THAN ONCE IN THE REFERENCING CLAUSE OF A TRIGGER DEFINITION

Explanation: The REFERENCING clause of a CREATE TRIGGER statement specified the same name for more than one of the OLD or NEW correlation names or the OLD_TABLE or NEW_TABLE identifiers. *name* is the name that was specified multiple times.

System action: The statement cannot be executed. The trigger was not created.

Programmer response: Change the statement to specify unique names for all transition variables and tables in the REFERENCING clause and resubmit the CREATE TRIGGER request.

SQLSTATE: 42712

-214 AN EXPRESSION IN THE FOLLOWING POSITION, OR STARTING WITH *position-or-expression-start* IN THE *clause-type* CLAUSE IS NOT VALID. REASON CODE = *reason-code*

Explanation: The expression identified by the first part of the expression *expression-start* in the *clause-type* clause is not valid for the reason specified by the *reason-code* as follows:

1. The fullselect of the select-statement is not a subselect. Expressions are not allowed in the ORDER BY clause for this type of select-statement. This reason code occurs only when *clause-type* is ORDER BY.
2. DISTINCT is specified in the select clause, and either a column name in the ORDER BY clause cannot be matched exactly with a column name in the SELECT list, or a *sort-key-expression* is specified in the ORDER BY clause. This reason code occurs only when *clause-type* is ORDER BY.
3. The select list includes an aggregate function or the subselect includes a GROUP BY clause and the expression is not an aggregate function or does not match exactly with an expression in the select list.
4. Grouping is caused by the presence of an aggregate function in the ORDER BY clause. This reason code occurs only when *clause-type* is ORDER BY.
5. Expression in a GROUP BY clause cannot contain a scalar-fullselect. This reason code occurs only when *clause-type* is GROUP BY.
6. Invalid use of scalar-fullselect. This reason code can be issued when the RETURN statement of an SQL

| function contains a scalar-fullselect, or a
| scalar-fullselect is passed as an argument on a
| CALL statement for a parameter that is defined as
| an input parameter (IN).

System action: The statement cannot be executed.

Programmer response: Modify the select-statement based on the reason specified by the *reason-code*. Use one of the following suggestions to modify the select-statement:

1. Remove the expression from the ORDER BY clause. If attempting to reference a column of the result, change the sort key to the *simple-integer* or *simple-column-name* form. See the ORDER BY syntax diagram in the DB2 SQL Reference for more information
- | 2. Remove DISTINCT from the SELECT clause.
- | 3. Change the expression in the ORDER BY or GROUP BY clause to an aggregate function or change the clause to use a numeric column identifier or a column name.
- | 4. Add a GROUP BY clause or remove the aggregate function from the ORDER BY clause.
- | 5. Remove the scalar fullselect from the GROUP BY clause.
- | 6. Remove the scalar fullselect from the statement.

SQLSTATE: 42822

-216 **THE NUMBER OF ELEMENTS ON EACH SIDE OF A PREDICATE OPERATOR DOES NOT MATCH. PREDICATE OPERATOR IS** *operator*.

Explanation: The number of expressions specified on the left-hand side of OPERATOR *operator* is unequal to either the number of values returned by the fullselect or to the number of expressions specified on the right-hand side of the operator. The number of expressions and the number of values/expressions on either side of the operator must be equal.

System action: The statement was not executed.

Programmer response: Change the number of expressions to match the number of values returned by the fullselect or vice versa.

SQLSTATE: 428C4

-219 **THE REQUIRED EXPLANATION TABLE** *table-name* **DOES NOT EXIST**

Explanation: The EXPLAIN statement assumes the existence of the explanation table and it is not defined in the DB2 subsystem as a base table. Refer to Chapter 5 of *DB2 SQL Reference* for more information.

System action: The statement cannot be executed.

Programmer response: Determine whether the

required explanation table does exist. If not, create the required table.

SQLSTATE: 42704

-220 **THE COLUMN** *column-name* **IN EXPLANATION TABLE** *table-name* **IS NOT DEFINED PROPERLY**

Explanation: An error occurred during the insertion of a row into the explanation table. The table is improperly defined for the following reasons:

- A column is missing.
- Columns are defined in the wrong order.
- The table contains an extra column.
- A column description is invalid because of its name, data type, length, or null attributes.

System action: The statement cannot be executed. The explanation information is not generated.

Programmer response: Correct the definition of the required explanation table. Refer to Chapter 5 of *DB2 SQL Reference* for information on defining an explanation table.

SQLSTATE: 55002

-221 **"SET OF OPTIONAL COLUMNS" IN EXPLANATION TABLE** *table-name* **IS INCOMPLETE. OPTIONAL COLUMN** *column-name* **IS MISSING**

Explanation: The EXPLAIN statement assumes the required explanation table is defined properly. The optional column indicated is not defined in the indicated explanation table. PLAN_TABLEs must have one of several specific formats. The format chosen must be complete, and each column in the PLAN_TABLE definition must be correct for the chosen format. The allowed formats for the PLAN_TABLE are described in Chapter 6 of *DB2 SQL Reference*.

System action: The explanation information is not generated.

Programmer response: Correct the definition of the required explanation table to include all of the optional columns in the chosen format, just the Version 2 Release 2 optional columns, or no optional columns. Refer to Chapter 5 of *DB2 SQL Reference* for information on defining an explanation table.

SQLSTATE: 55002

-222 **AN UPDATE OR DELETE OPERATION WAS ATTEMPTED AGAINST A HOLE USING CURSOR** *cursor-name*

Explanation: DB2 could not process a positioned update or delete with cursor *cursor-name* that is defined as SENSITIVE STATIC. The selected row is either a delete hole or an update hole. DB2 detects these holes

when DB2 tries to delete or update the current row of the result table for cursor *cursor-name*, and cannot locate the corresponding row of the underlying table.

A *delete hole* occurs when the corresponding row of the underlying table has been deleted.

An *update hole* occurs when the corresponding row of the underlying table has been updated, and the updated row no longer satisfies the search condition that is specified in the SELECT statement of the cursor.

System action: The statement cannot be processed. The cursor is positioned on the hole.

Programmer response: Issue a FETCH statement to position the cursor on a row.

SQLSTATE: 24510

-224 THE RESULT TABLE DOES NOT AGREE WITH THE BASE TABLE USING *cursor-name*

Explanation: DB2 attempted a positioned UPDATE or DELETE was attempted on a row that no longer matches its previous condition. The column values in the result table row do not match the current values in the base table row because the row was updated between the time it was inserted into the result table and the positioned update or delete was executed.

cursor-name

Name of the cursor used for the positioned update or delete.

System action: The statement cannot be processed. The cursor is positioned on the same row.

Programmer response: Correct the application program to handle this error condition or change isolation levels so the base row cannot be updated during the cursor operation.

SQLSTATE: 24512

-225 FETCH STATEMENT FOR CURSOR *cursor-name* IS NOT VALID BECAUSE THE CURSOR IS NOT DEFINED AS SCROLL

Explanation: A FETCH statement for cursor *cursor-name* has been specified and one of the following errors has occurred:

- BEFORE and AFTER was specified as a fetch orientation on FETCH, but the cursor is not defined as a scrollable cursor.
- PRIOR, FIRST, LAST, CURRENT, ABSOLUTE, or RELATIVE was specified as a row-positioned fetch orientation on FETCH, but the cursor is not defined as a scrollable cursor. NEXT is the only row-positioned fetch orientation that can be specified for cursors that are not scrollable.

- PRIOR ROWSET, FIRST ROWSET, LAST ROWSET, CURRENT ROWSET, or ROWSET STARTING AT was specified as a row-positioned fetch orientation on FETCH, but the cursor is not defined as a scrollable cursor. NEXT ROWSET is the only rowset-positioned fetch orientation that can be specified for cursors that are not scrollable.

System action: The statement cannot be processed. The cursor position is unchanged.

Programmer response: Change the FETCH statement to remove the fetch orientation clause, for example, on PRIOR, FIRST, PRIOR ROWSET, FIRST ROWSET and so forth, to NEXT or NEXT ROWSET. Alternatively, you could change the definition of the cursor to be scrollable.

SQLSTATE: 42872

-227 FETCH *fetch-orientation* IS NOT ALLOWED, BECAUSE CURSOR *cursor-name* HAS AN UNKNOWN POSITION (*sqlcode*,*sqlstate*)

Explanation: The cursor position for *cursor-name* is unknown. The previous multiple-row FETCH for cursor *cursor-name* resulted in an error (SQLCODE *sqlcode*, SQLSTATE *sqlstate*) in the middle of processing multiple rows that were retrieved from DB2. One or more of the requested rows could not be returned to the program following the error, leaving the position of the cursor unknown.

If an indicator structure had been provided on the previous multiple-row FETCH, a positive SQLCODE would have been returned and all of the rows that were retrieved from DB2 could have been returned to the application program.

System action: The statement cannot be processed. The cursor position is not changed.

Programmer response: Close and reopen the cursor to reset the position. For scrollable cursors, you can change the FETCH statement to specify one of the other fetch orientations (such as FIRST, LAST, BEFORE, AFTER, or ABSOLUTE) to establish a valid cursor position and fetch a row of data.

SQLSTATE: 24513

-228 FOR UPDATE CLAUSE SPECIFIED FOR READ-ONLY CURSOR *cursor-name*

Explanation: A cursor was declared read-only with the INSENSITIVE SROLL option, but the SELECT statement contained a FOR UPDATE clause.

cursor-name

Name of the cursor used for the FETCH.

System action: The statement cannot be processed.

Programmer response: To define a scrollable cursor

that is read-only, specify INSENSITIVE SCROLL, but do not specify FOR UPDATE clause. To define a scrollable cursor that can be updated, specify SENSITIVE SCROLL. Correct the application program to DECLARE CURSOR appropriately.

SQLSTATE: 42620

-229 THE LOCALE *locale* SPECIFIED IN A SET LC_CTYPE OR OTHER STATEMENT THAT IS LOCALE SENSITIVE WAS NOT FOUND

Explanation: The statement attempted to reference a locale that is not known or not available to DB2. The value of the variable *locale* indicates what locale DB2 is using when it processed the statement. DB2 used the locale that was either specified on the SET CURRENT LOCALE LC_CTYPE statement or the locale that was in effect at the time the locale access was attempted.

System action: The statement cannot be executed.

Programmer response: Depending on whether the locale was explicitly specified in a SET CURRENT LOCALE LC_CTYPE statement or the current locale was used implicitly, complete one of the following actions:

- If the statement was a SET CURRENT LOCALE LC_CTYPE statement, re-specify a locale that is correct (known and available to DB2).
- If the statement was something other than SET CURRENT LOCALE LC_CTYPE, then the statement contained a locale sensitive interface (the UPPER function is an example of a locale sensitive interface).

Issue the following statement to determine the value of the locale in use by your program:

```
SELECT CURRENT LOCALE LC_CTYPE FROM
SYSIBM.SYSDUMMY1.
```

Another possible reason for this message is that DB2 used an incorrect locale default value specified at installation time. Because locales are dynamic, they can be added, created, or deleted at anytime. DB2 does not validate the value of the locale until it is used. Therefore, it is possible to specify a locale that is not valid at installation or bind time.

For information about locales and their naming conventions, see *z/OS C/C++ Programming Guide*

SQLSTATE: 42708

-240 THE PART CLAUSE OF A LOCK TABLE STATEMENT IS INVALID

Explanation: The LOCK TABLE statement is invalid for one of the following reasons:

- If it is partitioned, specify a PART clause that identifies the partition you want to lock.

System action: The LOCK TABLE statement cannot be executed.

Programmer response: Determine whether the specified table resides in a partitioned table space defined with LOCKPART YES.

- If it is partitioned and defined with LOCKPART YES, specify a PART clause that identifies the partition you want to lock.
- If it is partitioned but does not have the LOCKPART YES attribute and you want to lock a single partition, use ALTER TABLESPACE to change the LOCKPART attribute to YES.
- If it is not partitioned, do not specify the PART clause.

SQLSTATE: 428B4

-242 THE OBJECT NAMED *object-name* OF TYPE *object-type* WAS SPECIFIED MORE THAN ONCE IN THE LIST OF OBJECTS

Explanation: In a list of object names of type *object-type*, the object named *object-name* was specified more than once.

System action: The statement cannot be processed.

Programmer response: Correct the error by removing from the list all duplicate occurrences of the object.

SQLSTATE: 42713

-243 SENSITIVE CURSOR *cursor-name* CANNOT BE DEFINED FOR THE SPECIFIED SELECT STATEMENT

Explanation: The cursor *cursor-name* is defined as SENSITIVE, but the content of the SELECT statement requires DB2 to build a temporary table with the result table of the cursor, and DB2 cannot guarantee that changes made outside the cursor will be visible. This situation occurs when the content of the query making the result table read-only. In this case the cursor must be defined INSENSITIVE or ASENSITIVE.

System action: The statement cannot be processed.

Programmer response: Either change the content of the query to result in a result table that is not read-only, or change the type of cursor to be INSENSITIVE or ASENSITIVE.

SQLSTATE: 36001

-244 SENSITIVITY *sensitivity* SPECIFIED ON THE FETCH IS NOT VALID FOR CURSOR *cursor-name*

Explanation: The sensitivity option specified on FETCH conflicts with the sensitivity option in effect for cursor *cursor-name*. If a cursor is declared INSENSITIVE, the FETCH statement can only specify

INSENSITIVE or nothing. If a cursor is declared SENSITIVE, the FETCH statement can specify INSENSITIVE, SENSITIVE, or nothing.

The keyword INSENSITIVE is not allowed with the FETCH statements if the associated cursor is either:

- Declared as SENSITIVE DYNAMIC SCROLL, or
- The cursor is declared ASENSITIVE, and DB2 selected the maximum allowable sensitivity of SENSITIVE DYNAMIC SCROLL for the associated SELECT statement.

In the case of a non-scrollable cursor, the sensitivity option cannot be specified.

sensitivity

Specified sensitivity for the FETCH statement.

cursor-name

Name of the cursor used for the FETCH statement.

System action: The statement cannot be processed.

Programmer response: Change or remove the sensitivity option that is specified on the FETCH.

SQLSTATE: 428F4

-245 THE INVOCATION OF FUNCTION *routine-name* IS AMBIGUOUS

Explanation: DB2 issues this error when an invocation of a function is ambiguous. This occurs when an untyped parameter marker is passed to a function and there are two or more possible candidate functions to resolve to during function resolution.

System action: The statement cannot be processed.

Programmer response: Fix the problem and retry. This could involve a change to the SQL statement, changing the definition of a function, or a change to the user's SQL path. See the *DB2 Application Programming and SQL Guide* for details on function resolution.

SQLSTATE: 428F5

-246 STATEMENT USING CURSOR *cursor-name* SPECIFIED NUMBER OF ROWS *num-rows* WHICH IS NOT VALID WITH *dimension*

Explanation: A multiple-row FETCH or multiple-row INSERT statement is not valid in this context. The number of rows that were specified is not greater than 0 and not less than or equal to 32767, or is greater than the dimension of the host variable array. The number of rows that were specified is *num-rows*, and the dimension of the array is *dimension*. If this is a FETCH statement, the cursor name is *cursor-name*. Otherwise, the cursor name is not applicable.

System action: The statement cannot be processed. The cursor position is unchanged.

Programmer response: Change the application to either declare, or allocate a host-variable-array that is large enough to contain the number of rows specified in the statement, or update the value of *num-rows* to a value within the valid range.

SQLSTATE: 42873

-247 A HOLE WAS DETECTED ON A MULTIPLE ROW FETCH STATEMENT USING CURSOR *cursor-name*, BUT INDICATOR VARIABLES WERE NOT PROVIDED TO DETECT THE CONDITION

Explanation: A hole was detected on a FETCH statement for multiple rows of data, but no indicator variables were provided to reflect the situation to the application.

System action: The statement cannot be processed.

Programmer response: Change the FETCH statement to provide at least one indicator variable, and resubmit the statement.

SQLSTATE: 24519

-248 A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR *cursor-name* SPECIFIED ROW *n* OF A ROWSET, BUT THE ROW IS NOT CONTAINED WITHIN THE CURRENT ROWSET

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a positioned DELETE or UPDATE statement, but row *n* is not contained within the bound of the rowset. This situation can also occur when row *n* is within the bounds of the rowset that was requested, but the current rowset contains less than the requested number of rows. In this case, a partial rowset is returned. A partial rowset can occur for various reasons, including an end of data condition or an error that did not result in the closure of the cursor.

System action: The statement cannot be processed.

Programmer response: Reissue the positioned UPDATE or DELETE with a value that corresponds to a row of the current rowset. If the row that is specified is outside of the current rowset, then do the following:

- Use the FOR *n* ROWS clause on a FETCH CURRENT ROWSET statement to specify that the rowset contains a larger number of rows
- Reissue the positioned UPDATE or DELETE statement.

If this message is issued because a partial rowset was returned,

- Update the application logic to detect that the actual rowset size was less than the rowset size that was requested

- Ensure that a positioned UPDATE or DELETE statement only refers to rows of the current rowset.

SQLSTATE: 24521

-249 DEFINITION OF ROWSET ACCESS FOR CURSOR *cursor-name* IS INCONSISTENT WITH THE FETCH ORIENTATION CLAUSE *clause* SPECIFIED

Explanation: A *clause* specified for the FETCH statement is inconsistent with the definition of the cursor *cursor-name*. This error can be issued for the following situations:

- A cursor defined WITHOUT ROWSET POSITIONING can only use BEFORE, AFTER, row positioned fetch orientation keywords: NEXT, PRIOR, FIRST, LAST, CURRENT, ABSOLUTE, or RELATIVE.
- A cursor defined WITH ROWSET POSITIONING can use BEFORE, AFTER, rowset positioned fetch orientation clauses: NEXT ROWSET, PRIOR ROWSET, FIRST ROWSET, LAST ROWSET, CURRENT ROWSET, or ROWSET STARTING AT, or, row positioned fetch orientation keywords: NEXT, PRIOR, FIRST, LAST, CURRENT, ABSOLUTE, or RELATIVE.

A FOR n ROWS clause was specified on a FETCH statement, but the cursor is not defined for rowset access.

System action: The statement cannot be processed.

Programmer response: Correct the fetch orientation, remove the FOR n ROWS clause, or redefine the cursor.

SQLSTATE: 24523

-250 THE LOCAL LOCATION NAME IS NOT DEFINED WHEN PROCESSING A THREE-PART OBJECT NAME

Explanation: A three-part object name (table, view, or alias) cannot be used until the local location name is defined.

System action: Install or reinstall the DB2 distributed data facility (DDF) with a registered location name for local DB2.

Programmer response: Define the local location name and then retry the function.

SQLSTATE: 42718

-251 TOKEN *name* IS NOT VALID

Explanation: A *location name* cannot contain alphabetic extenders. (The standard alphabetic extenders in the United States are #, @, \$.)

System action: The statement cannot be executed

Programmer response: Correct the name and reissue the statement.

SQLSTATE: 42602

-253 A NON-ATOMIC *statement* STATEMENT SUCCESSFULLY COMPLETED FOR SOME OF THE REQUESTED ROWS, POSSIBLY WITH WARNINGS, AND ONE OR MORE ERRORS

Explanation: A non-atomic *statement* statement successfully processed some of the rows of data that were requested. However, one or more error conditions occurred, and some warnings might have also occurred. Use GET DIAGNOSTICS to obtain information about the error and warning conditions that occurred.

System action: One or more rows were successfully processed, but one or more errors or warnings also occurred.

Programmer response: Analyze the error and warning conditions to determine if the statement should be rolled back.

SQLSTATE: 22529

-254 A NON-ATOMIC *statement* STATEMENT ATTEMPTED TO PROCESS MULTIPLE ROWS OF DATA, BUT ERRORS OCCURRED

Explanation: A non-atomic *statement* statement specified that multiple rows of data were to be processed, but errors occurred during the processing of those rows of data. Use GET DIAGNOSTICS to obtain information about the error and warning conditions that occurred.

System action: The statement cannot be processed.

Programmer response: Analyze the error and warning conditions to determine the appropriate corrective actions.

SQLSTATE: 22530

-270 FUNCTION NOT SUPPORTED

Explanation: The statement cannot be processed because it violates one or more of the following restrictions:

- For an ALTER TABLE statement that names a materialized query table, the alterations are limited to either:
 - Changing materialized query table attributes, or turning the materialized query table to a base table, or
 - Using AUDIT, DATA CAPTURE, and ADD or DROP RESTRICT ON DROP clauses,

| (but not both in the same statement).

| • The length of the column for a base table cannot be
| altered if that base table is referenced by a
| materialized query table definition.

| • A materialized query table cannot be renamed.

| • The XML data type can only be used as a transient
| data type, and cannot be stored in the database nor
| returned to an application.

| **System action:** The statement cannot be processed.

| **Programmer response:** Alter the materialized query
| table into a base table before performing the alteration,
| or drop and recreate the materialized query table.

| If this error is caused by an XML data type, input the
| XML data to one of the functions that accept XML
| input. Store the output of the function in the database,
| or return it to the application.

| **SQLSTATE:** 42997

**-300 THE STRING CONTAINED IN HOST
VARIABLE OR PARAMETER
position-number IS NOT
NUL-TERMINATED**

Explanation: A host variable or parameter is invalid.
Its entry in the SQLDA is indicated by *position-number*.
The host variable or parameter is a C string variable
that is one of the following:

- Used as an input parameter to a stored procedure or
function.
- Returned as an output parameter from a stored
procedure or function.
- Referenced as an input variable in an embedded SQL
statement.
- Used to provide a value for a parameter marker of a
dynamic SQL statement.

If the data type of the variable is character string, it is
invalid because it does not include X'00'. If the data
type of the variable is graphic string, it is invalid
because it does not include X'0000'.

System action: The statement cannot be executed.

Programmer response: Append a NUL-terminator to
the end of the string.

SQLSTATE: 22024

**-301 THE VALUE OF INPUT HOST
VARIABLE OR PARAMETER NUMBER
position-number CANNOT BE USED AS
SPECIFIED BECAUSE OF ITS DATA
TYPE**

Explanation: DB2 received data that could not be used
as specified in the statement because its data type is
incompatible with the requested operation.

The *position-number* identifies either the host variable

number (if the message is issued as a result of an
INSERT, UPDATE, DELETE, SELECT, VALUE INTO, or
SET assignment statement), or the parameter number
(if the message is issued as the result of a CALL
statement, or the invocation of a function).

System action: The statement cannot be executed.

Programmer response: Correct the application
program, function or stored procedure. Ensure that the
data type of the indicated input host variable or
parameter in the statement is compatible with the way
it is used.

SQLSTATE: 42895

**-302 THE VALUE OF INPUT VARIABLE OR
PARAMETER NUMBER *position-number*
IS INVALID OR TOO LARGE FOR
THE TARGET COLUMN OR THE
TARGET VALUE**

Explanation: DB2 received data that was invalid or
too large to fit in the corresponding column of the table
or the corresponding target value. The *position-number*
identifies either the host variable number (if the
message is issued as a result of an INSERT, UPDATE,
DELETE, SELECT, VALUES INTO, or SET assignment
statement), or the parameter number (if the message is
issued as the result of a CALL statement or the
invocation of a function).

One of the following occurred:

- The column is defined as a string and the host
variable or parameter contains a string that is too
long for the column.
- The column is defined as numeric and the host
variable or parameter contains a numeric value too
large for the definition of the column.
- The host variable is defined as decimal, but contains
invalid decimal data.
- The target value is a string constant and the host
variable or parameter contains a string that is too
long for the target value.
- The target value is a numeric constant and the host
variable or parameter contains a numeric value that
is too large for the target value.

System action: The statement cannot be executed.

Programmer response: Correct the application
program, function or stored procedure. Check the
column type and length of the value or the data type
and contents of the input host variable or parameter
position-number. Ensure that the value of the host
variable or parameter will fit in the column or contains
valid decimal data. Valid decimal data is a System/370
packed decimal number.

SQLSTATE: 22003 if *number too large for target*; 22001
otherwise.

**-303 A VALUE CANNOT BE ASSIGNED TO
OUTPUT HOST VARIABLE NUMBER
position-number BECAUSE THE DATA
TYPES ARE NOT COMPARABLE**

Explanation: A CALL, FETCH, SELECT, VALUES INTO, or SET *host-variable* statement with an output host variable, whose entry in the output SQLDA is indicated by *position-number*, could not be performed. The data type of the variable was not compatible with the data type of the corresponding SELECT, VALUES INTO, or SET *host-variable* statement list element. The values of the output host variable and the corresponding list element must be in one of the following categories:

- Both must be numbers.
- Both must be character strings if not using Unicode.
- Both must be graphic strings if not using Unicode.
- Both must be row IDs.

In addition, for datetime, timestamp values, the host variable must be a character string variable with a correct length.

System action: The CALL, FETCH, SELECT, VALUES INTO, or SET *host-variable* statement cannot be executed. No data was retrieved.

Programmer response: Verify that table definitions are current and that the host variable has the correct data type.

SQLSTATE: 42806

**-304 A VALUE WITH DATA TYPE *data-type1*
CANNOT BE ASSIGNED TO A HOST
VARIABLE BECAUSE THE VALUE IS
NOT WITHIN THE RANGE OF THE
HOST VARIABLE IN POSITION
position-number WITH DATA TYPE
*data-type2***

Explanation: A CALL, FETCH, SELECT, VALUES INTO, or SET assignment statement with a host variable list or structure in position number *position-number* failed because the host variable with data type *data-type2* was not large enough to hold the retrieved value with data type *data-type1*.

System action: The statement cannot be executed. No data was retrieved. If the statement was a FETCH, the cursor remains open.

Programmer response: Verify that table definitions are current, and that the host variable has the correct data type. See the explanation for SQLCODE -405 for ranges of SQL data types.

SQLSTATE: 22003

**-305 THE NULL VALUE CANNOT BE
ASSIGNED TO OUTPUT HOST
VARIABLE NUMBER *position-number*
BECAUSE NO INDICATOR VARIABLE
IS SPECIFIED**

Explanation: A FETCH, SELECT, VALUES INTO, or SET assignment statement resulted in the retrieval of a null value to be inserted into the output host variable, designated by entry number 'position-number' of the output SQLDA, for which no indicator variable was provided. An indicator variable must be supplied if a column returns a null value.

System action: The statement cannot be executed. No data was retrieved.

| **Programmer response:** Examine the definition of the
| table that is the object of the statement and correct the
| application program to provide indicator variables for
| all host variables into which null values can be
| retrieved. This includes host variables for columns
| which can contain null values and host variables which
| receive the results of aggregate functions whose result
| table could be empty.

SQLSTATE: 22002

**-309 A PREDICATE IS INVALID BECAUSE
A REFERENCED HOST VARIABLE
HAS THE NULL VALUE**

Explanation: The statement could not be processed because a host variable appearing in a predicate such as

column-name = host-variable

had the NULL value. Such a predicate is not permitted when the host variable contains the NULL value even though the object column might contain nulls.

System action: The statement cannot be executed.

Programmer response: Rebind the plan or package containing the statement. The condition described is not an error in DB2 Version 2 Release 3 and later releases.

SQLSTATE: 22512

**-310 DECIMAL HOST VARIABLE OR
PARAMETER *number* CONTAINS
NON-DECIMAL DATA**

Explanation: DB2 received nondecimal data from either an application (in the form of a host variable), function or a stored procedure (in the form of a parameter that was passed to or from function or a stored procedure).

number Identifies either the host variable number (if the message is issued as a result of a FETCH, INSERT, UPDATE, DELETE, SELECT, VALUES INTO, or SET assignment statement statement), or the parameter number (if the

message is issued as the result of the invocation of a function, or a CALL statement).

System action: The statement cannot be processed.

Programmer response: Correct the application program or stored procedure. Ensure that all decimal variables or parameters contain valid System/370 packed decimal numbers.

SQLSTATE: 22023

-311 THE LENGTH OF INPUT HOST VARIABLE NUMBER *position-number* IS NEGATIVE OR GREATER THAN THE MAXIMUM

Explanation: When evaluated, the length specification for input host string variable, whose entry in the SQLDA is indicated by position-number, was negative or greater than the maximum.

System action: The statement cannot be executed.

Programmer response: Correct the program to ensure that the lengths of all host string variables are not negative or that they are not greater than the maximum allowed length.

SQLSTATE: 22501

-312 *variable-name* IS AN UNDEFINED OR UNUSABLE HOST VARIABLE OR IS USED IN A DYNAMIC SQL STATEMENT OR A TRIGGER DEFINITION

Explanation: The host variable *variable-name* appears in the SQL statement, but:

- The SQL statement is a prepared statement, or
- The attributes of the variable are inconsistent with its usage in the SQL statement, or
- The variable is not declared in the application program or
- The variable appeared in one of the triggered SQL statements in a CREATE TRIGGER statement.

System action: The statement cannot be executed.

Programmer response: Verify that

- The variable name is spelled properly in the SQL statement.
- The variable is allowed in the SQL statement.
- The application program contains a declaration for that variable.
- The attributes of the variable are compatible with its use in the statement.

SQLSTATE: 42618

-313 THE NUMBER OF HOST VARIABLES SPECIFIED IS NOT EQUAL TO THE NUMBER OF PARAMETER MARKERS

Explanation: The number of host variables specified in the EXECUTE or OPEN statement is not the same as the number of parameter markers (question marks) appearing in the prepared SQL statement.

System action: The statement cannot be executed.

Programmer response: Correct the application program so that the number of host variables specified in the EXECUTE or OPEN statement is the same as the number of parameter markers appearing in the prepared SQL statement. The DESCRIBE INPUT SQL statement can be used to determine the expected number of input parameter markers.

SQLSTATE: 07001

-314 THE STATEMENT CONTAINS AN AMBIGUOUS HOST VARIABLE REFERENCE

Explanation: A host variable used in the statement has been defined more than once in this application program causing confusion as to which host variable defined should be used.

System action: The statement cannot be executed.

Programmer response: Make the host variable unique or use qualifications to indicate which host variable definition is to be used.

SQLSTATE: 42714

-327 THE ROW CANNOT BE INSERTED BECAUSE IT IS OUTSIDE THE BOUND OF THE PARTITION RANGE FOR THE LAST PARTITION

Explanation: When a row is inserted, the calculated partition key value for the new row must be within the bounds of a partition (as specified in the VALUES clause of the CREATE INDEX statement).

System action: The statement cannot be executed.

Programmer response: Correct the statement to specify a value for the partition key that is within the bounds of the last partition of the partitioned table space.

SQLSTATE: 22525

-330 A STRING CANNOT BE USED BECAUSE IT CANNOT BE PROCESSED. REASON *reason-code*, CHARACTER *code-point*, HOST VARIABLE *position-number*

Explanation: AN error occurred during the processing of a string, or in the conversion of a string. The type of

error is indicated by the *reason-code*:

- | 8 Length exception (for example, expansion
| required for PC MIXED data exceeds the
| maximum length of the string).
- | 12 Invalid code point (for example, use of the
| ERRORBYTE option of SYSSTRINGS).
- | 16 Form exception (for example, invalid MIXED
| data).
- | 20 Conversion procedure error (for example, an
| exit set the length control field of the string to
| an invalid value).
- | 24 SBCS character found in string contained in a
| wchar_t or sqlbchar host variable.

| If the *reason-code* is 12, *code-point* is the invalid code
| point. Otherwise, *code-point* is either blank or an
| additional *reason-code* returned by an exit. If the string
| is the value of an input host variable, the
| *position-number* is the ordinality of the variable in the
| SQLDA. If the string is not the value of a host variable,
| the *position-number* is blank.

System action: The statement cannot be executed.

Programmer response: Take one of the following
actions based on the *reason-code*

- | • If the *reason-code* is 8, extend the maximum length of
| the host variable to allow for the expansion that
| occurs when the string is converted.
- | • If the *reason-code* is 12, either change the convert table
| to accept the *code-point* or the data to eliminate the
| *code-point*.
- | • If the *reason-code* is 16 and the string is described as
| MIXED data, either change its description or the
| string to conform to the rules for well-formed mixed
| data.
- | • If the *reason-code* is 20, correct the conversion
| procedure.
- | • If the *reason-code* is 24, delete the SBCS character
| from the graphic string.

SQLSTATE: 22021

| -331 **CHARACTER CONVERSION**
| **CANNOT BE PERFORMED BECAUSE**
| **A STRING, POSITION** *position-number*
| **CANNOT BE CONVERTED FROM**
| *source-ccsid* **TO** *target-ccsid*, **REASON**
| *reason-code*

| **Explanation:** The operation required the conversion
| from *source-ccsid* to *target-ccsid* and a conversion error
| occurred. The type of error is indicated by the
| *reason-code*:

- | • 8 for length exception (for example, expansion
| required for PC MIXED data exceeds the maximum
| length of the string).

- | • 12 for invalid *code-point* (for example, use of the
| ERRORBYTE option of SYSSTRINGS).
- | • 16 for form exception (for example, invalid MIXED
| data).
- | • 20 for conversion procedure error (for example, an
| exit set the length control field of the string to an
| invalid value). You can find the procedure name in
| SYSIBM.SYSSTRINGS row with INCCSID=*source-*
| *ccsid* and OUTCCSID=*target-ccsid* in the
| TRANSPROC column.

| The *position-number*, if provided (non-zero), is the
| ordinality of the output variable in the SQLDA.

System action: The statement cannot be executed.

Programmer response: Take one of the following
actions based on the *reason-code*:

- | • If the *reason-code* is 8, the maximum length of the
| result column must be extended to allow for the
| expansion that occurs when the string is converted.
- | • If the *reason-code* is 12, either the conversion table
| must be changed to accept the *code-point* or the data
| must be changed to eliminate the *code-point*.
- | • If the *reason-code* is 16, and the string is described as
| MIXED data, either its description must be changed
| or the string must be changed to conform to the
| rules for well-formed MIXED data.
- | • If the *reason-code* is 20, the conversion procedure
| must be corrected.

An alternative to these corrective actions is to provide
an indicator variable so that a null value and a warning
can be returned rather than an error. Refer to Chapter 2
of *DB2 SQL Reference* for more information on coded
character set.

SQLSTATE: 22021

| -332 **CHARACTER CONVERSION**
| **BETWEEN CCSID** *from-ccsid* **TO** *to-ccsid*
| **REQUESTED BY** *reason-code* **IS NOT**
| **SUPPORTED**

| **Explanation:** The operation required a conversion
| between two different CCSIDs, but no conversion
| support was found.

| This error may occur if one CCSID is 65535 (BIT data)
| and the other CCSID is a graphic CCSID. Conversion is
| not defined between 65535 and a graphic CCSID.

| *from-ccsid* identifies the coded character set of the string
| to be converted.

| *to-ccsid* identifies the coded character set to which it
| must be converted.

| *reason code* describes the reason codes returned from
| DB2. Reason codes returned from DB2 begin with
| 'DSN' and identify the context in which the conversion
| was requested. Values other than those that start with

| 'DSN' are returned from other DB2 platforms and are
| described in the documentation for the platform.

System action: The statement cannot be processed.

| **Programmer response:** If the conversion request is
| correct, refer to the section entitled "Character
| conversion" in *DB2 Installation Guide* for information on
| how to add conversion support.

SQLSTATE: 57017

-333 **THE SUBTYPE OF A STRING
VARIABLE IS NOT THE SAME AS
THE SUBTYPE KNOWN AT BIND
TIME AND THE DIFFERENCE
CANNOT BE RESOLVED BY
CHARACTER CONVERSION**

Explanation: The CCSID in the run time SQLDA is inconsistent with the bind time subtype of the host variable or parameter marker. Either the run time description is BIT and the bind time description was not BIT, or the run time description is not BIT and the bind time description was BIT.

System action: The statement cannot be executed.

Programmer response: Change the CCSID in the SQLDA so that the subtype of the host variable is consistent with the bind time subtype of the host variable or parameter marker. If the input data in error is a parameter marker, you can use the DESCRIBE INPUT SQL statement to determine the expected SQLTYPE, SQLLEN and CCSID expected. Refer to Chapter 2 of *DB2 SQL Reference* for more information on coded character set.

SQLSTATE: 56010

-336 **THE SCALE OF THE DECIMAL
NUMBER MUST BE ZERO**

| **Explanation:** The decimal number is used in a context
| where the scale must be zero. This can occur when a
| decimal number is specified in a CREATE or ALTER
| SEQUENCE statement for START WITH, INCREMENT
| BY, MINVALUE, MAXVALUE, or RESTART WITH.

| **Programmer response:** Change the decimal number so
| that there are no non-zero digits to the right of the
| decimal point.

| SQLSTATE: 428FA

-338 **AN ON CLAUSE IS INVALID**

Explanation: This return code reports a violation of one of the following:

- One expression of the predicate must only reference columns of one of the operand tables of the associated join operator, full join, and the other expression of the predicate must only reference columns of the other operand table.

- A VALUE or COALESCE function is allowed in the ON clause only when the join operator is a FULL OUTER JOIN or FULL JOIN.
- An operator other than '=' is not allowed in a FULL OUTER JOIN or FULL JOIN.
- A subquery is not allowed in the ON clause.

System action: The statement cannot be executed.

Programmer response: Correct the syntax so that it doesn't violate any of the above items within the ON clause

SQLSTATE: 42972

-340 **THE COMMON TABLE EXPRESSION
name HAS THE SAME IDENTIFIER AS
ANOTHER OCCURRENCE OF A
COMMON TABLE EXPRESSION
DEFINITION WITHIN THE SAME
STATEMENT**

| **Explanation:** The common table expression name *name*
| is used in the definition of more than one common
| table expressions in the statement. The name used to
| describe a common table expression must be unique
| within the same statement.

| **System action:** The statement cannot be executed.

| **Programmer response:** Correct the error by changing
| the name of one of the common table expressions.

| SQLSTATE: 42726

-341 **A CYCLIC REFERENCE EXISTS
BETWEEN THE COMMON TABLE
EXPRESSIONS name1 AND name2**

| **Explanation:** The common table expression *name1*
| refers to *name2* in a FROM clause within its fullselect
| and *name2* refers to *name1* in a FROM clause within its
| fullselects. Such forms of cyclic references are not
| allowed.

| **System action:** The statement cannot be executed.

| **Programmer response:** Remove the cyclic reference
| from one of the common table expressions.

| SQLSTATE: 42835

-342 **THE COMMON TABLE EXPRESSION
name MUST NOT USE SELECT
DISTINCT AND MUST USE UNION
ALL BECAUSE IT IS RECURSIVE**

| **Explanation:** There are two possible explanations:

- A fullselect within the common table expression *name* cannot start with SELECT DISTINCT because the common table expression is recursive.
- A fullselect within the common table expression *name* specified UNION instead of UNION ALL as required for recursive common table expressions.

| **System action:** The statement cannot be executed.

| **Programmer response:** Remove the keyword
| DISTINCT from the common table expression, add the
| keyword ALL following UNION, or remove the
| recursive reference within the common table
| expression.

| **SQLSTATE:** 42925

| **-343 THE COLUMN NAMES ARE
| REQUIRED FOR THE RECURSIVE
| COMMON TABLE EXPRESSION** *name*

| **Explanation:** The recursive common table expression
| name *name* must include the specification of the
| column names following the identifier of the common
| table expression.

| **System action:** The statement cannot be executed.

| **Programmer response:** Add column names following
| the identifier of the common table expressions.

| **SQLSTATE:** 42908

| **-344 THE RECURSIVE COMMON TABLE
| EXPRESSION** *name* **HAS
| MISMATCHED DATA TYPES OR
| LENGTHS FOR COLUMN** *column-name*

| **Explanation:** The recursive common table expression
| name *name* has a column *column-name* that is referred to
| in the iterative fullselect of the common table
| expression. The data type and length are set based on
| the initialization fullselect for this column. The result of
| the expression for the column *column-name* in the
| iterative fullselect has a different data type or length
| that may result in failure to assign the value for the
| column.

| **System action:** The statement cannot be executed.

| **Programmer response:** Correct the column used in the
| fullselects of the recursive common table expression so
| that the initialization column matches the iterative
| columns.

| **SQLSTATE:** 42825

| **-345 THE FULLSELECT OF THE
| RECURSIVE COMMON TABLE
| EXPRESSION** *name* **MUST BE THE
| UNION OF TWO OR MORE
| FULLSELECTS AND MUST NOT
| INCLUDE COLUMN FUNCTIONS,
| GROUP BY CLAUSE, HAVING
| CLAUSE, OR AN EXPLICIT JOIN
| INCLUDING AN ON CLAUSE**

| **Explanation:** The common table expression *name*
| includes a reference to itself and therefore:

- | • must be the union of two or more fullselects.
- | • cannot include a GROUP BY clause.

- | • cannot have column functions.
- | • cannot include a HAVING clause.
- | • and cannot include an explicit join with an ON
| clause.

| **System action:** The statement cannot be executed.

| **Programmer response:** Change the common table
| expression by:

- | • making it a union of two or more fullselects.
- | • removing any column functions, GROUP BY clause,
| HAVING clause, or explicit JOIN including an ON
| clause.
- | • removing the recursive reference.

| **SQLSTATE:** 42836

| **-346 AN INVALID REFERENCE TO
| COMMON TABLE EXPRESSION** *name*
| **OCCURS IN THE FIRST FULLSELECT,
| AS A SECOND OCCURRENCE IN THE
| SAME FROM CLAUSE, OR IN THE
| FROM CLAUSE OF A SUBQUERY**

| **Explanation:** The common table expression *name*
| includes an invalid reference to itself as described by
| one of the following:

- | • A recursive reference in the first fullselect before the
| UNION ALL set operator. The first fullselect must be
| an initialization and cannot include a recursive
| reference.
- | • More than one reference to the same common table
| expression in the same FROM clause. Such references
| are not permitted in recursive common table
| expression.
- | • A recursive reference in the FROM clause of a
| subquery. A recursion cycle cannot be defined using
| a subquery.

| **System action:** The statement cannot be executed.

| **Programmer response:** Change one of the following:

- | • the fullselect prior to the union operator so that it
| does not include a recursive reference.
- | • the FROM clause containing more than one
| reference to the same common table expression to
| just one reference .
- | • the FROM clause of the subquery so that it does not
| reference the common table expression.

| **SQLSTATE:** 42836

| **-348** *sequence-expression* **CANNOT BE
| SPECIFIED IN THIS CONTEXT**

| **Explanation:** The statement contains a NEXT VALUE
| expression or PREVIOUS VALUE expression in an
| invalid context.

| The NEXT VALUE expression or PREVIOUS VALUE

| expression cannot be specified in the following
| contexts:

- | • Join condition of a full outer join
- | • DEFAULT value for a column in a CREATE TABLE
| or ALTER TABLE statement
- | • Column definition that is generated in a CREATE
| TABLE or ALTER TABLE statement
- | • Materialized query table definition in a CREATE
| TABLE or ALTER TABLE statement
- | • Condition of a CHECK constraint
- | • Input value-specification for LOAD
- | • CREATE VIEW statement

| NEXT VALUE expressions cannot be specified in the
| following contexts:

- | • CASE expression
- | • Parameter list of an aggregate function
- | • Subquery in a context in which it is not otherwise
| allowed
- | • SELECT statement for which the outer SELECT
| contains a DISTINCT operator or a GROUP BY
| clause
- | • SELECT statement for which the outer SELECT is
| combined with another SELECT statement using the
| UNION set operator
- | • Join condition of a join
- | • Nested table expression
- | • Parameter list of a table function
- | • SELECT clause of the fullselect of an expression in
| the SET clause of an UPDATE statement
- | • ORDER BY clause of the outer-most SELECT
| statement
- | • IF, WHILE, DO ... UNTIL, or CASE statement in an
| SQL routine

| **System action:** The statement cannot be executed.

| **Programmer response:** Remove the reference to the
| sequence expression and resubmit the statement.

| **SQLSTATE:** 428F9

| -350 **INVALID SPECIFICATION OF A
| LARGE OBJECT COLUMN OR
| SECURITY LABEL COLUMN**

Explanation: The ALTER TABLE, CREATE TABLE, or
CREATE INDEX statement is invalid for one of the
following reasons:

- | • A LOB column cannot be added to a temporary
| table.
- | • A LOB column cannot be added to a table defined
| with an EDITPROC.
- | • A LOB column cannot be specified in a PRIMARY
| KEY clause.
- | • A LOB column cannot be specified in a UNIQUE
| clause.

- | • A LOB column or security label column cannot be
| specified as a column of a foreign key in a
| *referential-constraint* clause.
- | • A LOB column or security label column cannot be
| specified in a REFERENCES clause.
- | • A LOB column cannot be specified as part of the
| index key in a CREATE INDEX statement.
- | • A LOB column cannot be specified in a partitioning
| key.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and
resubmit the statement.

SQLSTATE: 42962

-351 **AN UNSUPPORTED SQLTYPE WAS
ENCOUNTERED IN POSITION
 position-number OF THE SELECT-LIST**

Explanation: *position-number* is the position of the first
element in the SQLDA with an unsupported data type.
Either the application requestor or the application
server does not have support for this type. This error
can only occur in a client/server environment.

System action: The statement cannot be executed.

Programmer response: Change the statement to
exclude the unsupported data type. For a select
statement, remove the names of any columns in the
select-list with the unsupported data types.

SQLSTATE: 56084

-352 **AN UNSUPPORTED SQLTYPE WAS
ENCOUNTERED IN POSITION
 position-number OF THE INPUT-LIST**

Explanation: The input SQLDA for an OPEN,
EXECUTE, FETCH, or CALL statement contains an
unsupported SQLTYPE for the parameter in position
position-number. *position-number* is the position of the
first element in the SQLDA with an unsupported data
type. Either the application requestor or the application
server does not have support for this data type. This
error can only occur in a client/server environment.

System action: The statement cannot be executed.

Programmer response: Change the SQLDA to exclude
the unsupported data type.

SQLSTATE: 56084

-353 **FETCH IS NOT ALLOWED, BECAUSE
CURSOR *cursor-name* HAS AN
UNKNOWN POSITION**

| **Explanation:** The cursor position for *cursor-name* is
| unknown. The previous multiple-row-fetch for cursor
| *cursor-name* resulted in an error in the middle of
| processing multiple rows that were retrieved from DB2.

| One or more of the requested rows could not be
| returned to the program following the error, leaving the
| position of the cursor unknown.

| The error might have been detected at the requester.
| For example, a row with a null value was returned to
| an application, but no indicator variable was provided.
| A subsequent FETCH statement would result in
| SQLCODE -353. If an indicator had been provided, a
| positive SQLCODE would have been returned and all
| of the rows retrieved from DB2 could have been
| returned to the application program.

| **System action:** The statement cannot be processed.
| The cursor position is not changed.

| **Programmer response:** Close and reopen the cursor to
| reset the cursor position. For scrollable cursors, you can
| change the FETCH statement to specify one of the
| other fetch orientations. For example, you can modify
| the FETCH statement by specifying one of the
| following fetch orientations:

- | • BEFORE or AFTER
- | • row-positioned fetch orientations: FIRST, LAST, or
| ABSOLUTE to establish a valid row cursor and fetch
| a row of data
- | • rowset-positioned fetch orientations: FIRST ROWSET,
| LAST ROWSET, or ROWSET STARTING AT
| ABSOLUTE to establish a valid rowset cursor
| position and fetch multiple rows of data

| Alternately, change the application to correct the error
| that originally occurred. For example, if the error was
| issued because an indicator was not provided, change
| the application to provide an indicator.

| **SQLSTATE:** 24513

-355 **A LOB COLUMN IS TOO LARGE TO
BE LOGGED**

Explanation: One of the following has occurred:

- a CREATE TABLE statement for an auxiliary table
stores a BLOB, CLOB or DBCLOB column whose
length exceeds 1 gigabyte but whose associated LOB
table space was defined with the LOG YES attribute
- an ALTER TABLESPACE statement of a LOB table
space specifies the LOG YES clause but the auxiliary
table in the LOB table space stores a BLOB or CLOB
column whose length exceeds 1 gigabyte or a
DBCLOB column whose length exceeds 500
megabyte characters

System action: The statement cannot be executed.

Programmer response: Either change the attribute of
the LOB table space to LOG NO or drop the base table,
and recreate it with columns of an acceptable length for
logging.

SQLSTATE: 42993

-359 **THE RANGE OF VALUES FOR THE
IDENTITY COLUMN OR SEQUENCE
IS EXHAUSTED**

| **Explanation:** DB2 attempted to generate a value for an
| identity column or a sequence object. However, all
| allowable values have already been assigned.

| **System action:** The statement cannot be processed.

| **Programmer response:** Take one of the following
| actions:

- | • For an identity column, redefine the table with a
| larger range of values for the identity column. If a
| MAXVALUE or MINVALUE specification has been
| made that limits the range of values to be less than
| the range for the data type of the column, then the
| column can be altered to expand the range of valid
| values. Otherwise, the identity column must be
| recreated, which requires that the table be recreated.
| First, drop the existing table; then, recreate the table
| with a different data type for the identity column,
| specifying a data type that has a larger range of
| values than the current data type for the identity
| column.
- | • For a sequence object, redefine the sequence with a
| larger range of values. If a MAXVALUE or
| MINVALUE specification has been made that limits
| the range of values to be less than the range for the
| data type, then the sequence can be altered to
| expand the range of valid values. Otherwise, the
| sequence must be recreated using DROP SEQUENCE
| and CREATE SEQUENCE to cover a larger range of
| values.

SQLSTATE: 23522

-372 **ONLY ONE ROWID, IDENTITY, OR
SECURITY LABEL COLUMN IS
ALLOWED IN A TABLE**

| **Explanation:** An attempt was made to do one of the
| following actions:

- | • Create a table with more than one ROWID column.
- | • Add a ROWID column to a table that already has
| one.
- | • Create a table with more than one identity column.
- | • Add an identity column to a table that already has
| one.
- | • Create a table with more than one security label
| column.
- | • Add a security label column to a table that already
| has one.
- # • Create a table without a security label in the
Common Criteria environment which requires a
security label column on every table created.

| **System action:** The statement was not executed.

| **Programmer response:** For a CREATE TABLE
| statement, select only one column to have the row ID

| data type, the AS IDENTITY attribute, or the AS
| SECURITY LABEL attribute. For an ALTER TABLE
| statement, a ROWID column, identity column, or
| security label column already exists for the table. Do
| not attempt to add another column with the data type
| row ID, with the AS IDENTITY attribute or the AS
| SECURITY LABEL to the table. If the Common Criteria
| environment is set (DSN6SPRM COMCRIT= YES), then
| every table created must have a security label.
| Designate a column AS SECURITY LABEL or change
| the subsystem parameter.

SQLSTATE: 428C1

| -373 **DEFAULT CANNOT BE SPECIFIED**
| **FOR IDENTITY COLUMN OR**
| **SECURITY LABEL**
| **COLUMN***columnname-seclabel*

| **Explanation:** A DEFAULT clause cannot be specified
| for a column that has been identified as an IDENTITY
| column or a security label column.

System action: The statement cannot be executed.

Programmer response: Remove the DEFAULT clause
and resubmit the statement.

SQLSTATE: 42623

-390 **THE FUNCTION** *function-name*,
 SPECIFIC NAME *specific-name*, **IS NOT**
 VALID IN THE CONTEXT IN WHICH
 IT OCCURS

Explanation: A function resolved to a specific function
that is not valid in the context where it is used. If
specific-name is an empty string, then the function
resolved to the built-in function identified by
function-name. Some of the possible situations include:

- | • A scalar or aggregate function is referenced where
| only a table function is allowed (such as in the
| FROM clause of a query).
- | • A table function is referenced where only a scalar or
| aggregate function is allowed (such as in an
| expression, or in a SOURCE clause of a CREATE
| FUNCTION statement).

System action: The statement cannot be executed.

Programmer response: Ensure that the correct
function name and arguments are specified and that
the SQL path includes the schema where the correct
function is defined. You may need to change the
function name, arguments, SQL path (using SET
CURRENT PATH or the PATH bind option), or change
the context in which the function is used. Refer to
Chapter 5 of *DB2 SQL Reference* for information on the
use of functions.

SQLSTATE: 42887

-392 **SQLDA PROVIDED FOR CURSOR**
 cursor **HAS BEEN CHANGED FROM**
 THE PREVIOUS FETCH

Explanation: The application is running with *DB2*
rules, and has requested that LOB data be returned as a
LOB in one FETCH statement, and as a locator in
another FETCH statement. This is not permitted.

System action: The statement is not executed and the
connection is terminated.

Programmer response: Either do not use *DB2 rules*, or
change to application to not change the data type code
from LOB to locator (or the reverse) in the SQLDA
between successive fetches.

SQLSTATE: 42855

-393 **THE CONDITION OR CONNECTION**
 NUMBER IS INVALID

| **Explanation:** The value of the CONDITION or
| CONNECTION number that was specified in the GET
| DIAGNOSTICS statement is either less than zero, or
| greater than the number of available diagnostics.

| **System action:** The statement cannot be processed.

| **Programmer response:** Correct the value of the
| CONDITION or CONNECTION number, while
| ensuring that the number is between 1 and the value of
| the NUMBER statement-information item or GET
| DIAGNOSTICS. Resubmit the GET DIAGNOSTICS
| CONDITION or GET DIAGNOSTICS CONNECTION
| statement.

| SQLSTATE: 35000

-396 *object-type object-name* **ATTEMPTED TO**
 EXECUTE AN SQL STATEMENT
 DURING FINAL CALL PROCESSING

Explanation: A user-defined function named
object-name was invoked and attempted to execute an
SQL statement (other than CLOSE CURSOR) during
final call processing, but the statement is not allowed.

System action: The SQL statement cannot be executed.

Programmer response: Change the definition of the
function to not issue SQL statements during final call
processing.

SQLSTATE: 38505

-397 **GENERATED IS SPECIFIED WITH A**
 COLUMN THAT IS NOT A ROW ID, A
 DISTINCT TYPE BASED ON A ROW
 ID, OR AN IDENTITY COLUMN

| **Explanation:** GENERATED was specified in a
| CREATE or ALTER TABLE statement for a column with
| a data type that is not a row ID, a distinct type that is
| based on a row ID, or an identity column.

| GENERATED can only be specified for a column with a
| data type of row ID, a distinct type that is based on a
| row ID, or an identity column.

System action: The statement cannot be processed.

Programmer response: Correct the statement. Either eliminate the GENERATED clause or change the data type of the column ensure that the data type of the object is row ID, or that the column is an identity column

SQLSTATE: 428D3

**-398 A LOCATOR WAS REQUESTED FOR
HOST VARIABLE NUMBER
 $position-number$ BUT THE VARIABLE IS
 NOT A LOB**

Explanation: The application requested that a locator be returned from host variable number $position-number$. A locator can only be used with LOB data, and the requested data is not a LOB.

System action: The statement cannot be executed.

Programmer response: Change the statement to either return LOB data, or change the target host variable to not be a locator.

SQLSTATE: 428D2

**-399 INVALID VALUE ROWID WAS
SPECIFIED**

Explanation: When inserting into a table, a value specified for a ROWID column was invalid. Only row ID values previously generated by DB2 are valid.

System action: The statement cannot be executed.

System programmer response: Do not attempt to generate any value into a ROWID column. Insertion into ROWID columns is supported for purposes of Data Propagation, where DB2 has previously generated the row ID values. Only row ID values previously generated by DB2 can be used as values for insertion into a row ID column. Alternatively, insert the row specifying DEFAULT for the ROWID column or remove the ROWID column from the insert column-list.

You could also use the OVERRIDING clause as a possible solution for this situation. See INSERT in DB2 SQL Reference for more information about the OVERRIDING USER VALUE clause.

SQLSTATE: 22511

**-400 THE CATALOG HAS THE MAXIMUM
NUMBER OF USER DEFINED
INDEXES**

Explanation: Only one hundred user-defined indexes can be created in the catalog database.

System action: The statement cannot be executed.

Programmer response: If this index must be created, another user-defined index on the catalog must be dropped. After that index is dropped, this statement can be executed.

SQLSTATE: 54027

**-401 THE OPERANDS OF AN
ARITHMETIC OR COMPARISON
OPERATION ARE NOT COMPARABLE**

Explanation: An arithmetic operation appearing within the SQL statement contains a mixture of numeric and non-numeric operands, or the operands of a comparison operation are not compatible.

| One reason for this error is that a field procedure exists
| on one of the columns. If one column of arithmetic or
| comparison operation is defined with a field procedure,
| other columns in the operation must be defined with
| the same field procedure.

System action: The statement cannot be executed.

Programmer response: Check the data types of all operands to ensure that their data types are comparable and compatible with their usage in the statement.

If all the operands of the SQL statement are correct, then, if a view is being accessed, check the data types of all the operands in the view definition.

SQLSTATE: 42818

**-402 AN ARITHMETIC FUNCTION OR
OPERATOR $arith-fop$ IS APPLIED TO
CHARACTER OR DATETIME DATA**

Explanation: A nonnumeric operand has been specified for the arithmetic function or operator $arith-fop$.

System action: The statement cannot be executed.

Programmer response: Examine and correct the syntax of the SQL statement such that all operands of the specified function or operator are numeric.

SQLSTATE: 42819

**-404 THE SQL STATEMENT SPECIFIES A
STRING THAT IS TOO LONG**

Explanation: An INSERT, UPDATE, CALL, VALUES INTO, SET, parameter, host variable, or transition variable statement specifies a value that is longer than the maximum length string that can be stored in the target column.

System action: The statement cannot be executed.

Programmer response: Check the length of the target column, parameter, host variable or transition variable and correct the program or SQL statement so that the length of the string does not exceed that maximum. For

example, you could use the SUBSTR function to shorten the string.

SQLSTATE: 22001

-405 THE NUMERIC LITERAL *literal* CANNOT BE USED AS SPECIFIED BECAUSE IT IS OUT OF RANGE

Explanation: The numeric *literal* is not in the proper range.

The proper ranges for SQL values are as follows:

- 5.4E-79 to 7.2E+75 for FLOAT values
- $-(10^{31} - 1)$ to $+(10^{31} - 1)$ for DECIMAL values
- -2147483648 to 2147483647 for INTEGER values
- -32768 to +32767 for small integer (SMALLINT) values.

System action: The statement cannot be executed.

Programmer response: The value of *literal* should be reduced to the appropriate size for this data type.

SQLSTATE: 42820

-406 A CALCULATED OR DERIVED NUMERIC VALUE IS NOT WITHIN THE RANGE OF ITS OBJECT COLUMN

Explanation: A value derived or calculated during processing of the SQL statement was outside the range of the data type of its object column. This problem might have arisen because either the values occurring in the object column were out of range, or the SQL operation performed was not appropriate for the values in the object column.

System action: The statement cannot be executed.

Programmer response: See the explanation of SQLCODE -405 for allowed ranges for numeric data types.

SQLSTATE: 22003

-407 AN UPDATE, INSERT, OR SET VALUE IS NULL, BUT THE OBJECT COLUMN *column-name* CANNOT CONTAIN NULL VALUES

Explanation: One of the following conditions occurred:

- A null insert or update value was specified for a column defined as NOT NULL.
- No insert value was provided for a column that does not have a default value.
- A SET transition variable statement specified a NULL value for column defined as NOT NULL.
- The insert value was DEFAULT, but the object column was declared as NOT NULL without WITH

DEFAULT in the table definition. Consequently, a default value of NULL cannot be inserted into that column.

- A null insert value was specified for a ROWID column.

System action: The statement cannot be executed. The 'column-name' might be returned in the SQLCA, depending on the syntax of the SQL statement in which the error was detected.

Programmer response: Examine the definition of the object table to determine which columns of the table have the NOT NULL attribute or have a type of ROWID, and correct the SQL statement accordingly.

SQLSTATE: 23502

-408 THE VALUE IS NOT COMPATIBLE WITH THE DATA TYPE OF ITS TARGET. TARGET NAME IS *name*

Explanation: The data type of the value to be assigned to the column, parameter, host variable or transition variable by the SQL statement is incompatible with the declared data type of the assignment target. Both must be:

- Numeric
- Character
- Graphic
- Dates or character
- Times or character
- Timestamps or character
- Row IDs
- The same distinct types

However, dates, times, or timestamps cannot be assigned to a character column that has a field procedure. Also note that character and graphic data types are compatible when using Unicode.

This SQLCODE is issued for any statement that fails required assignment rule checking.

System action: The statement cannot be executed.

Programmer response: Examine the current definition for the object table, procedure, user-defined function, or host variable and ensure that the host variable or literal value that is assigned to the object has the proper data type. In some cases, you can convert the value to the proper data type by using a function such as CHAR or DECIMAL.

SQLSTATE: 42821

-409 INVALID OPERAND OF A COUNT FUNCTION

Explanation: The operand of the COUNT or COUNT_BIG function in the statement violates SQL syntax. A common error is a column name or other expression without DISTINCT.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement. Refer to Chapter 3 of *DB2 SQL Reference* for information about the proper form for the operands of a COUNT or COUNT_BIG function.

SQLSTATE: 42607

-410 THE FLOATING POINT LITERAL *literal* CONTAINS MORE THAN 30 CHARACTERS

Explanation: The specified floating-point literal is more than 30 characters in length. A floating-point literal has a maximum length of 30 characters.

System action: The statement cannot be executed.

Programmer response: Correct the indicated literal.

SQLSTATE: 42820

-411 CURRENT SQLID CANNOT BE USED IN A STATEMENT THAT REFERENCES REMOTE OBJECTS

Explanation: A reference to the CURRENT SQLID special register is invalid in a statement that contains the three-part name or alias of an object that is remote to the remote server.

System action: The statement cannot be executed.

Programmer response: Either remove the reference to CURRENT SQLID or the reference to the remote object.

SQLSTATE: 56040

-412 THE SELECT CLAUSE OF A SUBQUERY SPECIFIES MULTIPLE COLUMNS

Explanation: In the context in which it was used in the SQL statement, the subquery can have only one column specified in its SELECT clause.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the SQL statement. Refer to Chapter 4 of *DB2 SQL Reference* for information about restrictions on the syntax for subqueries.

SQLSTATE: 42823

-413 OVERFLOW OCCURRED DURING NUMERIC DATA TYPE CONVERSION

Explanation: During processing of the SQL statement, an overflow condition arose when converting from one numeric type to another. Numeric conversion is performed according to the standard rules of SQL.

System action: The statement cannot be processed. No data was retrieved, updated, or deleted.

Programmer response: Examine the syntax of the SQL statement to determine the cause of the error. If the problem is data-dependent, it might be necessary to examine the data processed at the time of the error.

SQLSTATE: 22003

-414 A LIKE PREDICATE IS INVALID BECAUSE THE FIRST OPERAND IS NOT A STRING

Explanation: The data type of the first operand of the LIKE predicate must be a character string or graphic string.

System action: The statement cannot be executed.

Programmer response: Respecify the predicate so that the data type of each operand is a character string or a graphic string.

SQLSTATE: 42824

-415 THE CORRESPONDING COLUMNS, *column-number*, OF THE OPERANDS OF A UNION OR A UNION ALL DO NOT HAVE COMPARABLE COLUMN DESCRIPTIONS

Explanation: The column descriptions of corresponding columns of the operands of a UNION or UNION ALL must be comparable. The columns of ordinality '*column-number*' of the operands in this UNION or UNION ALL do not satisfy this requirement. For columns to be comparable, they must both be either numeric, character, graphic, date, time, or timestamp. They cannot be a mixture of these groups. If corresponding columns have field procedures, they must both have the same field procedure.

System action: The statement cannot be executed.

Programmer response: Check the data types of the specified columns and correct the UNION or UNION ALL statement so that all corresponding columns have comparable column descriptions.

SQLSTATE: 42825

-416 AN OPERAND OF A UNION CONTAINS A LONG STRING COLUMN

Explanation: The UNION specified in the SQL statement could not be performed because one of the tables participating in the union contains a long string column. The operands of a UNION cannot contain long string columns.

System action: The statement cannot be executed.

Programmer response: The implied function is not supported by DB2. Refer to Chapter 2 of *DB2 SQL Reference* for information about restrictions on the

manipulation of long string columns.

SQLSTATE: 42907

**-417 A STATEMENT STRING TO BE
PREPARED INCLUDES PARAMETER
MARKERS AS THE OPERANDS OF
THE SAME OPERATOR**

Explanation: The statement string specified as the object of a PREPARE contains a predicate or expression where parameter markers have been used as operands of the same operator—for example:

? > ?

This syntax is not permitted.

System action: The statement cannot be executed.

Programmer response: Correct the logic of the application program so that this syntax error does not occur. Refer to Chapter 5 of *DB2 SQL Reference* for information about the proper usage of parameter markers within SQL statements to be prepared.

SQLSTATE: 42609

**-418 A STATEMENT STRING TO BE
PREPARED CONTAINS AN INVALID
USE OF PARAMETER MARKERS**

Explanation: Parameter markers cannot be used in the SELECT list, as the sole argument of a scalar function, or in a concatenation operation. Parameter markers cannot be used in the string expression of an EXECUTE IMMEDIATE SQL statement.

System action: The statement cannot be executed.

Programmer response: Correct the logic of the application program so that this error does not occur. Refer to Chapter 5 of *DB2 SQL Reference* for information about the proper usage of parameter markers within SQL statements and for EXECUTE IMMEDIATE SQL statement restrictions.

SQLSTATE: 42610

**-419 THE DECIMAL DIVIDE OPERATION
IS INVALID BECAUSE THE RESULT
WOULD HAVE A NEGATIVE SCALE**

Explanation: The decimal division is invalid because it will result in a negative scale.

| The formula used internally to calculate the scale of the
| result for decimal division is explained in Chapter 3 of
| *DB2 SQL Reference*.

System action: The statement cannot be executed. No data was retrieved, updated, or deleted.

Programmer response: Examine the precision and scale of all columns that might have participated in a

decimal division. Note that an integer or small integer value might have been converted to decimal for this calculation.

| A value of YES for field MINIMUM DIVIDE SCALE on
| installation panel DSNTIPF specifies that the scale of
| the result of a decimal division is never less than 3.

SQLSTATE: 42911

**-420 THE VALUE OF A STRING
ARGUMENT WAS NOT ACCEPTABLE
TO THE *function-name* FUNCTION**

Explanation: A string argument did not conform to the requirements of the function. For example, a character string passed to the DECIMAL function did not conform to the rules for forming an SQL integer or decimal constant.

System action: The statement cannot be processed.

Programmer response: Change the argument value so that it conforms to the requirements of the function as specified in *DB2 SQL Reference*.

SQLSTATE: 22018

**-421 THE OPERANDS OF A UNION OR
UNION ALL DO NOT HAVE THE
SAME NUMBER OF COLUMNS**

Explanation: The operands of a UNION or UNION ALL must have the same number of columns.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement so that there are exactly the same number of columns in each operand.

SQLSTATE: 42826

**-423 INVALID VALUE FOR LOCATOR IN
POSITION *position-#***

| **Explanation:** The value specified in a result set locator
| host variable, a LOB locator host variable, or a table
| locator that is specified at position *position-#* in the
| locator variable list of the SQL statement does not
| identify a valid result set locator, LOB locator variable,
| or table locator, respectively.

System action: The statement cannot be executed.

Programmer response: For a result set locator there are two common causes for the error:

- The host variable used as a result set locator was never assigned a valid result set locator value. Result set locator values are returned by the DESCRIBE PROCEDURE and ASSOCIATE LOCATORS statements. Make sure the value in your host variable is obtained from one of these statements.
- Result set locator values are only valid as long as the underlying SQL cursor is open. If a commit or

rollback operation closes an SQL cursor, the result set locator associated with the cursor is no longer valid.

For a LOB locator, some common causes for the error are:

- The host variable used as a LOB locator was never assigned a valid LOB value.
- A commit or rollback operation or an SQL FREE LOCATOR statement freed the locator.

| For a table locator, the error commonly occurs when
| the host variable that was used as a table locator was
| never assigned a valid table locator value.

SQLSTATE: 0F001

-426 DYNAMIC COMMIT NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED

Explanation: An application executing using DRDA protocols has attempted to issue a dynamic COMMIT statement, or a stored procedure has attempted to issue a COMMIT_ON_RETURN, while connected to a location at which updates are not allowed. A dynamic COMMIT or COMMIT_ON_RETURN can be issued only while connected to a location at which updates are allowed.

System action: The statement cannot be executed. No COMMIT is performed.

Programmer response: The IMS or CICS protocols should be used to commit work in these environments.

SQLSTATE: 2D528

-427 DYNAMIC ROLLBACK NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED

Explanation: An application executing using DRDA protocols has attempted to issue a dynamic ROLLBACK statement while connected to a location at which updates are not allowed. A dynamic ROLLBACK may be issued only while connected to a location at which updates are allowed.

System action: The statement cannot be executed. No ROLLBACK is performed.

Programmer response: The IMS or CICS protocols should be used to rollback work in these environments.

SQLSTATE: 2D529

-430 *routine-type routine-name* (SPECIFIC NAME *specific-name*) HAS ABNORMALLY TERMINATED

Explanation: An abnormal termination has occurred while the routine *routine-name* (stored procedure or function) was in control.

System action: The statement cannot be executed.

Programmer response: The stored procedure or function needs to be fixed. Contact the author of the routine or your database administrator. Until it is fixed, the routine should not be used.

SQLSTATE: 38503

-433 VALUE *value* IS TOO LONG

Explanation: The value *value* required truncation by a system (built-in) cast or adjustment function, which was called to transform the value in some way. The truncation is not allowed where this value is used. The value being transformed is one of the following:

- an argument to a user defined function (UDF)
- an input to the SET clause of an UPDATE statement
- a value being INSERTed into a table
- an input to a cast or adjustment function in some other context.

If *value* has the 'for bit data' subtype, then the *value* is printed as a hexadecimal string in quotes followed by an X.

System action: The statement cannot be executed.

Programmer response: If *value* is a literal string in the SQL statement, it is too long for its intended use. If *value* is not a literal string, examine the SQL statement to determine where the transformation is taking place. Either the input to the transformation is too long, or the target is too short. Correct the problem and rerun the statement.

SQLSTATE: 22001

-435 AN INVALID SQLSTATE *sqlstate* IS SPECIFIED IN THE FUNCTION RAISE_ERROR OR IN A SIGNAL OR RESIGNAL SQLSTATE STATEMENT

| **Explanation:** The SQLSTATE specified in the
| RAISE_ERROR function or specified in a SIGNAL or
| RESIGNAL SQLSTATE statement does not conform to
| the rules for an application defined SQLSTATE.

System action: The statement cannot be processed.

| **Programmer response:** Correct the SQLSTATE
| specified in the RAISE_ERROR function or SIGNAL or
| RESIGNAL statement. The SQLSTATE must be a
| character string containing exactly 5 characters. It must
| be of type CHAR defined with a length of 5, or a type
| VARCHAR defined with a length of 5 or greater. The
| SQLSTATE value must follow the rules for
| application-defined SQLSTATES as follows:
| • Each character must be from the set of digits ('0'
| through '9') or non-accented upper case letters ('A'
| through 'Z').

- The SQLSTATE class (first two characters) cannot be '00', '01' or '02' because these are not error classes.
- If the SQLSTATE class (first two characters) starts with the character '0' through '6' or 'A' through 'H', then the subclass (last three characters) must start with a letter in the range 'I' through 'Z'.
- If the SQLSTATE class (first two characters) starts with the character '7', '8', '9' or 'I' through 'Z', then the subclass (last three characters) can be any of '0' through '9' or 'A' through 'Z'.

SQLSTATE: 428B3

-438 APPLICATION RAISED ERROR WITH DIAGNOSTIC TEXT: *text*

Explanation: This error occurred as a result of execution of the RAISE_ERROR function or as a result of the SIGNAL or RESIGNAL SQLSTATE statement.

text Diagnostic text provided by the invocation of the RAISE_ERROR function or the SIGNAL or RESIGNAL SQLSTATE statement.

System action: The statement cannot be processed.

Programmer response: Use application-provided diagnostic text, if provided, to determine the cause of the error.

SQLSTATE: application-defined

-440 NO *routine-type* BY THE NAME *routine-name* HAVING COMPATIBLE ARGUMENTS WAS FOUND

Explanation: This occurs in a reference to routine (stored procedure or function) *routine-name*, when DB2 cannot find a function or stored procedure it can use to implement the reference. There are several reasons why this could occur.

- *routine-name* was either incorrectly specified or does not exist in the database.
- A qualified reference was made, and the qualifier was incorrectly spelled.
- A user's SQL path does not contain the schema to which the desired function belongs, and an unqualified reference was used.
- The wrong number of arguments were included.
- For functions, the data types of one or more of the arguments is incorrect.

System action: The statement cannot be executed.

Programmer response: Fix the problem and retry. This could involve a change to the SQL statement, the addition of new routines or a change to the user's SQL path.

SQLSTATE: 42884

-441 INVALID USE OF 'DISTINCT' OR 'ALL' WITH SCALAR FUNCTION *function-name*

Explanation: The keyword 'DISTINCT' or 'ALL' was detected within parentheses in a reference to function *function-name* and the function has been resolved as a scalar function. Use of the keyword 'DISTINCT' or 'ALL' with a scalar function is invalid.

System action: The statement cannot be executed.

Programmer response: If a scalar function is being used, then remove the keyword 'DISTINCT' or 'ALL'.

If an aggregate function is being used, then there is a problem with function resolution. Check your SQL path to see if the desired function is in one of the schemas, and also check the SYSIBM.SYSROUTINES catalog for the spelling of the function name and the number and types of parameters.

SQLSTATE: 42601

-443 ROUTINE *routine-name* (SPECIFIC NAME *specific-name*) HAS RETURNED AN ERROR SQLSTATE WITH DIAGNOSTIC TEXT *msg-text*

Explanation: An SQLSTATE of the form 38xxx was returned by routine *routine-name*, along with message text *msg-text*.

If the third character is not 5 (for example, '385xx') then the last 3 characters of the SQLSTATE value were chosen by the function to indicate the reason of the failure. SQLSTATEs values of the form 385xx are issued by IBM with a different SQLCODE.

System action: Execution of the SQL statement is terminated.

Programmer response: Contact the author of the function or your database administrator. Until the problem is resolved, the function should not be used.

SQLSTATE: 38xxx (the SQLSTATE that was returned by the routine).

-444 USER PROGRAM *name* COULD NOT BE FOUND

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function, and found the row in the SYSIBM.SYSROUTINES catalog table associated with the requested procedure name. However, the MVS load module identified in the EXTERNAL_NAME column of the SYSIBM.SYSROUTINES row could not be found.

name The name of the MVS load module that could not be found

System action: The statement cannot be executed.

Programmer response: If the `EXTERNAL_NAME` column value in the `SYSIBM.SYSROUTINES` table is incorrect, use the `ALTER FUNCTION` or `ALTER PROCEDURE` statement to correct the value.

If the `EXTERNAL_NAME` column value is correct, use the MVS linkage editor to create the required MVS load module in one of the MVS load libraries used by your installation for stored procedures.

This error can also occur if you are invoking a WLM-managed stored procedure that is not APF authorized, and the DB2 load libraries are not in the STEPLIB concatenation because they are being loaded from LINKLIST. In this case, if you want the stored procedure program to run APF-authorized, link-edit it with `AC=1` into an MVS APF authorized library. If you do not want the stored procedure program to run APF authorized, add the DB2 load library to the STEPLIB concatenation of the JCL used to start the WLM-managed address space.

SQLSTATE: 42724

-449 CREATE OR ALTER STATEMENT FOR FUNCTION OR PROCEDURE
routine-name CONTAINS AN INVALID FORMAT OF THE EXTERNAL NAME CLAUSE OR IS MISSING THE EXTERNAL NAME CLAUSE

Explanation: An error was found in the `EXTERNAL NAME` clause of the `CREATE FUNCTION`, `CREATE PROCEDURE`, `ALTER FUNCTION`, or `ALTER PROCEDURE` statement for *routine-name*, or the clause is needed but was not specified.

- For external routines with `LANGUAGE JAVA`, the name must be specified and it must contain a valid *external-java-routine-name* of the following form:
jar-name:package-id...class-id.method-id(method-signature)
 - No blanks are permitted within the single quotes.
 - The *method-name* consists of the list of *package-ids*, *class-id*, and *method-id*, and must not be longer than 254 bytes.
 - Zero or more *package-ids* can be specified, preceding the *class-id*.
 - The *method-signature* is optional, and is a list of Java data types that are separated by commas. If specified, the *method-signature* must not be longer than 1024 bytes.
 - If multiple strings are specified, the total length of all the strings concatenated together for the *external-java-routine-name* must not be greater than 1305.
- For external routines with a language other than `JAVA`, the external name must be a short identifier with letters or digits. The first character must be a letter (this is the MVS naming convention for load modules). A possible cause for this error is the inclusion of a blank in the name.

If the clause is omitted, the external name defaults to *function-name*. However, for `CREATE FUNCTION` or `CREATE PROCEDURE`, if the function or procedure name is longer than eight characters then the `EXTERNAL NAME` clause must be explicitly specified to specify a valid *short identifier* as the external name.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the SQL statement. Refer to the *DB2 SQL Reference* for information on the `EXTERNAL NAME` clause.

User response: When `LANGUAGE` is `JAVA`, possible causes include:

- Omitting the `EXTERNAL NAME` clause.
- Including a blank.
- Having the `'` at the beginning or end of the name.
- Specifying an invalid *external-java-routine-name*.

SQLSTATE: 42878

-450 USER-DEFINED FUNCTION OR STORED PROCEDURE *name*,
PARAMETER NUMBER *parmnum*,
OVERLAYED STORAGE BEYOND ITS DECLARED LENGTH.

Explanation: Upon return from a specific function *name* or a stored procedure *name*, DB2 has detected an overlay storage beyond a parameter's declared length. The parameter number is specified for a stored procedure or function. This is not permitted.

System action: Execution of the SQL statement is terminated.

Programmer response: Contact the author of the function or your database administrator. Until it is fixed, the function should not be used.

SQLSTATE: 39501

-451 THE *data-item* **DEFINITION, IN THE CREATE FUNCTION FOR** *function-name* **CONTAINS DATA TYPE** *type* **WHICH IS NOT APPROPRIATE FOR AN EXTERNAL FUNCTION WRITTEN IN THE GIVEN LANGUAGE**

Explanation: An error was made in the *data-item* part of the `CREATE FUNCTION` statement for *function-name*. The `CREATE FUNCTION` statement contained an invalid *type*, or it contained a distinct type which is based on the invalid *type*.

System action: The statement cannot be executed.

Programmer response: Correct the statement.

SQLSTATE: 42815

-453 **THERE IS A PROBLEM WITH THE RETURNS CLAUSE IN THE CREATE FUNCTION STATEMENT FOR**
function-name

Explanation: A problem casting the result of user-defined function *function-name* has been identified. The CAST FROM data type is not castable to the RETURNS data type, and it must be. See the *SQL Reference* for details on casting between data types.

System action: The statement cannot be executed.

Programmer response: Change the RETURNS or CAST FROM clause so that the CAST FROM data type is castable to the RETURNS data type.

SQLSTATE: 42880

-454 **THE SIGNATURE PROVIDED IN THE CREATE FUNCTION STATEMENT FOR**
function-name **MATCHES THE SIGNATURE OF SOME OTHER FUNCTION ALREADY EXISTING IN THE SCHEMA**

Explanation: The signature consists of the function name (*function-name*), the number of parameters defined for the function, and an ordered list of the types of the parameters (without regard to any parameters of the types). In this case there is a function already in the schema and the existing function has the same signature as the function being created. See the *SQL Reference* for the details on the uniqueness of a function.

System action: The statement cannot be executed.

Programmer response: Determine if the existing function already provides the functionality desired. If not, then the new function's signature will have to be changed (e.g. change the function name).

SQLSTATE: 42723

-455 **IN CREATE FUNCTION FOR**
function-name, **THE SCHEMA NAME**
schema-name1 **PROVIDED FOR THE SPECIFIC NAME DOES NOT MATCH THE SCHEMA NAME** *schema-name2* **OF THE FUNCTION**

Explanation: If the SPECIFIC name is specified as a two part name, the *schema-name1* portion must be the same as the *schema-name2* portion of the *function-name*. Note that the *schema-name2* portion of *function-name* may have been specified directly or it may have defaulted to the authorization ID of the statement.

System action: The statement cannot be executed.

Programmer response: Correct the statement.

SQLSTATE: 42882

-456 **IN CREATE FUNCTION FOR**
function-name, **THE SPECIFIC NAME**
specific-name **ALREADY EXISTS IN THE SCHEMA**

Explanation: A SPECIFIC name has been explicitly specified as *specific-name* in the CREATE FUNCTION statement for *function-name*, but this name already exists as the SPECIFIC name for another function within the schema.

System action: The statement cannot be executed.

Programmer response: Choose a new SPECIFIC name.

SQLSTATE: 42710

-457 **A FUNCTION OR DISTINCT TYPE CANNOT BE CALLED** *name* **SINCE IT IS RESERVED FOR SYSTEM USE**

Explanation: The user-defined function or distinct type cannot be created or referenced because the name selected is reserved for use by the system.

A number of names used as keywords are reserved for system use. These names may not be used as user-defined functions or distinct-type-names, **even if they are delimited identifiers**. These names are:

=	<	>	>=	<=
=	<=	>=	<	>
ALL	AND	ANY	BETWEEN	DISTINCT
EXCEPT	EXISTS	FALSE	FOR	FROM
IN	IS	LIKE	MATCH	NOT
NULL	ONLY	OR	OVERLAPS	SIMILAR
SOME	TABLE	TRUE	TYPE	UNIQUE
UNKNOWN				

The names of built-in data types cannot be used as the name of a distinct type (for example, CHAR).

| **Restriction:** You cannot use an asterisk (*) as a specific name for a user-defined or procedure name.

System action: The statement is not executed.

Programmer response: Select a name for the function or distinct type that is not reserved for system use.

SQLSTATE: 42939

-458 **IN A REFERENCE TO FUNCTION**
function-name **BY SIGNATURE, A MATCHING FUNCTION COULD NOT BE FOUND**

Explanation: In a reference to function *function-name* by signature, no matching function could be found. The problem could be with the data type or some other attributes of a parameter. For some data types there are attributes in addition to data type:

- Length, precision, or scale

While it is not necessary to specify a length, precision, or scale attribute for a data type, if one is specified then there must be an exact match on the corresponding specification of the parameter for the existing function as defined in SYSPARMS.

A type of FLOAT(*n*) does not need to match the defined value for *n* since $1 \leq n \leq 21$ means REAL and $22 \leq n \leq 53$ means DOUBLE. Matching occurs based on whether the type is REAL or DOUBLE.

However, a match on data type is sufficient.

To indicate this, an empty set of parentheses must be specified for the data types that allow a specification of length, precision, or scale. For example, assuming a function exists for which a parameter was defined as CHAR(12) on the CREATE FUNCTION statement, a reference to that function by a signature could specify this parameter as either CHAR(12), or CHAR(). The CHAR() syntax provides a way to say "don't care about length, precision and scale attributes in finding a matching function".

FLOAT() cannot be used since the parameter value indicates different data types (REAL or DOUBLE).

If, however, neither length, precision, scale, or empty parenthesis were specified, then normal default rules apply. For example, a specification of CHAR would result in CHAR(1) as on the CREATE TABLE statement. Furthermore, this implicit specification of length, precision, or scale must exactly match the corresponding specification of the parameter for the existing function as defined in SYSPARMS.

- Subtype, or encoding scheme

You do not need to specify the subtype or encoding scheme (CCSID clause) to identify an existing function in the database. However, if a subtype or encoding scheme is specified then there must be an exact match on the corresponding specification of the parameter for the existing function as defined in SYSPARMS.

Unqualified function names:

- For ALTER FUNCTION, DROP FUNCTION, COMMENT ON FUNCTION, GRANT and REVOKE statements for EXECUTE on functions, an unqualified function name is implicitly qualified with the statement authorization ID, and this is the schema where the function with the problem can be found.
- In the SOURCE clause of a CREATE FUNCTION statement, the qualification comes from the SQL path. In this case, there is no matching function in the entire path.

Attention: A function cannot be sourced on the COALESCE, NULLIF, RAISE_ERROR, or VALUE built-in functions. Additionally, there are restrictions on the way that you can source on the COUNT, COUNT_BIG, CHAR, and STRIP built-in functions because of some of the keywords that they accept.

System action: The statement cannot be executed.

Programmer response: Possible responses include:

- Changing the SQL path to include the correct schema.
- Changing the attributes of the parameters.
- Using a SPECIFIC name to refer to the function instead of a signature.

SQLSTATE: 42883

-461 **A VALUE WITH DATA TYPE**
source-data-type **CANNOT BE CAST TO**
TYPE *target-data-type*

Explanation: The statement contains a CAST with the first operand having a data type of *source-data-type* to be cast to the data type *target-data-type*. This is not supported.

Change the data type of either the source or target so that the cast is supported. For predefined (built-in) data types or a cast involving a user-defined distinct type, see the SQL Reference.

System action: The statement could not be processed.

Programmer response: Correct the CAST specification to specify a supported combination of source and target types.

SQLSTATE: 42846

-469 **SQL CALL STATEMENT MUST**
SPECIFY AN OUTPUT HOST
VARIABLE FOR PARAMETER *number*

Explanation: DB2 received an SQL CALL statement for a stored procedure. DB2 found the row in the SYSIBM.SYSROUTINES catalog table associated with the requested procedure name. However, parameter *number* was identified in the SYSIBM.SYSPARMS table as an OUT or INOUT parameter. A host variable must be supplied on the SQL CALL statement for parameters defined as OUT or INOUT.

number

The parameter number from the ORDINAL field in SYSIBM.SYSPARMS.

System action: The statement cannot be executed.

Programmer response: If the SQL CALL statement is coded incorrectly, modify the SQL application to provide an output host variable on the SQL CALL statement.

If the SYSIBM.SYSPARMS table contains incorrect information, the DROP PROCEDURE and CREATE PROCEDURE statements must be used to replace the catalog definition for the stored procedure.

SQLSTATE: 42886

-470 SQL CALL STATEMENT SPECIFIED A NULL VALUE FOR INPUT PARAMETER *number*, BUT THE STORED PROCEDURE DOES NOT SUPPORT NULL VALUES.

Explanation: DB2 received an SQL CALL statement for a stored procedure and found a null value in the incoming parameter list. The stored procedure was defined in the SYSIBM.SYSROUTINES catalog table with PARAMETER_STYLE of GENERAL, which specifies that the routine does not accept null values.

| A call to a stored procedure with a LANGUAGE value
| of JAVA receives this SQLCODE if an input parameter
| in the compiled Java stored procedure has a Java base
| type that cannot be set to a null value.

number

The parameter number from the ORDINAL field in SYSIBM.SYSPARMS.

System action: The statement cannot be executed.

Programmer response: If the stored procedure should not accept null values, change the calling application to provide a non-null value.

If the stored procedure should accept null values, use the ALTER PROCEDURE statement to change the PARAMETER STYLE of the stored procedure to be DB2SQL or GENERAL WITH NULLS.

SQLSTATE: 39004

-471 INVOCATION OF FUNCTION OR PROCEDURE *name* FAILED DUE TO REASON *rc*

Explanation: A routine was invoked. The routine invocation was not accepted because of DB2 reason code *rc*.

name The name of the routine that was invoked.

rc The DB2 reason code describing the cause of the failure.

System action: The statement cannot be executed. A DSNX9xx message describing the error might be displayed on the MVS system console.

Programmer response: Correct the condition described by the DB2 reason code.

SQLSTATE: 55023

-472 CURSOR *cursor-name* WAS LEFT OPEN BY EXTERNAL FUNCTION *function-name* (SPECIFIC NAME *specific-name*)

Explanation: The function program did not close the specified cursor. Modify the function program so that it closes the cursor.

System action: The statement cannot be executed.

Programmer response: Reissue the statement when desired.

SQLSTATE: 24517

-473 A USER DEFINED DATA TYPE CANNOT BE CALLED THE SAME NAME AS A SYSTEM PREDEFINED TYPE (BUILT-IN TYPE)

Explanation: The name of a data type to be created has an unqualified name that is the same as a system-predefined data type or is BOOLEAN. This is not allowed. Adding delimiters does not make the name valid. The following names are restricted:

BLOB	CHAR	DATE	DBCLOB
CHARACTER	CLOB	DOUBLE	FLOAT
DEC	DECIMAL	INTEGER	NUMERIC
GRAPHIC	INT	SMALLINT	TIME
REAL	ROWID	VARCHAR	VARGRAPHIC
TIMESTAMP			

System action: The statement could not be processed.

Programmer response: Correct the statement to use another identifier for the name of the new user-defined type.

SQLSTATE: 42918

-475 THE RESULT TYPE *type-1* OF THE SOURCE FUNCTION CANNOT BE CAST TO THE RETURNS TYPE *type-2* OF THE USER-DEFINED FUNCTION *function-name*

Explanation: In order for the CREATE FUNCTION for a sourced user-defined function to be valid, the result type (*type-1*) of the source function must be castable to the RETURNS type (*type-2*) of the function being created. There is no supported cast between these data types. See the DB2 SQL Reference for details on casting between data types.

System action: The statement cannot be executed.

Programmer response: Change the RETURNS data type or the SOURCE function identified so that the result type of the SOURCE function is castable to the RETURNS data type.

SQLSTATE: 42866

-476 REFERENCE TO FUNCTION *function-name* WAS NAMED WITHOUT A SIGNATURE, BUT THE FUNCTION IS NOT UNIQUE WITHIN ITS SCHEMA

Explanation: References to a function without a signature are permitted, but the named function *function-name* must be unique in its schema and it is not.

| Note also that in the ALTER FUNCTION, DROP

| FUNCTION, COMMENT ON FUNCTION, GRANT
| and REVOKE statements for EXECUTE on functions,
| an unqualified reference is qualified with the statement
| authorization ID, and this is the schema where the
| problem can be found. In the SOURCE clause of a
| CREATE FUNCTION statement, the qualification comes
| from the SQL path. In this case, the first schema in the
| path containing a function with this name had other
| functions by the same name.

System action: The statement cannot be executed.

Programmer response: Correct the reference by one of the following:

- completing the signature
- using the SPECIFIC name of the desired function
- changing the SQL path

SQLSTATE: 42725

-478 DROP OR REVOKE ON OBJECT TYPE
***type1* CANNOT BE PROCESSED**
BECAUSE OBJECT *name* OF TYPE *type2*
IS DEPENDENT ON IT

Explanation: The requested action cannot be processed because a dependency exists on this *type1*. *type2* is the type of object that has the dependency on the *type1* object involved in the DROP or REVOKE. *type2* can be one of the following:

- FUNCTION
- PROCEDURE
- TABLE
- VIEW
- TRIGGER (for the trigger package)
- CHECK CONSTRAINT (*object_name* contains the table name)
- DEFAULT (*object_name* contains the table name)

DROP If *type1* is *FUNCTION*, the dependencies for DROP might be:

- Another function is sourced on this function.
- A view uses this function.
- A trigger package uses this function.
- A table uses this function in a check constraint or user-defined default.
- A materialized query table definition uses this function.

The dependency might be on one of the generated *cast functions* for a distinct type. If *type1* is *DISTINCT TYPE*, the dependencies for DROP might be:

- A parameter of a function is defined as this distinct type.
- A column of a table is defined as this distinct type.

- A parameter of a stored procedure is defined as this distinct type.

If *type1* is *PROCEDURE*, the dependencies for DROP might be:

- A trigger definition contains a CALL statement with the name of this stored procedure

REVOKE

If *type1* is *FUNCTION*, the dependencies for REVOKE might be:

- A function owned by the revokee is sourced on this function.
- A view owned by the revokee uses this function.
- A trigger package owned by the revokee uses this function.
- A table owned by the revokee uses this function in a check constraint or user-defined default.
- A materialized query table owned by the revokee uses this function in the definition.

If *type1* is *DISTINCT TYPE*, the dependencies for REVOKE might be:

- A parameter of a function owned by the revokee is defined as this distinct type.
- A column of a table owned by the revokee is defined as this distinct type.
- A parameter of a stored procedure owned by the revokee is defined as this distinct type.

If *type1* is *PROCEDURE*, the dependencies for REVOKE might be:

- A trigger definition owned by the revokee contains a CALL statement with the name of this stored procedure.

This SQLCODE may also be issued when SYSADM is being revoked. When SYSADM is revoked the cascading of the REVOKE statement may encounter dependencies that prevent the REVOKE from being successfully processed.

System action: The statement cannot be executed.

Programmer response: Remove the dependencies on this object and then reissue the request.

SQLSTATE: 42893

-480 THE PROCEDURE *procedure-name* HAS
NOT YET BEEN CALLED

Explanation: The procedure identified in a DESCRIBE PROCEDURE or an ASSOCIATE LOCATORS statement has not yet been called within the application process or the procedure has been called, but an explicit or implicit commit occurred before the statement.

System action: The statement cannot be executed.

Programmer response: Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR and/or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location. Rerun the statements.

SQLSTATE: 51030

-482 THE PROCEDURE *procedure-name* RETURNED NO LOCATORS

Explanation: The procedure identified in an ASSOCIATE LOCATORS statement returned no result set locators.

System action: The statement cannot be executed.

Programmer response: Determine if result set locators are returned from the identified procedure by using the DESCRIBE PROCEDURE statement.

SQLSTATE: 51030

-483 IN CREATE FUNCTION FOR *function-name* STATEMENT, THE NUMBER OF PARAMETERS DOES NOT MATCH THE NUMBER OF PARAMETERS OF THE SOURCE FUNCTION

Explanation: An attempt is being made to CREATE a user-defined function *function-name* which is sourced on another function. One of the following situations has been identified:

- The SOURCE clause uses a function-name (input parameter list) to identify the source function, and the number of types in the list is different from the number of parameters of the function being created.
- The SOURCE clause uses different syntax to identify the source function, and the number of types of that function is different from the number of parameters of the function being created.

System action: The statement cannot be executed.

Programmer response: The number of parameters for the SOURCE function and for the function being created must be the same. The identification of the SOURCE function needs to be changed to:

- fix the input parameter list
- correct the function name or function specific name to identify the proper function.

It is also possible that the SQL path needs to be corrected in order for correct function resolution to occur.

SQLSTATE: 42885

-487 *object-type object-name* ATTEMPTED TO EXECUTE AN SQL STATEMENT WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION

Explanation: A user-defined function or stored procedure *object-name* was invoked and attempted to execute SQL statements, but the function or procedure was created with the NO SQL option.

In an environment of nested functions and procedures, the SQL option in effect is the most restrictive one that has been specified in the nested hierarchy of functions and procedures. The SQL data access option in effect does not allow for modifying data.

System action: The SQL statement cannot be executed.

Programmer response: Either use an ALTER statement to change the definition of the function or procedure to allow SQL statements, or remove the failing SQL statement from the external function or procedure.

SQLSTATE: 38001

-490 NUMBER *number* DIRECTLY SPECIFIED IN AN SQL STATEMENT IS OUTSIDE THE RANGE OF ALLOWABLE VALUES IN THIS CONTEXT (*minval*, *maxval*)

Explanation: A number (*number*) was specified that is not valid in the context in which it was specified. The minimum allowed value in this context is *minval*. The maximum allowed value in this context is *maxval*. *n* must be within the range specified by *minval* and *maxval* (*minval* ≤ *n* ≤ *maxval*).

System action: The statement was not executed.

Programmer response: Change the value *n* to a valid value in the statement.

SQLSTATE: 428B7

-491 CREATE STATEMENT FOR USER-DEFINED FUNCTION *function-name* MUST HAVE A RETURNS CLAUSE AND: THE EXTERNAL CLAUSE WITH OTHER REQUIRED KEYWORDS; THE RETURN STATEMENT AND PARAMETER NAMES; OR THE SOURCE CLAUSE

Explanation: A required clause is missing in the CREATE for function *function-name*.

- For an EXTERNAL function, specify EXTERNAL and one of the following:
 - LANGUAGE
 - PARAMETER STYLE
- For an SQL FUNCTION, specify a RETURN statement, and a parameter name for each parameter.
- For a user-defined SOURCE FUNCTION, specify the SOURCE class.

System action: The statement cannot be processed.

Programmer response: Add the missing clauses or statement, and reissue the failing statement.

SQLSTATE: 42601

-492 THE CREATE FUNCTION FOR *function-name* HAS A PROBLEM WITH PARAMETER NUMBER *number*. IT MAY INVOLVE A MISMATCH WITH A SOURCE FUNCTION

Explanation: The parameter in position *number* of function *function-name* is in error. The parameter in position *number* of the source function is not castable to the corresponding parameter of the function being created.

If the parameter of the function being created is a *table parameter* then the corresponding parameter of the source function must also be a *table parameter*. Furthermore, the column numbers for both of the table parameters must be the same.

If the parameter of the function being created is not a table parameter then the corresponding parameter of the source function must also not be a table parameter.

System action: The statement cannot be executed.

Programmer response: Possible corrections include:

- Identify a different source function.
- Change the data type of the parameter of the function being created so that the data type of the source function can be cast to this data type.

SQLSTATE: 42879

-495 ESTIMATED PROCESSOR COST OF *estimate-amount1* PROCESSOR SECONDS (*estimate-amount2* SERVICE UNITS) IN COST CATEGORY *cost-category* EXCEEDS A RESOURCE LIMIT ERROR THRESHOLD OF *limit-amount* SERVICE UNITS

Explanation: The prepare of a dynamic INSERT, UPDATE, DELETE, or SELECT SQL statement resulted in a cost estimate that exceeded the error threshold value specified in the resource limit specification table (RLST). This error is also issued if DB2's cost category value was "B", and the default action specified in the

RLF_CATEGORY_B column in the RLST is to issue an error.

estimate-amount1

The cost estimate (in processor seconds) if the prepared INSERT, UPDATE, DELETE or SELECT statement were to be executed.

estimate-amount2

The cost estimate (in service units) if the prepared INSERT, UPDATE, DELETE or SELECT statement were to be executed.

cost-category

DB2's cost-category for this SQL statement. The possible values are A or B.

limit-amount

The error threshold (in service units) specified in the RLFASUERR column of the RLST. If you entered any negative number for the RLFASUERR column, the value for *limit-amount* defaults to zero.

System action: The prepare of the dynamic INSERT, UPDATE, DELETE, or SELECT statement was unsuccessful.

Programmer response: If this SQLCODE was returned because the cost category value is "B", it might be that the statement is using parameter markers or that some statistics are not available for the referenced tables and columns. Make sure the administrator has run the utility RUNSTATS on the referenced tables. It might also be that UDFs will be invoked when the statement is executed, or for INSERT, UPDATE, or DELETE statements that triggers are defined on the changed table. Check the DSN_STATEMNT_TABLE or the IFCID 22 record for this statement to find the reasons this SQL statement has been put in cost category "B". If the program cannot be changed, or if statistics cannot be obtained, ask the administrator to change the value in the RLF_CATEGORY_B column in the RLST to "Y" which allows the statement to execute or "W" which returns a warning instead of an error.

User response: If the warning is caused by an SQL statement that is consuming too much processor resource, attempt to rewrite the statement to perform more efficiently. Another option is to ask the administrator to increase the error threshold value in the RLST.

SQLSTATE: 57051

-496 THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT REFERENCES A RESULT SET THAT WAS NOT CREATED BY THE CURRENT SERVER

Explanation: The SQL statement cannot be executed because the current server is different from the server that called a stored procedure. The SQL statement can be any of the following:

- ALLOCATE CURSOR

- DESCRIBE CURSOR
- FETCH (using an allocated cursor)
- CLOSE (using an allocated cursor)

System action: The statement cannot be executed.

Programmer response: Connect to the server that called the stored procedure which created the result set before running the SQL statement that failed.

SQLSTATE: 51033

-497 THE MAXIMUM LIMIT OF INTERNAL IDENTIFIERS HAS BEEN EXCEEDED FOR DATABASE *database-name*

Explanation: The SQL statement cannot be executed because an internal identifier limit has been exceeded for the database. The cause of this error is due to one of the following:

1. On a CREATE DATABASE statement, the limit of 65279 DBIDs has been exceeded.
2. For all other statements, the limit of 32767 OBIDs has been exceeded for that database.

System action: The SQL statement cannot be executed.

Programmer response: Take the appropriate action as described in the following cases:

1. In the case of a DBID limit being exceeded, DROP all unused databases and issue a COMMIT.
2. In the case of an OBID limit being exceeded, DROP all unused objects in the database and issue a COMMIT, specify a different database or run the MODIFY utility to reclaim unused OBIDs.

SQLSTATE: 54041

-499 CURSOR *cursor-name* HAS ALREADY BEEN ASSIGNED TO THIS OR ANOTHER RESULT SET FROM PROCEDURE *procedure-name*.

Explanation: An attempt was made to assign a cursor to a result set using the SQL statement ALLOCATE CURSOR and one of the following applies:

- The result set locator variable specified in the ALLOCATE CURSOR statement has been previously assigned to cursor *cursor-name*.
- Cursor *cursor-name* specified in the ALLOCATE CURSOR statement has been previously assigned to a result set from stored procedure *procedure-name*.

System action: The statement cannot be executed.

Programmer response: Determine if the target result set named in the ALLOCATE CURSOR statement has been previously assigned to a cursor.

If the result set has been previously assigned to cursor *cursor-name*, then either choose another target result set or call stored procedure *procedure-name* again and

reissue the ASSOCIATE LOCATOR and ALLOCATE CURSOR statements.

If the result set has not been previously assigned to a cursor, the cursor *cursor-name* specified in the ALLOCATE CURSOR statement has been previously assigned to some result set from stored procedure *procedure-name*. You can not assign cursor *cursor-name* to another result set, so you must specify a different cursor name in the ALLOCATE CURSOR statement.

Correct the statements so that the exact syntax used to specify the procedure name on the CALL statement be the same as that on the ASSOCIATE LOCATOR and/or DESCRIBE PROCEDURE. If an unqualified name is used to CALL the procedure, the 1-part name must also be used on the other statements. If the CALL statement is made with a 3-part name, and the current server is the same as the location in the 3-part name, the ASSOCIATE LOCATOR or DESCRIBE procedure can omit the location.

SQLSTATE: 24516

-500 THE IDENTIFIED CURSOR WAS CLOSED WHEN THE CONNECTION WAS DESTROYED

Explanation: The FETCH, UPDATE, DELETE, or CLOSE statement identifies a closed cursor that was defined with the WITH HOLD option. The cursor was closed when the connection on which it was dependent was destroyed during a commit operation. The connection was destroyed because the application process placed it in the released state, or the application plan was bound with the DISCONNECT(AUTOMATIC) option.

System action: The statement cannot be executed.

Programmer response: The correction depends on the desired state of both the cursor and the connection, as follows:

- If you want the cursor closed, change the application program so that the cursor is not referenced in the closed state.
- If you want the cursor open and the connection was placed in the released state by the application program, change the program so that the connection is not placed in the released state until the cursor is explicitly closed.
- If you want the cursor open and the connection was placed in the released state as a result of the DISCONNECT(AUTOMATIC) option, rebind the plan using DISCONNECT(CONDITIONAL).

Correct the error in the application, rebind the plan, and resubmit the job.

SQLSTATE: 24501

**-501 THE CURSOR IDENTIFIED IN A
FETCH OR CLOSE STATEMENT IS
NOT OPEN**

Explanation: The application program attempted to either:

1. FETCH using a cursor, or
2. CLOSE a cursor

at a time when the specified cursor was not open.

System action: The statement cannot be executed.

Programmer response: Check for a previous SQL return code that may have closed the cursor. Commit and rollback operations close cursors. SQLCODES -404, -652, -679, -802, -901, -904, -909, -910, -911, -913, and -952 may force the cursor to close. After the cursor is closed, any fetches or close cursor statements will receive this SQLCODE -501.

If no previous SQL return codes have been issued, correct the logic of the application program to ensure that the cursor is open at the time the FETCH or CLOSE statement is executed.

SQLSTATE: 24501

**-502 THE CURSOR IDENTIFIED IN AN
OPEN STATEMENT IS ALREADY
OPEN**

Explanation: The application program attempted to execute an OPEN statement for a cursor that was already open.

System action: The statement cannot be executed. The cursor was unchanged (that is, it was not 'reopened').

Programmer response: Correct the logic of the application program to ensure that it does not attempt to execute an OPEN statement for a cursor that is already open.

SQLSTATE: 24502

**-503 A COLUMN CANNOT BE UPDATED
BECAUSE IT IS NOT IDENTIFIED IN
THE UPDATE CLAUSE OF THE
SELECT STATEMENT OF THE
CURSOR**

Explanation: The application program attempted to update (using a cursor) a value in a column of the object table that was not identified in the FOR UPDATE clause in the cursor declaration.

Any column that is to be updated must be identified in the FOR UPDATE clause of the cursor declaration.

System action: The statement cannot be executed. No data was updated in the object table.

Programmer response: Correct the application program. If the column is to be updated, its name must

be added to the FOR UPDATE clause of the cursor declaration.

SQLSTATE: 42912

**-504 THE CURSOR NAME *cursor-name* IS
NOT DEFINED**

Explanation: Cursor *cursor-name* was referenced in an SQL statement, and one of the following is true:

- Cursor *cursor-name* was not declared (using the DECLARE CURSOR statement) or allocated (using the ALLOCATE CURSOR statement) in the application program before it was referenced.
- Cursor *cursor-name* was referenced in a positioned UPDATE or DELETE statement which is not a supported operation for an allocated cursor.
- Cursor *cursor-name* was allocated, but a CLOSE cursor statement naming *cursor-name* was issued and deallocated the cursor before this cursor reference.
- Cursor *cursor-name* was allocated, but a ROLLBACK operation occurred and deallocated the cursor before this cursor reference.
- Cursor *cursor-name* was allocated, but its associated cursor declared in a stored procedure was not declared WITH HOLD, and a COMMIT operation occurred and deallocated the cursor before this cursor reference. The COMMIT operation can be either explicit (the COMMIT statement) or implicit (that is, a stored procedure defined as COMMIT_ON_RETURN = 'Y' was called before this cursor reference).
- Cursor *cursor-name* was allocated, but its associated stored procedure was called again since the cursor was allocated, new result sets were returned, and cursor *cursor-name* was deallocated.

System action: The statement cannot be executed.

Programmer response: Check the application program for completeness and for a possible spelling error in the cursor declaration or allocation. The declaration for or allocation of a cursor must appear in an application program before SQL statements that reference the cursor.

If the *cursor-name* was <UNKNOWN>, then the cursor was not successfully declared or allocated. This can occur if SQL(DB2) was used, and a warning message was issued during precompilation. Check the precompile output for warning messages on the DECLARE CURSOR or ALLOCATE CURSOR statement, and correct the statement.

For an allocated cursor, if an implicit or explicit COMMIT, ROLLBACK, or CLOSE occurred since the cursor was successfully allocated, modify the application program logic to do one of the following:

- After the COMMIT, ROLLBACK, or CLOSE operation, call the associated stored procedure again,

and reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.

- For COMMIT, declare the associated cursor in the stored procedure WITH HOLD so the COMMIT operation will not deallocate the cursor.

For an allocated cursor, if the associated stored procedure was called again and new result sets were returned since the cursor was allocated, reissue the ASSOCIATE LOCATORS and ALLOCATE CURSOR statements.

SQLSTATE: 34000

-507 THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT OPEN

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement at a time when the specified cursor was not open.

System action: The statement cannot be executed. No update or delete was performed.

Programmer response: Check for a previous SQL return code that might have closed the cursor. SQLCODES -404, -652, -679,-802, -901, -904, -909, -910, -911, -913, and -952 may force the cursor to close. After the cursor is closed, any fetches or close cursor statements receive SQLCODE -501. Any updates or deletes receive this SQLCODE -507. Correct the logic of the application program to ensure that the specified cursor is open at the time the UPDATE or DELETE statement is executed.

SQLSTATE: 24501

-508 THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT POSITIONED ON A ROW OR ROWSET THAT CAN BE UPDATED OR DELETED

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement at a time when the specified cursor was not positioned on a row of the object table. The cursor must be positioned on the row that is to be updated or deleted.

This can occur if the cursor is no longer positioned on the row because another cursor in the same application program delete the row or updates an index column. This includes deletes and index column updates that are performed as a result of rolling back to a savepoint.

This can also occur with a sensitive dynamic cursor when the FOR ROW *n* OF ROWSET clause is specified and the specified row of the current rowset has been updated or deleted.

System action: The statement cannot be executed. No

data was updated or deleted.

Programmer response: Correct the logic of the application program to ensure that the cursor is correctly positioned on the intended row of the object table before the UPDATE or DELETE statement is executed. Note that the cursor is not positioned on a row if FETCH returned an SQLCODE = 100.

SQLSTATE: 24504

-509 THE TABLE IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT THE SAME TABLE DESIGNATED BY THE CURSOR

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement where the table named in that statement did not match the name of the table specified in the declaration for that cursor.

System action: The statement cannot be executed. The update or delete was not performed.

Programmer response: Correct the application program to ensure that the table identified in the UPDATE or DELETE statement is the same table identified in the declaration for the cursor.

SQLSTATE: 42827

-510 THE TABLE DESIGNATED BY THE CURSOR OF THE UPDATE OR DELETE STATEMENT CANNOT BE MODIFIED

Explanation: The application program attempted to execute an UPDATE or DELETE WHERE CURRENT OF cursor statement against a table or view that cannot be updated or deleted. This can occur for a delete from a read-only view or for an update in which the cursor was not defined with the FOR UPDATE clause.

This error code is also returned when the table exists at a remote location and DB2 has employed block fetching because you explicitly declared the cursor FOR FETCH ONLY, or because the application is bound CURRENTDATA(NO) and the cursor is ambiguous.

This error code is also returned if DB2 has employed parallelism to execute the SELECT statement associated with the cursor named in a DELETE WHERE CURRENT OF cursor statement, or if a DELETE WHERE CURRENT OF is issued against a row which DB2 cannot guarantee to have not been modified by another application since the time the cursor was positioned upon it (in accordance with ISO(CS)) semantics for an ambiguous cursor in an application bound CURRENTDATA(NO)).

System action: The statement cannot be processed. No data was updated or deleted in the object table.

Programmer response: The requested UPDATE or

DELETE cannot be performed. Refer to Chapter 5 of *DB2 SQL Reference* for information about restrictions on using UPDATE and DELETE operations against views.

For a remote table, modify the DECLARE CURSOR and then rebind the PLAN.

For a cursor that uses parallelism, disable parallelism for the query by using the DEGREE(1) BIND option for static SQL or by setting the CURRENT DEGREE special register to '1' for dynamic SQL.

For an ambiguous cursor in an application bound CURRENTDATA(NO), either make the cursor unambiguous (declare it FOR UPDATE OF), or rebind the application CURRENTDATA(YES).

SQLSTATE: 42828

-511 **THE FOR UPDATE CLAUSE CANNOT
BE SPECIFIED BECAUSE THE RESULT
TABLE DESIGNATED BY THE SELECT
STATEMENT CANNOT BE MODIFIED**

Explanation: The result table of the SELECT statement cannot be updated. This error can occur if the SELECT clause specifies more than one table or view in the FROM clause, if the SELECT list contains a built-in function or DISTINCT, or if the statement contains an ORDER BY or GROUP BY or HAVING clause. This error can also occur if a view is specified in the FROM clause and the view cannot be updated, or if a data change statement is specified within the SELECT statement, for example: SELECT from INSERT.

System action: The statement cannot be executed.

Programmer response: Updates cannot be performed on the result table as it is specified. Refer to Chapter 5 of *DB2 SQL Reference* for information about restrictions on the updating of read-only result tables.

SQLSTATE: 42829

-512 **STATEMENT REFERENCE TO
REMOTE OBJECT IS INVALID**

Explanation: One of the following conditions exists:

- The statement refers to multiple locations.
- A statement with a remote reference is being EXPLAINED either by a dynamic EXPLAIN statement or the EXPLAIN(YES) option.
- An alias is used incorrectly.
- A three-part name is implicitly or explicitly used in a statement that is not supported by the DB2 private protocols.
- A three-part name is implicitly or explicitly used in a triggered statement.
- A PREPARE statement contains an ATTRIBUTES clause. This is not supported by the DB2 private protocols.

System action: The statement cannot be executed.

Programmer response: If the object cannot be meaningfully eliminated from the statement, see your Database Administrator for other ways to obtain the data required. Refer to Chapter 3 of *DB2 SQL Reference* for more information about using remote objects.

If the remote object reference is in a triggered SQL statement, you can instead invoke a user-defined function or a stored procedure from the trigger and access the remote object from the function or stored procedure.

SQLSTATE: 56023

-513 **THE ALIAS *alias-name* MUST NOT BE
DEFINED ON ANOTHER LOCAL OR
REMOTE ALIAS**

Explanation: The object indicated by 'alias-name' is a local or remote alias. An alias is not allowed to be defined on a local alias, and it should not be defined on a remote alias.

System action: The statement cannot be executed.

Programmer response: Modify the SQL statement to ensure that all object references are to base tables or views.

SQLSTATE: 42924

-514 **THE CURSOR *cursor-name* IS NOT IN A
PREPARED STATE**

Explanation: The application program has tried to use a cursor, 'cursor-name,' that is not in a prepared state. The cursor is associated with a statement that either (1) has never been prepared, or (2) has been invalidated by a commit or rollback operation.

System action: The statement cannot be executed.

Programmer response: For case (1), ensure that you prepare the statement that is named in the DECLARE CURSOR statement for 'cursor-name' before you try to open the cursor. For case (2), do one of the following:

- Use the WITH HOLD option of DECLARE CURSOR.
- Do not execute a commit or rollback operation until you are finished using the cursor.
- Prepare the statement again after the commit or rollback.

SQLSTATE: 26501

-516 **THE DESCRIBE STATEMENT DOES
NOT SPECIFY A PREPARED
STATEMENT**

Explanation: An attempt was made to execute a DESCRIBE statement that did not refer to a statement that had been successfully prepared at the current server.

System action: The statement cannot be executed.

Programmer response: Verify that the statement name specified in the DESCRIBE statement is a statement that has been prepared at the current server.

SQLSTATE: 26501

-517 **CURSOR *cursor-name* CANNOT BE USED BECAUSE ITS STATEMENT NAME DOES NOT IDENTIFY A PREPARED SELECT STATEMENT**

Explanation: The cursor 'cursor-name' could not be used as specified because the prepared statement named in the declaration for the cursor was not a SELECT statement.

System action: The statement cannot be executed.

Programmer response: Verify that the statement-name is specified correctly in the PREPARE statement and the DECLARE CURSOR statement for cursor 'cursor-name'. Alternatively, correct the application program logic to ensure that only prepared SELECT statements are used in association with cursor declarations.

SQLSTATE: 07005

-518 **THE EXECUTE STATEMENT DOES NOT IDENTIFY A VALID PREPARED STATEMENT**

Explanation: One of the following conditions exists:

- The statement named in the EXECUTE statement has not been prepared.
- The statement named in the EXECUTE statement identifies a SELECT, VALUE INTO, or statement.
- The statement named in the EXECUTE IMMEDIATE statement identifies a SELECT, VALUE INTO, or statement.

System action: The statement cannot be executed.

Programmer response: Ensure that you prepare the statement prior to EXECUTE. Also, ensure that the statement you prepare is not a SELECT or VALUES INTO statement.

SQLSTATE: 07003

-519 **THE PREPARE STATEMENT IDENTIFIES THE SELECT STATEMENT OF THE OPENED CURSOR *cursor-name***

Explanation: The application program has attempted to PREPARE (actually, re-PREPARE) the SELECT statement for the specified cursor at a time when that cursor was already open.

System action: The statement cannot be executed. The cursor was not affected.

Programmer response: Correct the logic of the application program so that it does not attempt to

re-PREPARE the SELECT statement for a cursor when that cursor is open.

SQLSTATE: 24506

-525 **THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS IN ERROR AT BIND TIME FOR SECTION = *sectno* PACKAGE = *pkgname* CONSISTENCY TOKEN = *contoken***

Explanation: One of the following:

- The statement was in error when the package was bound, but the error was ignored then because the option SQLERROR (CONTINUE) was used. Since the statement contains an error, it cannot be executed.
- The statement might not be an executable statement at this location, or might only be executable by a DB2 application requester (for example, DECLARE TABLE in an application running on OS/2 causes this message).

The variables are:

sectno Section number

pkgname
 locid.collid.pkgid

contoken
 Consistency token in hexadecimal

System action: The statement cannot be executed.

Programmer response: If the SQL statement is not supposed to execute at the indicated location, then correct the program so that the statement in error does not execute at that location. Precompile, compile, and bind replace the package. If the SQL statement is supposed to execute at the indicated location, correct the problem found when it was bound and bind the package over using BIND with ACTION(REPLACE). If multiple versions of the package have been bound, issue the following SELECT statement to determine which version has the error: SELECT VERSION FROM locid.SYSIBM.SYSPACKAGE WHERE LOCATION = ' ' AND COLLID = 'collid' AND NAME = 'pkgid' AND HEX(CONTOKEN) = 'contoken'

Where:

locid Location name

collid Collection id

pkgid Program name

SQLSTATE: 51015

-526 **THE REQUESTED OPERATION OR USAGE DOES NOT APPLY TO *table-type* TEMPORARY TABLE *table-name***

Explanation: DB2 assumes that the SQL statement

being executed refers to a *created* or *declared* temporary table named *table-name*, and the requested operation or usage in the statement is not allowed on the temporary table.

table-type

CREATED or DECLARED

CREATED is for a temporary table defined by the CREATE GLOBAL TEMPORARY TABLE statement.

DECLARED is for a temporary table defined by the DECLARE GLOBAL TEMPORARY TABLE statement.

table-name

Qualified name of the temporary table.

System action: The statement cannot be processed.

Programmer response: Modify the SQL statement to ensure that the object references are not to the indicated type of temporary table, or if *table-type* is DECLARED and you intended *table-name* to refer to an existing persistent base table, you must perform one of the following actions:

- Recreate the persistent base table *table-name* with a different qualifier
- In the same application process, issue a DROP TABLE for *table name* followed by a COMMIT to drop the declared temporary table and afterwards be able to reference the persistent base table with the same *table-name* in the same application process
- Remove the DECLARE GLOBAL TEMPORARY TABLE statement from the application process to use the persistent base table with the same *table-name*

SQLSTATE: 42995

-530 THE INSERT OR UPDATE VALUE OF FOREIGN KEY *constraint-name* IS INVALID

Explanation: An UPDATE or INSERT operation attempted to place a value in a foreign key of the object table; however, this value was not equal to some value of the parent key of the parent table.

When a row is inserted into a dependent table, the insert value of a foreign key must be equal to the value of the parent key of some row of the parent table in the associated relationship.

When the value of the foreign key is updated, the update value of a foreign key must be equal to the value of the parent key of some row of the parent table of the associated relationship.

System action: The UPDATE or INSERT statement cannot be executed. The object table is unchanged.

Programmer response: Examine the insert or update value of the foreign key first, and then compare it with each of the parent key values of the parent table to

determine the cause of the problem.

SQLSTATE: 23503

-531 PARENT KEY IN A PARENT ROW CANNOT BE UPDATED BECAUSE IT HAS ONE OR MORE DEPENDENT ROWS IN RELATIONSHIP

constraint-name

Explanation: For plans and packages bound beginning with Version 5 or dynamic SQL, a multi-row update of a parent key attempted to remove a parent key value on which a foreign key was dependent.

For plans and packages bound prior to Version 5 an UPDATE operation attempted to update a primary key in the specified row of the object table; however, the primary key in the specified row had dependent rows associated with it. The value of a primary key in a parent row cannot be updated if the parent row has any dependent rows.

System action: The UPDATE statement cannot be executed. The object table is unchanged.

Programmer response: Examine the parent key of the object table and the foreign key of the dependent table to determine if the value of the specified row of the parent key should be changed. If this does not expose the problem, examine the contents of the object table and the dependent table to determine the cause of the problem.

SQLSTATE: 23504

-532 THE RELATIONSHIP *constraint-name* RESTRICTS THE DELETION OF ROW WITH RID X'rid-number'

Explanation: A DELETE operation attempted to delete a specified parent row in the object table and all related descendent rows in the descendent tables. However, a delete rule of RESTRICT or NO ACTION was specified for one or more descendent tables.

A row of the table cannot be deleted because it has a dependent in a relationship with a delete rule of RESTRICT or NO ACTION or the deletion cascades to a row which is a dependent in a relationship with a delete rule of RESTRICT or NO ACTION.

| If the statement that failed is an ALTER TABLE with
| ALTER PART ROTATE FIRST TO LAST, then there is a
| referential constraint that is defined with DELETE
| RESTRICT on the table, and the data in the partition
| that is to be reused cannot be deleted because of the
| referential constraint.

System action: The DELETE statement cannot be executed. The contents of the object table are unchanged.

Programmer response: Examine the delete rule for all descendent tables to determine the cause of the

problem. The specific tables involved can be determined from the relationship 'constraint-name'. The specific descendent row is known by RID X'*rid-number*'.

SQLSTATE: 23504

-533 INVALID MULTIPLE-ROW INSERT

Explanation: An INSERT operation with a subselect attempted to insert multiple rows into a self-referencing table.

The subselect of the INSERT operation should return no more than one row of data.

System action: The INSERT statement cannot be executed. The contents of the object table are unchanged.

Programmer response: Examine the search condition of the subselect to make sure that no more than one row of data is selected.

SQLSTATE: 21501

**-534 THE PRIMARY KEY CANNOT BE
UPDATED BECAUSE OF
MULTIPLE-ROW UPDATE**

Explanation: An UPDATE operation attempted to update a primary key on multiple rows of the object table.

An UPDATE statement updating the primary key cannot be used to update more than one row of the object table.

Note: This SQLCODE will only be issued for plans and packages bound prior to Version 5. SQLCODE -534 will not be issued for dynamic SQL or plans and packages bound with Version 5 or later releases.

System action: The UPDATE statement cannot be executed. The contents of the object table are unchanged.

Programmer response: Examine the search condition of the UPDATE statement to make sure that no more than one row of the object table is selected to be updated.

SQLSTATE: 21502

**-536 THE DELETE STATEMENT IS
INVALID BECAUSE TABLE *table-name*
CAN BE AFFECTED BY THE
OPERATION**

Explanation: A DELETE operation with the indicated table referenced in a subquery was attempted.

If 'T' is the object table of the DELETE, the indicated table is one of the following:

- A dependent of 'T' in a relationship with a delete rule of CASCADE or SET NULL
- A dependent of another table in a relationship with a delete rule of CASCADE or SET NULL in which deletions from 'T' can cascade to that table.

System action: The DELETE statement cannot be processed. The contents of the object table are unchanged.

Programmer response: Do not attempt to reference a table in a subquery of a DELETE statement when the table can be affected by the DELETE statement.

SQLSTATE: 42914

| **-537 THE PRIMARY KEY, FOREIGN KEY,
| UNIQUE, OR PARTITIONING CLAUSE
| IDENTIFIES COLUMN *column-name*
| MORE THAN ONCE**

| **Explanation:** The primary key clause, foreign key
| clause, uniqueness clause and partitioning clause each
| contain a list of one or more column names. The
| statement violates the rule that no column name can
| appear more than once in any such list.

| **Programmer response:** Correct the statement to
| specify unique names for each column.

| **SQLSTATE:** 42709

**-538 FOREIGN KEY *name* DOES NOT
CONFORM TO THE DESCRIPTION
OF A PARENT KEY OF TABLE
*table-name***

Explanation: The definition of the indicated foreign key does not conform to the description of parent key of the indicated table due to one of the following reasons:

- The referenced parent key has not been defined as a primary key or a unique key.
- The keys do not have the same number of columns.
- The description of the keys are not identical. The requirement for identical descriptions includes data type, length attribute, and field procedure.

name is the constraint-name specified in the foreign key clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System action: The statement cannot be processed.

Programmer response: Correct the statement so that the description of the foreign key references a primary key or unique key, or so that the description of the foreign key conforms to that of a parent key of the indicated table.

SQLSTATE: 42830

-539 **TABLE *table-name* DOES NOT HAVE A PRIMARY KEY**

Explanation: DB2 cannot perform the CREATE or ALTER TABLE statement because the indicated table does not have a primary key. Thus, the primary key cannot be dropped, or the table cannot be defined as a parent in a referential constraint.

System action: The statement cannot be processed.

Programmer response: Correct the statement to reference a table with a primary key, or define a primary key with ALTER TABLE ADD PRIMARY KEY before referencing the table in a FOREIGN KEY clause.

SQLSTATE: 42888

-540 **THE DEFINITION OF TABLE *table-name* IS INCOMPLETE BECAUSE IT LACKS A PRIMARY INDEX OR A REQUIRED UNIQUE INDEX**

Explanation: The table named was defined with a PRIMARY KEY clause, a UNIQUE clause, or with a ROWID column with the GENERATED BY DEFAULT attribute. Its definition is incomplete, and it cannot be used until a unique index is defined for

- the primary key (the primary index)
- a ROWID column
- for each set of columns in any UNIQUE clause (the required unique indexes).

An attempt was made to use the table in a FOREIGN KEY clause or in an SQL manipulative statement.

System action: The statement cannot be executed.

Programmer response: Define a primary index or a required unique index on the table before referencing it.

SQLSTATE: 57001

-542 ***column-name* CANNOT BE A COLUMN OF A PRIMARY KEY, A UNIQUE CONSTRAINT, OR A PARENT KEY BECAUSE IT CAN CONTAIN NULL VALUES**

Explanation: The code is used to report that a column identified in a PRIMARY KEY, a UNIQUE constraint clause, or a parent key (via a REFERENCES clause) is defined to allow null values.

System action: The statement cannot be executed.

Programmer response: In the case of a column identified in a PRIMARY KEY or a UNIQUE constraint clause, correct the statement and rerun it.

In the case of a column identified in a REFERENCES clause, drop the parent table then recreate it with referenced columns defined as NOT NULL. Afterwards, rerun the statement.

SQLSTATE: 42831

-543 **A ROW IN A PARENT TABLE CANNOT BE DELETED BECAUSE THE CHECK CONSTRAINT *check-constraint* RESTRICTS THE DELETION**

Explanation: The delete operation cannot be executed because the target table is a parent table and is connected with a referential constraint to a dependent table with a delete rule of SET NULL. However, a check constraint defined on the dependent table restricts the column from containing a null value.

System action: The DELETE statement was not executed. The contents of the tables are unchanged.

Programmer response: Examine the foreign key and its delete rule in the dependent table and the conflicting check constraint. Change either the delete rule or the check constraint so that they do not conflict.

SQLSTATE: 23511

-544 **THE CHECK CONSTRAINT SPECIFIED IN THE ALTER TABLE STATEMENT CANNOT BE ADDED BECAUSE AN EXISTING ROW VIOLATES THE CHECK CONSTRAINT**

Explanation: An existing row violates the check constraint specified in the ALTER TABLE statement.

System action: The statement cannot be executed. The check constraint definition is not added to the table. The table definition is unchanged.

Programmer response: Examine the check constraint definition that was specified in the ALTER TABLE statement and the data in the table to determine why the ALTER TABLE statement was rejected.

You can determine which rows violated the check constraint by using the SELECT statement, negating the check constraint in the WHERE clause. For example:
SELECT * FROM table WHERE (NOT (check-condition));

SQLSTATE: 23512

-545 **THE REQUESTED OPERATION IS NOT ALLOWED BECAUSE A ROW DOES NOT SATISFY THE CHECK CONSTRAINT *check-constraint***

Explanation: Table check constraint violations occurred on an INSERT or UPDATE statement. The resulting row violated the check constraint definition on the table.

System action: The INSERT or UPDATE statement cannot be executed. The contents of the table are unchanged.

Programmer response: Examine the data and the

check constraint definition in the SYSIBM.SYSCHECKS catalog table to determine why the INSERT or UPDATE statement was rejected. The data must be changed to satisfy the check constraint.

SQLSTATE: 23513

-546 THE CHECK CONSTRAINT
constraint-name **IS INVALID**

Explanation: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- The constraint definition refers to a column that has a field procedure.
- The constraint definition refers to a column with a data type that is lower in the hierarchy of numeric data types than the data type of any other operand. The hierarchy is as follows:
small integer < large integer < decimal
< single precision float < double precision float
- The constraint definition refers to a column with a numeric data type that is not the same numeric data type as that of the other column operands.
- The constraint definition refers to a column with a length that is shorter than the other operands when the column and other operands are not character string data types.
- The constraint definition refers to a built-in or user-defined function.
- The constraint definition uses a cast function that requires conversion of the data. The only functions that are allowed in a check constraint are cast functions that do not require conversion of the data.

System action: The statement is not executed.

For ALTER TABLE, the check constraint is not added to the object table. The definition of the table is unchanged.

For CREATE TABLE, the table is not created.

Programmer response: Correct the check constraint definition and execute the statement again.

SQLSTATE: 42621

-548 A CHECK CONSTRAINT THAT IS
DEFINED WITH *column-name* **IS**
INVALID

Explanation: A check constraint in the CREATE TABLE or ALTER TABLE statement is invalid for one or more of the following reasons:

- The constraint definition refers to a column that has a field procedure.
- The constraint definition refers to a column with a data type that is lower in the hierarchy of numeric data types than the data type of any other operand. The hierarchy is as follows:

small integer < large integer < decimal
< single precision float < double precision float

- The constraint definition refers to a column with a numeric data type that is not the same numeric data type as that of the other column operands.
- The constraint definition refers to a column with a length that is shorter than the other operands when the column and other operands are not character string data types.
- The constraint definition refers to a ROWID column.
- The constraint definition refers to a LOB column.

System action: The statement is not executed.

For ALTER TABLE, the check constraint is not added to the object table. The definition of the table is unchanged.

For CREATE TABLE, the table is not created.

Programmer response: Correct the check constraint definition and execute the statement again.

SQLSTATE: 42621

-549 THE *statement* STATEMENT IS NOT
ALLOWED FOR *object_type1* *object_name*
BECAUSE THE BIND OPTION
DYNAMICRULES(RUN) IS NOT IN
EFFECT FOR *object_type2*

Explanation: A program attempted to issue the indicated SQL statement that is one of several SQL statements that cannot be issued from a plan or package for which the option DYNAMICRULES(RUN) is not in effect. Those SQL statements are:

- Dynamic GRANT statement
- Dynamic REVOKE statement
- Dynamic ALTER statement
- Dynamic CREATE statement
- Dynamic DROP statement

The indicated SQL statement is bound to one of the following:

- The named plan or package that was not bound with the option DYNAMICRULES(RUN)
- The named package that was not bound with the DYNAMICRULES option, but is appended to a plan that was not bound with DYNAMICRULES(RUN)

statement

The SQL statement in error

object_type1

PACKAGE or DBRM

object_name

If *object_type1* is PACKAGE, *object_name* is the name of the package in the format 'location-id.collection-id.package-id'.

If *object_type1* is DBRM, *object_name* is the name of the DBRM in the format 'plan-name DBRM-name'.

object_type2

PLAN or PACKAGE

If *object_type1* is PACKAGE, *object_type2* can be either PACKAGE or PLAN (whichever is bound with a DYNAMICRULES value other than RUN).

If *object_type1* is DBRM, *object_type2* is PLAN.

System action: The SQL statement cannot be executed.

Programmer response: Do one of the following to correct the error:

- If the SQL statement is embedded, remove it, precompile and compile the application program again, and reissue the BIND command with the desired DYNAMICRULES option.
- If appropriate, use the SQL statement with a package or plan that is bound with DYNAMICRULES(RUN).
- Issue the REBIND command with the DYNAMICRULES(RUN) option for the plan or package to which the SQL statement is bound

Refer to the BIND PACKAGE(DSN), BIND PLAN(DSN), REBIND PACKAGE(DSN), or REBIND PLAN(DSN) statement in *DB2 Command Reference* for the description of the DYNAMICRULES option and the expected results. Determine if either the SQL statement should be removed from the program or the plan or package should be rebound with the DYNAMICRULES(RUN) option.

SQLSTATE: 42509

-551 *auth-id* DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION *operation* ON OBJECT *object-name*

Explanation: Authorization ID *auth-id* attempted to perform *operation* on object *object-name* without having been granted the proper authority to do so. This error might also occur if the object is a read-only view (for INSERT, DELETE, or UPDATE), or if *auth-id* is trying to create a table or view with an authorization ID other than its own.

You can create a table from an *auth-id* other than your own only if your authorization ID is SYSADM, DBADM, or DBCTRL. You can create a view from an *auth-id* other than your own only if your authorization ID is SYSADM.

When *operation* is 'GRANT ***', the keyword ALL was used in the GRANT statement, but the grantor *auth-id* did not possess any privilege to grant.

If this error occurs while DB2 is creating or altering a table involving referential constraints, this code reports

that the user does not have the necessary ALTER privilege to perform a FOREIGN KEY, DROP FOREIGN KEY, DROP PRIMARY KEY, or DROP UNIQUE operation. The *object-name* identifies the object table of the CREATE or ALTER TABLE statement, not the table for which the user lacks the ALTER privilege.

If this error occurs for a distributed SQL request, then:

1. If authorization ID translation is in effect for either the requesting DB2 site or the serving (responding) DB2 site, then *auth-id* is the translated authorization ID. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for information on authorization ID translation.
2. If an alias name was used in the SQL statement, then *object-name* is the resolved remote table or view name.

If the operation is a DROP PACKAGE, the object name consists of the collection ID, the package name and the consistency token. The consistency token uniquely identifies which version of the package the user does not have authorization to drop.

| If this error occurs during invocation of a routine, then
| authorization ID *auth-id* does not have the EXECUTE
| privilege on any candidate routine in the SQL path.
| *object-name* is the name of a candidate routine in the
| SQL path.

Attention: Beginning with Version 5, SQLCODE -551 will be returned instead of SQLCODE -204 for the runtime error where an object does not exist and the CURRENT RULES special register is set to 'STD'.

System action: The statement cannot be executed.

Installation Action: Check for an attempted authorization violation.

Programmer response: Ensure that *auth-id* was granted the authority to perform the desired operation, the *object-name* exists, and *auth-id* is not trying to create a table with a different authorization ID.

SQLSTATE: 42501

-552 *auth-id* DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION *operation*

Explanation: Authorization ID 'auth-id' has attempted to perform the specified 'operation' without having been granted the authority to do so.

System action: The statement cannot be executed.

Installation Action: Check for an attempted authorization violation.

Programmer response: Ensure that the authorization ID has been granted the authority necessary to perform the desired operation.

SQLSTATE: 42502

**-553 *auth-id* SPECIFIED IS NOT ONE OF
THE VALID AUTHORIZATION IDS**

Explanation: The authorization ID specified as the value of the 'authorization-id' or host variable in the SQL SET CURRENT SQLID statement is neither the user's primary authorization ID nor one of the associated secondary authorization IDs.

System action: The SET CURRENT SQLID statement cannot be executed. The current SQL ID is not changed.

Programmer response: Correct the error in the statement or contact the security administrator to have the authorization ID defined for your use.

SQLSTATE: 42503

**-554 AN AUTHORIZATION ID CANNOT
GRANT A PRIVILEGE TO ITSELF**

Explanation: An authorization ID attempted to execute a GRANT statement in which that ID itself appears as one of the entries in the list of 'grantee' authorization IDs.

An authorization ID cannot GRANT a privilege to itself. However, if SQLRULES(STD) is in effect or CURRENT RULES contains STD, GRANT to self is allowed.

System action: The statement cannot be executed. No privileges were granted.

Programmer response: Refer to Chapter 4 of *DB2 SQL Reference* for information about restrictions on the use of the GRANT statement.

SQLSTATE: 42502

**-555 AN AUTHORIZATION ID CANNOT
REVOKE A PRIVILEGE FROM ITSELF**

Explanation: An authorization ID attempted to execute a REVOKE statement in which that ID itself appears as one of the entries in the list of authorization IDs to be revoked.

An authorization ID cannot REVOKE its own privilege. However, if SQLRULES(STD) is in effect or CURRENT RULES contains STD, REVOKE to self is allowed.

System action: The statement cannot be executed. No privileges were revoked.

Programmer response: Refer to Chapter 5 of *DB2 SQL Reference* for information about restrictions on the use of the REVOKE statement.

SQLSTATE: 42502

**-556 *authid2* CANNOT HAVE THE *privilege*
PRIVILEGE *on_object* REVOKED BY
authid1 BECAUSE THE REVOKEE
DOES NOT POSSESS THE PRIVILEGE
OR THE REVOKER DID NOT MAKE
THE GRANT**

Explanation: The REVOKE statement was not successful for one of the following reasons:

- *Authid2* does not possess the *privilege*.
- The revoker, *authid1*, did not explicitly grant the privilege to *authid2*.
- *Authid2* is the owner of the specified object.
- When *privilege* is '***' the keyword ALL was used in the REVOKE statement, but *authid2* did not possess any privilege to revoke.
- When *authid1* is ALL, the BY ALL clause was used in the REVOKE statement, but *authid2* did not possess any privilege to revoke.

An authorization ID can revoke only the privileges that it has explicitly granted to other authorization IDs, unless the authorization ID has SYSADM or SYSCTRL authority and specifies the BY clause. No authorization ID, not even SYSADM, can revoke 'privileges' on an object from the object owner.

System action: The statement cannot be executed. No privileges were revoked from any authorization ID.

Programmer response: Check the appropriate authorization catalog tables to verify that *authid2* possesses the privilege to be revoked. Queries can be made with GRANTEE = *authid2* and the privilege column not = blanks. Correct and reissue the REVOKE statement.

If a user holding SYSADM or SYSCTRL authority receives this SQLCODE, the BY clause might have been omitted from the REVOKE statement.

SQLSTATE: 42504

**-557 INCONSISTENT GRANT/REVOKE
KEYWORD *keyword*. PERMITTED
KEYWORDS ARE *keyword-list***

Explanation: The GRANT or REVOKE statement contains a syntax or spelling error at or before the specified 'keyword'. As an aid to the programmer, 'keyword-list' provides a list of the keywords that would be permitted in this context.

Alternatively:

- The mixture of privileges specified on the GRANT or REVOKE statement is not permitted. The privileges must all be of one type, and consistent with the form of the GRANT or REVOKE statement.
- REVOKE UPDATE (column-list) is not permitted; only REVOKE UPDATE is valid.

- The keywords DELETE, INSERT, SELECT, TRIGGER, UPDATE, REFERENCES and ALTER cannot be specified for an auxiliary table.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the GRANT or REVOKE statement.

SQLSTATE: 42852

**-558 INVALID CLAUSE OR COMBINATION
OF CLAUSES ON A GRANT OR
REVOKE**

Explanation: The location qualifier specified for a GRANT or REVOKE statement is invalid.

System action: The statement cannot be executed.

Programmer response: Refer to Chapter 5 of *DB2 SQL Reference* for valid keywords for the GRANT statement.

SQLSTATE: 56025

**-559 ALL AUTHORIZATION FUNCTIONS
HAVE BEEN DISABLED**

Explanation: The authorization mechanism has been disabled in the DB2 subsystem. Consequently, GRANT and REVOKE statements are ignored.

System action: The statement cannot be executed. No privileges were granted or revoked.

Programmer response: Do not attempt to execute GRANT or REVOKE statements unless and until the authorization mechanism is enabled in the DB2 subsystem.

SQLSTATE: 57002

**-567 *bind-type* AUTHORIZATION ERROR
USING *auth-id* AUTHORITY PACKAGE
= *package-name* PRIVILEGE = *privilege***

Explanation: The authorization ID given does not have the privilege indicated, and cannot invoke the indicated subcommand against the indicated package.

bind-type

Type of bind subcommand (BIND | REBIND | FREE).

auth-id Authorization ID of the package owner.

package-name

Name of the package
(location.collection.package.version)

privilege

Name of the privilege not held:

- BINDADD—The authority to create a new package using BIND with the ADD option.
- BIND—The authority to BIND (REPLACE) or REBIND a package.

- COPY—The authority to COPY from the indicated package
- CREATE IN—The authority to create a package in the indicated collection.

System action: The indicated package is not bound, rebound, or freed.

System programmer response: The indicated privilege must be granted to the authorization ID that will become the package owner.

SQLSTATE: 42501

**-571 THE STATEMENT WOULD RESULT IN
A MULTIPLE SITE UPDATE**

Explanation:

This SQLCODE is issued in the following situations:

- When an application program operating in an IMS or CICS environment attempts to modify data at a remote location where multi-site update capabilities are not supported.
- When an application program has explicit SQL statements within a commit scope that would result in updates at multiple sites where one of the sites at which data is being updated does not support multi-site update.

This SQLCODE can be issued when an application program explicitly modifies data at a single location within a commit scope. This can occur in the following situations:

- A package or plan associated with the application program was invalidated.
- A package or plan was bound at one release of DB2 and fallback occurs to a prior release.

In the situations described above, an implicit autobind is done on behalf of the user. An autobind results in the DB2 catalog being updated. The conditions that must exist for this SQLCODE to be issued when an autobind occurs are:

- One site where data has been modified does not support multi-site update.
- The autobind occurs at a separate and distinct site from where an application program explicitly modifies data.
- At the time of the autobind, locks are being held to process an SQL statement within the application program.

System action: The statement cannot be executed.

Programmer response:

- Ensure that all requests for modifications to the data are confined to a single location within any given commit scope for any application that references a location that does not support multi-site update.

- For programs operating in an IMS or CICS environment where the remote database systems do not support multi-site update, all SQL statements must be read-only access.
- If an autobind is causing this SQLCODE to be issued, REBIND the plan or package.

SQLSTATE: 25000

-573	TABLE <i>table-name</i> DOES NOT HAVE A UNIQUE KEY WITH THE SPECIFIED COLUMN NAMES
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	Explanation: A referential constraint cannot be defined with the specified table as the parent because a unique index with the specified column names does not exist for the identified parent table.
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System action: The statement cannot be processed.

Programmer response: Create a unique index with the specified columns for the parent table.

SQLSTATE: 42890

-574	THE SPECIFIED DEFAULT VALUE OR IDENTITY ATTRIBUTE VALUE CONFLICTS WITH THE DEFINITION OF COLUMN <i>column-name</i>
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Explanation: The DEFAULT value specified for *column-name* is not valid for one of the following reasons:

- The value is not assignable to the column because the constant does not conform to the format for a constant of that data type, or the value has the incorrect length or precision.
- A floating-point constant is specified and the column is not a floating point data type
- A decimal constant is specified and non-zero digits would be truncated when assigned to the column
- The value is more than 255 bytes, including quotes for strings, introducer characters such as the X for a hex constant, fully qualified function names, and parentheses.
- Either the USER or CURRENT SQLID special register is specified and the length attribute of the character string data type is less than 8.
- A system-generated cast function was specified and the column is not defined with a user-defined distinct type
- A function was specified that is not supported. A function may only be specified when the data type is a distinct type, and in this case the specified function must be one of the system-generated cast functions associated with this distinct type.
- WITH DEFAULT is specified with a value other than NULL for a LOB column.

- A value with non-zero scale was specified for the START WITH or INCREMENT BY option of an identity column with the DECIMAL data type.

System action: The SQL statement cannot be executed.

Programmer response: Specify a default value that is valid for the definition of the column.

SQLSTATE: 42894

-575	VIEW <i>view-name</i> CANNOT BE REFERENCED
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	Explanation: An alteration was made to a table underlying view <i>view-name</i> which caused the view definition to become invalid. The view must be successfully regenerated with an ALTER VIEW statement before it can be referenced in a statement other than ALTER VIEW, GRANT, REVOKE, DROP, COMMENT, or LABEL.
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	System action: The statement cannot be processed.
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	Programmer response: Issue an ALTER VIEW statement to regenerate the view.
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	SQLSTATE: 51024
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-577	<i>object-type</i> <i>object-name</i> ATTEMPTED TO MODIFY DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION
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Explanation: The current environment does not allow SQL statements that modify data. One of the following situations has occurred:

- A user-defined function or stored procedure *object-name* was invoked and attempted to modify data, but the function or procedure was defined without the MODIFIES SQL option.
- A user-defined function or stored procedure *object-name* was invoked and attempted to execute a data definition statement, but the function or procedure was defined without the MODIFIES SQL option.
- A function or procedure defined with READS SQL DATA, CONTAINS SQL, or NO SQL has attempted to invoke another function or procedure defined with MODIFIES SQL DATA.
- A user-defined function or stored procedure *object-name* was invoked and attempted to use a NEXT VALUE expression. However, the function or procedure was defined without the MODIFIES SQL DATA option.

In an environment of nested functions and procedures, the SQL option in effect is the most restrictive one that has been specified in the nested hierarchy of functions and procedures. The SQL data access option in effect does not allow for modifying the data.

System action: The SQL statement failed.

Programmer response: Either use an ALTER statement to change the definition of the function or procedure to allow statements that modify data, or remove the failing SQL statement from the external function or procedure.

SQLSTATE: 38002

-579 *object-type object-name* **ATTEMPTED TO READ DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION**

Explanation: The current environment does not allow SQL statements that read data. One of the following situations had occurred:

- A user-defined function or stored procedure *object-name* was invoked and attempted to read data, but the function or procedure was defined without the READS SQL DATA or MODIFIES SQL DATA option.
- A function or procedure defined with CONTAINS SQL or NO SQL has attempted to invoke another function or procedure defined with READS SQL DATA.

In an environment of nested functions and procedures, the SQL option in effect is the most restrictive one that has been specified in the nested hierarchy of functions and procedures. The SQL data access option in effect does not allow for reading data.

System action: The SQL statement failed.

Programmer response: Either use an ALTER statement to change the definition of the function or procedure to allow statements that read data, or remove the failing SQL statement from the external function or procedure.

SQLSTATE: 38004

-580 **THE RESULT-EXPRESSIONS OF A CASE EXPRESSION CANNOT ALL BE NULL**

Explanation: There is a CASE expression in the statement that has all the *result-expressions* (expressions following the THEN and ELSE keywords) coded with the keyword NULL.

System action: The statement cannot be processed.

Programmer response: Change the CASE expression to include at least one *result-expression* with a keyword other than NULL.

SQLSTATE: 42625

-581 **THE DATA TYPES OF THE RESULT-EXPRESSIONS OF A CASE EXPRESSION ARE NOT COMPATIBLE**

Explanation: There is a CASE expression in the statement that has *result-expressions* (expressions following THEN and ELSE keywords) that are not compatible. The data type of the *result-expressions* might be incompatible because the CASE condition result data types are not all:

- character
- graphic
- numeric
- date
- time
- timestamp

If encoded in Unicode, character and graphic data types are compatible, however. Refer to DB2 SQL Reference for more information about Unicode.

System action: The statement cannot be processed.

Programmer response: Correct the *result-expressions* so that they are compatible.

SQLSTATE: 42804

-582 **THE SEARCH-CONDITION IN A SEARCHED-WHEN-CLAUSE CANNOT BE A QUANTIFIED PREDICATE, IN PREDICATE, OR AN EXISTS PREDICATE.**

Explanation: The *search-condition* in a *searched-when-clause* specifies a quantified predicate, an IN predicate, or an EXISTS predicate, but is not allowed.

System action: The statement cannot be processed.

Programmer response: Correct the *search-condition*.

SQLSTATE: 42625

-583 **THE USE OF FUNCTION *function-name* IS INVALID BECAUSE IT IS NOT DETERMINISTIC OR MAY HAVE AN EXTERNAL ACTION**

Explanation: The function *function-name* is defined as a not deterministic function or a function with an external action. This type of function is not supported in the context in which it is used. The contexts in which these are not valid are:

- in the expression prior to the first WHEN keyword in a simple-case-expression.
- in the WHERE clause of the subselect in a CREATE VIEW statement if the WITH CHECK OPTION is specified.
- in an expression of an ORDER BY clause

System action: The statement cannot be executed.

Programmer response: If the use of a not deterministic or external action function was not intended, substitute a function without these characteristics. If the behavior associated with the not deterministic or external action function is intentional, use the alternate form of the statements that make that intent explicit.

- Instead of a simple-when-clause, use the corresponding searched-when-clause where the function would get specified in each search-condition.
- Remove the WITH CHECK OPTION from the CREATE VIEW statement.
- Remove the function from the ORDER BY clause. If the column is part of the result set of the query, change the expression in the ORDER BY clause to the *simple-integer* or *simple-column-name* form of the sort key. See the ORDER BY syntax diagram in the DB2 SQL Reference for more information.

SQLSTATE: 42845

-585 THE COLLECTION *collection-id* APPEARS MORE THAN ONCE IN THE SET *special-register* STATEMENT

Explanation: The SET statement for special register *special-register* includes *collection-id* more than once.

System action: The statement cannot be executed.

Programmer response: Remove duplicate occurrences of *collection-id* from the SET statement for the special register.

SQLSTATE: 42732

-586 THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 2048 CHARACTERS

Explanation: The CURRENT PATH special register is defined as a VARCHAR(2048). The content of the string includes each schema name delimited with double quotes and separated from the next schema name by a comma. The total length of the string of all schema names in the CURRENT PATH cannot exceed 2048 characters. A SET PATH statement causing this message would exceed this limit.

System action: The statement is not executed.

Programmer response: Remove schema names to reduce the total length to fit the 2048 character maximum length. If all the schema names are required, it may be necessary to consolidate some user-defined functions so that fewer schema names are required for the CURRENT PATH.

SQLSTATE: 42907

-589 A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR *cursor-name* SPECIFIED A ROW OF A ROWSET, BUT THE CURSOR IS NOT POSITIONED ON A ROWSET

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a positioned DELETE or UPDATE statement, but the cursor is not currently positioned on a rowset.

System action: The statement cannot be processed.

Programmer response: Issue a FETCH statement to position the cursor on the desired rowset, and then reissue the positioned DELETE or UPDATE statement. If the cursor is not defined for rowset access, redefine the cursor first.

SQLSTATE: 24520

-590 PARAMETER NAME *parameter-name* IS NOT UNIQUE IN THE CREATE FOR ROUTINE *routine-name*

Explanation: The parameter name *parameter-name* specified on a CREATE FUNCTION or CREATE PROCEDURE statement for *routine-name* is not unique.

System action: The statement cannot be executed.

Programmer response: Change the name of the parameter to make all of the parameter names unique within the CREATE statement.

SQLSTATE: 42734

-592 NOT AUTHORIZED TO CREATE FUNCTIONS OR PROCEDURES IN WLM ENVIRONMENT *env-name*

Explanation: This message is issued when:

- The value of the *env-name* token is 'NO WLM ENVIRONMENT' and the check for authorization to the DB2-managed stored procedures address space failed because the NO WLM ENVIRONMENT clause was specified on the CREATE PROCEDURE or ALTER PROCEDURE statement.
- There is no DB2-managed stored procedures address space.

System action: The statement cannot be executed.

Programmer response: To correct the error, perform one of the following actions:

- If the value of the *env-name* token is 'NO WLM ENVIRONMENT', choose a different value for the WLM ENVIRONMENT keyword or request authorization to create objects in the specified WLM ENVIRONMENT from the system administrator.

- If there is no DB2-managed stored procedures address space, request that one be created. Also request that a RACF PERMIT be completed to allow access to this resource.

After doing one of the above, reissue the SQL statement.

SQLSTATE: 42510

-593 NOT NULL MUST BE SPECIFIED FOR ROWID OR DISTINCT TYPE COLUMN *column-name*

Explanation: ROWID columns and distinct type columns for which the source type is a ROWID do not support null values. When a ROWID column (or distinct type for which the source type is a ROWID) is defined on a CREATE TABLE, ALTER TABLE, or DECLARE TABLE statement, the NOT NULL clause must be specified for the column.

System action: The statement cannot be executed.

Programmer response: Change the statement to specify NOT NULL for ROWID column *column-name*.

SQLSTATE: 42831

-601 THE NAME OF THE OBJECT TO BE CREATED OR THE TARGET OF A RENAME STATEMENT IS IDENTICAL TO THE EXISTING NAME *name* OF THE OBJECT TYPE *obj-type*

Explanation: One of the following situations has been detected:

- A CREATE statement tried to create an object *name* of type *obj-type*, but an object of that type with the same name is already defined in the DB2 subsystem.
 - If *obj-type* is CONSTRAINT, the *name* was specified in the FOREIGN KEY clause, CHECK clause, PRIMARY KEY clause, or UNIQUE clause of either a CREATE or ALTER TABLE statement. All referential integrity, check constraint, primary key, and unique key constraint names defined on a table must be unique.
 - If *obj-type* is TABLE or VIEW, and a CREATE ALIAS statement failed, then the alias-name specified in the CREATE ALIAS statement is identical to the table name or view name specified. The TABLE or VIEW might not exist in the DB2 subsystem.
 - If *obj-type* is DISTINCT TYPE, and a CREATE DISTINCT TYPE statement failed, then there is already a user-defined type existing with the same name as the distinct type name specified in the CREATE DISTINCT TYPE statement.
 - If *obj-type* is FUNCTION or PROCEDURE, and a CREATE FUNCTION or CREATE PROCEDURE statement failed, then there is already a routine

existing with the same name as the name specified in the CREATE FUNCTION or CREATE PROCEDURE statement.

- If *obj-type* is PROCEDURE, and a CREATE PROCEDURE statement for an SQL procedure failed, then there may already be an SQL procedure that has the same name as the external name that was implicitly or explicitly specified.
- If *obj-type* is FUNCTION, and a CREATE DISTINCT TYPE statement failed, then there is already a user-defined function function existing with the same name as the distinct type that is specified in the CREATE DISTINCT TYPE statement.
- If *obj-type* is SEQUENCE, and a CREATE SEQUENCE statement failed, then there is already a sequence existing with the same name as the sequence name that was specified in the CREATE SEQUENCE statement.

- A RENAME statement specified a target name *name*, but an object with the same name is already defined in the DB2 subsystem.

System action: The CREATE, ALTER or RENAME statement cannot be executed. No new object was created, no existing object was altered, and no existing object was renamed.

Programmer response: Either drop the existing object or choose another name. If *obj-type* is data set, do an IDCAMS DELETE of the data set before retrying the CREATE. Refer to Chapter 2 of *DB2 SQL Reference* for information about the scope of object names in DB2.

SQLSTATE: 42710

-602 TOO MANY COLUMNS SPECIFIED IN A CREATE INDEX OR ALTER INDEX STATEMENT

Explanation: The number of columns specified in the CREATE INDEX or ALTER INDEX statement exceeds 64, which is the maximum that is permitted by DB2.

System action: The statement cannot be executed. The specified index was not created.

Programmer response: The index definition must be modified to conform to the system-imposed column limit of 64.

SQLSTATE: 54008

-603 A UNIQUE INDEX CANNOT BE CREATED BECAUSE THE TABLE CONTAINS ROWS WHICH ARE DUPLICATES WITH RESPECT TO THE VALUES OF THE IDENTIFIED COLUMNS

Explanation: The index defined in the CREATE INDEX statement could not be created as unique because the specified table already contains rows that

are duplicates with respect to the values of the identified columns.

System action: The statement cannot be executed.

Programmer response: Examine the data to ascertain whether or not the duplicate data is valid. Alternatively, consider creating a nonunique index.

SQLSTATE: 23515

-604 A DATA TYPE DEFINITION SPECIFIES AN INVALID LENGTH, PRECISION, OR SCALE ATTRIBUTE

Explanation: A data type definition in a CREATE or ALTER statement contains an invalid length, precision, or scale attribute specification. In addition, the specification of data type might be incorrect or invalid. Or, the column definition in a view referenced in a CREATE TABLE LIKE *view* has an invalid length.

System action: The statement cannot be executed. The specified object was not created or altered.

Programmer response: Correct the syntax, and resubmit the statement. Refer to Chapter 2 of *DB2 SQL Reference* for information about valid length, precision, and scale attributes for the data type of an object.

SQLSTATE: 42611

-607 OPERATION OR OPTION *operation* IS NOT DEFINED FOR THIS OBJECT

Explanation: The operation or option cannot be performed on the object specified in the SQL statement.

System action: The statement cannot be executed.

Programmer response: If an option of the SQL statement is not allowed for this object, modify the SQL statement and resubmit the statement. If an operation is not defined for the object, the statement cannot be executed.

SQLSTATE: 42832

-611 ONLY LOCKMAX 0 CAN BE SPECIFIED WHEN THE LOCK SIZE OF THE TABLESPACE IS TABLESPACE OR TABLE

Explanation: This message is issued when:

- The LOCKSIZE of the table space is TABLESPACE or TABLE, and LOCKMAX is being altered to or created as a nonzero value.
- The LOCKSIZE of the table space is being altered to TABLESPACE or TABLE, and LOCKMAX is being altered to or created as a nonzero value.

If LOCKSIZE is TABLESPACE or TABLE, LOCKMAX must be 0 because lock escalation is not supported from these levels.

System action: The statement cannot be executed.

Programmer response: Do one of the following:

- Reissue the statement with LOCKMAX 0.
- Alter the LOCKSIZE of the table space to a value other than TABLESPACE or TABLE.

SQLSTATE: 53088

-612 *column-name* IS A DUPLICATE COLUMN NAME

Explanation: The CREATE INDEX, CREATE TABLE, CREATE VIEW or ALTER TABLE statement specifies the same *column-name* for two (or more) columns of the index, table, view, or the UPDATE OF clause of a trigger definition specifies the same column name more than once. Column names must be unique within an index, a table, a view, or in the UPDATE OF clause of a trigger definition. A column cannot be specified in more than one ALTER TABLE clause except if it is specified in an ALTER COLUMN clause and ADD CHECK CONSTRAINT clause. For ALTER TABLE ALTER COLUMN, the column name that is specified cannot be a column that is added in the same ALTER TABLE statement.

System action: The statement cannot be executed. The specified index, table, view, or trigger was not created.

Programmer response: Correct the CREATE statement to specify unique names for each of the columns of the index, table, view, or the columns in the UPDATE OF clause of a trigger definition. Correct the ALTER statement to specify unique names for each of the ALTER COLUMN clauses.

This error can also occur on CREATE TABLE when a column list of a PRIMARY KEY, FOREIGN KEY, or UNIQUE clause contains two or more occurrences of the same column name.

SQLSTATE: 42711

-613 THE PRIMARY KEY OR A UNIQUE CONSTRAINT IS TOO LONG OR HAS TOO MANY COLUMNS

Explanation: This error code results from a problem with the columns that are defined for a PRIMARY KEY or UNIQUE constraint. The number of columns is greater than 64, or the sum of the column length attributes is greater than the number allowed for the type of index.

If the failing statement was an ALTER TABLE statement that included the SET DATA TYPE clause to alter the definition of an existing column, a column being changed is part of a unique or primary constraint. The new sum of the lengths of the columns of the keys exceeds 255-*n*, where *n* is the number of columns allowing nulls. This sum currently exceeds the maximum number that is allowed.

If the failing statement was an ALTER TABLE statement with a PARTITIONING KEY specification, only 64 columns can be specified, and the combined lengths of all columns specified in the PARTITIONING KEY clause exceeds the maximum length of 255-*n*, where *n* is the number of columns that can contain null values.

System action: The CREATE or ALTER statement cannot be executed. The specified table cannot be created or altered.

Programmer response: Change the table definition to keep within the prescribed limits.

SQLSTATE: 54008

-614 THE INDEX CANNOT BE CREATED OR ALTERED, OR THE LENGTH OF A COLUMN CANNOT BE CHANGED BECAUSE THE SUM OF THE INTERNAL LENGTHS OF THE COLUMNS FOR THE INDEX IS GREATER THAN THE ALLOWABLE MAXIMUM

Explanation: The index could not be created or the length of a column cannot be changed because the sum of the internal lengths of the key columns would exceed the allowable maximum. The maximum permitted key length is as follows:

- For PADDED indexes, the sum of the length attributes of the columns must not be greater than 2000-*n*, where *n* is the number of columns that contain null values.
- For NOT PADDED indexes, the sum of the length attributes of the columns must not be greater than 2000-*n-2m*, where *n* is the number of nullable columns and *m* is the number of varying length columns.

System action: The statement cannot be executed. The specified index was not created or the length of the column was not changed.

Programmer response: The definition for the index must be modified (possibly by eliminating one or more key columns) to reduce the length of the key to the permitted maximum. Refer to Chapter 5 of *DB2 SQL Reference* if you require a complete explanation of other possible maximum key lengths and how they are computed.

SQLSTATE: 54008

-615 operation-type IS NOT ALLOWED ON A PACKAGE IN USE

Explanation: The operation 'operation-type' cannot be performed because the package is in use by the same application process.

operation-type

Type of bind operation (BIND, REBIND or DROP).

System action: The BIND, REBIND, or DROP operation on the package is not performed.

Programmer response: Change the application to invoke the BIND, REBIND or DROP operation when the package is not use by the same application process.

SQLSTATE: 55006

-616 obj-type1 obj-name1 CANNOT BE DROPPED BECAUSE IT IS REFERENCED BY obj-type2 obj-name2

Explanation: Some types of objects cannot be dropped if there are other objects which are dependent upon them. For example, a storage group cannot be dropped if there are one or more existing table spaces that use that storage group.

Execution of the specified DROP statement would drop object *obj-name1* of type *obj-type1* on which object *obj-name2* of type *obj-type2* is dependent.

System action: The statement cannot be processed. The specified object was not dropped.

Programmer response: Verify that the object specified in the DROP statement was, indeed, the object to be dropped. If so, all the existing objects that have a dependency on that object must first be dropped.

A LOB table space cannot be dropped when an association exists between it and another table space. The associated base table must be dropped first.

A populated auxiliary table and its index can only be dropped by dropping the associated base table.

A trigger package cannot be explicitly dropped. It can only be dropped by dropping the associated trigger with a DROP TRIGGER statement or by dropping the triggering table.

SQLSTATE: 42893

-618 OPERATION operation IS NOT ALLOWED ON SYSTEM DATABASES

Explanation: System databases cannot be the object of certain types of operations. The attempted 'operation' cannot be performed on system databases. One possible reason for this error is that CCSID ASCII was specified when a system database was being created.

System action: The statement cannot be executed. No changes were made to the specified system database.

Programmer response: Do not attempt to perform the requested operation on system databases.

SQLSTATE: 42832

**-619 OPERATION DISALLOWED BECAUSE
THE DATABASE IS NOT STOPPED**

Explanation: The statements CREATE, ALTER or DROP for a table space, table, or index in the database cannot be processed unless the database is stopped (using the STOP command).

System action: The statement cannot be processed.

Programmer response: Issue the -DISPLAY DATABASE command to verify that the work file database is stopped before resubmitting the statement.

SQLSTATE: 55011

**-620 KEYWORD *keyword* IN *stmt type*
STATEMENT IS NOT PERMITTED
FOR A *space type* SPACE IN THE
database type DATABASE**

Explanation: The specified *keyword* in the SQL statement *stmt type* indicates an attribute that is not allowed for a *space type* space in the *database type* database.

keyword Specifies the keyword that is not allowed.

stmt type

CREATE or ALTER

CREATE is for CREATE TABLESPACE or
CREATE INDEX.

ALTER is for ALTER TABLESPACE or ALTER
INDEX.

space type

TABLE or INDEX

TABLE is for table space, and INDEX is for
index space.

database type

WORK FILE or TEMP

System action: The statement cannot be executed.

Programmer response: Refer to *DB2 SQL Reference* for information about attributes that are allowed or not allowed for a *space type* space in a *database type* database. Correct and resubmit the *stmt type* statement.

SQLSTATE: 53001

**-621 DUPLICATE DBID *dbid* WAS
DETECTED AND PREVIOUSLY
ASSIGNED TO *database-name***

Explanation: The current database being created was assigned a DBID of '*dbid*', which is identical to the DBID assigned to database '*database-name*'. An inconsistency exists between the DB2 catalog and directory.

System action: The statement cannot be executed. No

new object was created, and the existing object was not altered or modified.

Programmer response: Notify the system programmer. The inconsistency must be corrected before CREATE DATABASE will be successful.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 58001

**-622 FOR MIXED DATA IS INVALID
BECAUSE THE MIXED DATA INSTALL
OPTION IS NO**

Explanation: FOR MIXED DATA is specified in a column description of a CREATE or ALTER TABLE, a CREATE FUNCTION, or a CREATE PROCEDURE statement, but the MIXED DATA install option is set to NO. FOR MIXED DATA is valid only when the MIXED DATA install option is set to YES.

System action: The statement is not executed.

Programmer response: Either change the install option or the FOR clause. If the install option is correctly set to NO, the allowable FOR clause options are BIT and SBCS.

SQLSTATE: 56031

**-623 A CLUSTERING INDEX ALREADY
EXISTS ON TABLE *table-name***

Explanation: A given table can have only one cluster index. This error can occur for the following reasons:

- A CREATE INDEX statement would create a second cluster index on the specified table.
- An ALTER INDEX statement specified the CLUSTER clause, but there is already a clustering index defined for the table.

System action: The statement cannot be executed.

Programmer response: Check to determine the identity and validity of the existing cluster index on the object table. Alternatively, consider creating the index without the CLUSTER attribute.

SQLSTATE: 55012

**-624 TABLE *table-name* ALREADY HAS A
PRIMARY KEY OR UNIQUE KEY
CONSTRAINT WITH SPECIFIED
COLUMNS**

Explanation: The code is used to report that a primary key or unique key cannot be defined in an ALTER TABLE statement because the table either:

- Already has a primary key, or

- Has an existing unique constraint with the same definition (same set of columns specified) as the new key.

System action: The statement cannot be run.

Programmer response: Do not attempt to define a table with more than one primary key, or a unique constraint that duplicates the definition of an existing unique constraint.

SQLSTATE: 42889

-625 TABLE *table-name* DOES NOT HAVE AN INDEX TO ENFORCE THE UNIQUENESS OF THE PRIMARY OR UNIQUE KEY

Explanation: The ALTER TABLE statement is invalid for one of the following reasons:

- The table does not have a unique index with a key that is identical to the nominated primary or unique key.
- A unique index exists, but the index is already being used to enforce referential constraints. In this case, DB2 does not choose the index to enforce the primary or unique key.

System action: The statement cannot be executed.

Programmer response: Make sure the key list specified on the ALTER TABLE statement identifies an existing unique index of the table that is not already enforcing referential constraints.

SQLSTATE: 55014

-626 THE ALTER STATEMENT IS NOT EXECUTABLE BECAUSE THE PAGE SET IS NOT STOPPED

Explanation: An ALTER statement specifies an ADD PART, BUFFERPOOL, USING, PRIQTY, SECQTY, ERASE, or GBPCACHE clause, but the page set is not stopped.

System action: The SQL statement cannot be executed.

Programmer response: Stop the page set before resubmitting the statement.

SQLSTATE: 55015

-627 THE ALTER STATEMENT IS INVALID BECAUSE THE PAGESET HAS USER-MANAGED DATA SETS

Explanation: This code is used if a PRIQTY, SECQTY, or ERASE clause is specified, USING STOGROUP is not specified, and the page set has user-managed data sets.

System action: The SQL statement cannot be executed.

Programmer response: Verify that the correct table or

partition is specified. The primary and secondary space allocation of a user-managed data set cannot be altered by means of an ALTER statement.

SQLSTATE: 55016

-628 THE CLAUSES ARE MUTUALLY EXCLUSIVE

Explanation: Mutually exclusive clauses were specified in one or more of the following ways:

- A CREATE TABLESPACE statement contains both the SEGSIZE and Numparts clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and LARGE clauses.
- A CREATE TABLESPACE statement contains both the SEGSIZE and MEMBER CLUSTER clauses.
- A CREATE or ALTER TABLESPACE contains both the LOCKPART YES and LOCKSIZE TABLESPACE
- A 'column-definition' contains both NOT NULL and DEFAULT NULL clauses.
- A 'column-definition' contains both FIELDPROC and DEFAULT clauses.
- A select-statement contains both the update-clause and the FOR FETCH ONLY clause.
- An ALTER TABLE statement contains both a DROP CONSTRAINT clause and either a DROP FOREIGN KEY, DROP CHECK, DROP PRIMARY KEY, or DROP UNIQUE clause.
- A CREATE or ALTER TABLESPACE statement contains both LOCKPART YES and LOCKSIZE TABLESPACE.
- A CREATE TRIGGER statement specifies more than one correlation name for OLD, NEW, OLD_TABLE, or NEW_TABLE. Each of these correlation specifications can appear no more than once in the CREATE TRIGGER statement.
- A CREATE FUNCTION statement contains both a CAST FROM clause and a SOURCE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a RETURNS TABLE clause.
- A CREATE FUNCTION statement contains both a SOURCE clause and a clause used to define an external function (For example, EXTERNAL, LANGUAGE, NO SQL).
- A CREATE or ALTER FUNCTION statement specified SCRATCHPAD. SCRATCHPAD must not be specified when LANGUAGE JAVA or PARAMETER STYLE JAVA is also specified for a function.
- A CREATE or ALTER FUNCTION statement specified FINAL CALL. FINAL CALL must not be specified when LANGUAGE JAVA or PARAMETER STYLE JAVA is also specified for a function.
- A CREATE or ALTER FUNCTION or PROCEDURE statement specified LANGUAGE JAVA, LANGUAGE

- | COMPJAVA, or PARAMETER STYLE JAVA, with
- | DBINFO. DBINFO must not be specified in these
- | cases.
- | • A CREATE or ALTER FUNCTION or PROCEDURE
- | statement specified LANGUAGE JAVA, LANGUAGE
- | COMPJAVA, or PARAMETER STYLE JAVA, with
- | RUN OPTIONS. RUN OPTIONS must not be
- | specified in these cases.
- | • A CREATE or ALTER PROCEDURE statement
- | specified PARAMETER STYLE JAVA, but
- | LANGUAGE COMPJAVA or LANGUAGE JAVA was
- | not specified.
- | • A CREATE or ALTER PROCEDURE statement
- | specified LANGUAGE JAVA, but did not specify
- | PARAMETER STYLE JAVA.
- | • A CREATE or ALTER FUNCTION statement
- | specified PARAMETER STYLE JAVA, but
- | LANGUAGE JAVA was not specified.
- | • A CREATE or ALTER FUNCTION statement
- | specified LANGUAGE JAVA, but did not specify
- | PARAMETER STYLE JAVA.
- | • A CREATE or ALTER PROCEDURE statement
- | specified LANGUAGE JAVA with NO WLM
- | ENVIRONMENT. NO WLM ENVIRONMENT must
- | not be specified when LANGUAGE JAVA or
- | LANGUAGE COMPJAVA is also specified for a
- | procedure.
- | • A CREATE or ALTER PROCEDURE statement
- | attempts to use the NO WLM ENVIRONMENT and
- | PROGRAM TYPE SUB options. When NO WLM
- | ENVIRONMENT is used, then SECURITY must also
- | be used.
- | • A CREATE or ALTER PROCEDURE statement
- | attempts to use both NO WLM ENVIRONMENT and
- | either USER or DEFINER for SECURITY. When NO
- | WLM ENVIRONMENT is used, then SECURITY DB2
- | must also be used.
- | • A CREATE or ALTER PROCEDURE statement
- | contains both a LANGUAGE REXX clause, and a
- | PARAMETER STYLE DB2SQL or PARAMETER
- | STYLE JAVA clause.
- | • An ALTER TABLE statement contains both an
- | ALTER COLUMN clause and a VALIDPROC clause.
- | • An ALTER TABLE statement contains both an
- | ALTER COLUMN clause and a clause other than the
- | check constraint clause.
- | • An ALTER TABLE statement contains either an ADD
- | MATERIALIZED QUERY or DROP MATERIALIZED
- | QUERY clause, and some other clauses.
- | • The AS (*subselect*) clause of a DECLARE GLOBAL
- | TEMPORARY TABLE statement contains both an
- | INCLUDING COLUMN DEFAULTS clause and a
- | USING TYPE DEFAULTS clause.
- | • A CREATE DATABASE statement contains both the
- | AS WORKFILE clause and the AS TEMP clause.

- If INSENSITIVE or SENSITIVE is specified, then
- SCROLL must also be specified, either on DECLARE
- CURSOR or with the ATTRIBUTES clause of the
- PREPARE statement.
- If SCROLL is specified, then either INSENSITIVE or
- SENSITIVE STATIC must also be specified, either on
- DECLARE CURSOR or with the ATTRIBUTES clause
- of the PREPARE statement.
- The *attribute-string* specified in the ATTRIBUTES
- clause of the PREPARE statement cannot specify
- conflicting options.
- LANGUAGE JAVA is not allowed for table functions.
- UNIQUE and UNIQUE WHERE NOT NULL cannot
- be specified with PARTITIONED on CREATE
- INDEX.
- EXTERNAL NAME is not allowed on ALTER TABLE
- for an SQL procedure. You may attempt the same
- action by issuing a DROP for the procedure, and
- rebuilding it with CREATE PROCEDURE.
- A CREATE PROCEDURE or CREATE FUNCTION
- can only specify a PARAMETER VARCHAR clause if
- LANGUAGE C is also specified.

Programmer response: Change the options specified in the statement, and reissue the statement.

SQLSTATE: 42613

**-629 SET NULL CANNOT BE SPECIFIED
BECAUSE FOREIGN KEY *name*
CANNOT CONTAIN NULL VALUES**

Explanation: The code SET NULL option of the indicated FOREIGN KEY clause is invalid because no column of the key allows null values. The *name* is the constraint-name specified in the FOREIGN KEY clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System action: The statement cannot be processed.

Programmer response: Change a column of the key to allow null values or change the delete rule.

SQLSTATE: 42834

**-631 FOREIGN KEY *name* IS TOO LONG OR
HAS TOO MANY COLUMNS**

Explanation: This code is used to report that the sum of the length attributes of the columns identified in the indicated FOREIGN KEY clause is greater than 255 bytes or the number of columns identified is greater than 64. The 'name' is the constraint-name specified in the FOREIGN KEY clause or, if a constraint-name was not specified, the first column-name specified in the clause.

System action: The statement cannot be executed.

Programmer response: The table definition must be modified to conform to the system-imposed limit of the

sum of the length attributes of the columns identified in the PRIMARY KEY clause.

SQLSTATE: 54008

-632 THE TABLE CANNOT BE DEFINED AS A DEPENDENT OF *table-name* BECAUSE OF DELETE RULE RESTRICTIONS

Explanation: This code is used to report that the object of an ALTER TABLE statement cannot be defined as a dependent of the indicated table because either:

- The relationship would form a cycle that would cause the table to be delete-connected to itself.
- The relationship would cause the table to be delete-connected to the indicated table through multiple paths and the delete rule of the existing relationship is SET NULL.

The error is due to the delete rules of existing relationships, not the delete rule specified in the FOREIGN KEY clause of the ALTER TABLE statement.

System action: The statement cannot be executed.

Programmer response: Eliminate the particular FOREIGN KEY clause from the ALTER or CREATE TABLE statement.

SQLSTATE: 42915

-633 THE DELETE RULE MUST BE *delete-rule*

Explanation: The code is used to report that the 'delete-rule' specified in a FOREIGN KEY clause of the ALTER TABLE statement is invalid. The indicated 'delete-rule' is required because:

- A self-referencing constraint must have a 'delete-rule' of CASCADE or NO ACTION.
- The relationship would cause the table to be delete-connected to the same table through multiple paths and such relationships must have the same 'delete-rule'.

System action: The statement cannot be executed.

Programmer response: Change the 'delete rule' in the FOREIGN KEY clause.

SQLSTATE: 42915

-634 THE DELETE RULE MUST NOT BE CASCADE

Explanation: The code is used to report that the CASCADE delete rule specified in the FOREIGN KEY clause of an ALTER TABLE statement is invalid because:

- The relationship would form a cycle that would cause a table to be delete-connected to itself.

- The relationship would cause another table to be delete-connected to the same table through multiple paths with different delete rules or with a delete rule equal to SET NULL.

System action: The statement cannot be executed.

Programmer response: Change the delete rule.

SQLSTATE: 42915

-635 THE DELETE RULES CANNOT BE DIFFERENT OR CANNOT BE SET NULL

Explanation: The code is used to report that the delete rules specified in two FOREIGN KEY clauses of the CREATE TABLE statement are invalid because the table would be delete-connected to the same table through multiple paths involving relationships with different delete rules or with delete rules of SET NULL.

System action: The statement cannot be executed.

Programmer response: Change the delete rule.

SQLSTATE: 42915

-636 THE PARTITIONING KEYS FOR PARTITION *part-num* ARE NOT SPECIFIED IN ASCENDING OR DESCENDING ORDER

Explanation: In the CREATE INDEX or ALTER INDEX statement for the CLUSTER index for a partitioned table (that is, a table residing in a partitioned table space), the partitioning key values specified in the limit key value specifications were not in either ascending or descending order.

System action: The statement cannot be executed. The specified cluster index was not created.

Programmer response: Correct the limit key value specifications in the CREATE INDEX or ALTER INDEX statement for the identified partitions so that the limit key values for successive partitions are in strictly ascending or descending order.

SQLSTATE: 56016

-637 DUPLICATE *keyword* KEYWORD

Explanation: The SQL statement contains a duplicate specification for the keyword *keyword*. For example:

- DEFAULT, UNIQUE, and PRIMARY can only be specified once in a column definition.
- UNIQUE and PRIMARY cannot both be specified for the same column definition.
- PRIMARY can only be specified once in a CREATE TABLE statement.
- The *attribute-string* specified in the ATTRIBUTES clause of the PREPARE statement cannot specify an option more than once.

System action: The statement cannot be processed.

Programmer response: Correct the statement by removing duplicate clauses.

SQLSTATE: 42614

**-638 TABLE *table-name* CANNOT BE
CREATED BECAUSE COLUMN
DEFINITION IS MISSING**

Explanation: The CREATE TABLE statement does not contain any column definition.

System action: The SQL statement cannot be executed.

Programmer response: Add column definition to the statement.

SQLSTATE: 42601

**-639 A NULLABLE COLUMN OF A
FOREIGN KEY WITH A DELETE RULE
OF SET NULL CANNOT BE A
COLUMN OF THE KEY OF A
PARTITIONED INDEX**

Explanation: A partition key of the clustering index cannot be updated. Therefore, a foreign key column with a delete rule of SET NULL cannot be a column of a partition key if that column is nullable. If this error occurs for an ALTER TABLE operation, the foreign key cannot be created. If this error occurs for a CREATE INDEX operation, the index cannot be created.

System action: The statement cannot be executed.

Programmer response: Review the delete rule of the referential constraint and the partition keys for the index. Do one of the following:

- If the operation in error was CREATE INDEX, either change the index partition key definition or drop and redefine the referential constraint with a different delete rule.
- If the operation in error was ALTER TABLE, change the referential delete rule so that all nullable index keys are not part of the foreign keys.

SQLSTATE: 56027

**-640 LOCKSIZE ROW CANNOT BE
SPECIFIED BECAUSE TABLE IN THIS
TABLESPACE HAS TYPE 1 INDEX**

Explanation: If LOCKSIZE ROW is specified for a table space, all indexes on tables in the table space must be type 2 indexes. The following SQL statement identifies all the type 1 indexes:

```
SELECT I.CREATOR, I.NAME
FROM SYSIBM.SYSINDEXES I,
SYSIBM.SYSTABLES T
WHERE INDEXTYPE = '1'
```

```
AND T.TSNAME = 'table_space_name'
AND T.DBNAME = 'database_name'
AND T.CREATOR = I.TBCREATOR
AND T.NAME = I.TBNAME;
```

where '*table_space_name*' is the name of the table space that is to be altered; '*database_name*' is the name of the database that contains the table space.

System action: The statement cannot be executed.

Programmer response: Since the LOCKSIZE ROW on the table space and the type 1 indexes conflict, either use the ALTER INDEX statement to convert all type 1 indexes to type 2 indexes or use another LOCKSIZE option.

SQLSTATE: 56089

**-643 CHECK CONSTRAINT EXCEEDS
MAXIMUM ALLOWABLE LENGTH**

Explanation: The check constraint definition exceeds the maximum allowable limit of 3800 characters. The redundant blank spaces are excluded from this limit.

System action: The CREATE TABLE or ALTER TABLE statement failed.

Programmer response: Rewrite the check constraint definition so that it is less than 3800 characters. You might need to divide the check constraint into two or more smaller check constraints.

SQLSTATE: 54024

**-644 INVALID VALUE SPECIFIED FOR
KEYWORD OR CLAUSE
keyword-or-clause IN STATEMENT
*stmt-type***

Explanation: The value specified for the *keyword-or-clause* parameter in the *stmt-type* SQL statement is not a permitted value.

System action: The SQL statement cannot be executed.

Programmer response: Correct the statement. Refer to Chapter 5 of *DB2 SQL Reference* for information about the permissible values for the *keyword-or-clause* keyword in *stmt-type* statements.

SQLSTATE: 42615

**-646 TABLE *table-name* CANNOT BE
CREATED IN SPECIFIED TABLE
SPACE *table-space-name* BECAUSE IT
ALREADY CONTAINS A TABLE**

Explanation: The table space specified in a CREATE TABLE statement is a partitioned, implicitly defined, or LOB table space in which an existing table already resides. Only one table may reside in a partitioned, implicitly defined, or LOB table space.

System action: The statement cannot be executed. The

specified table was not created.

Programmer response: Verify that the correct table space was specified in the CREATE statement. Do not attempt to create more than one table in a partitioned, implicitly defined, or LOB table space.

SQLSTATE: 55017

-647 BUFFERPOOL *bp-name* CANNOT BE SPECIFIED BECAUSE IT HAS NOT BEEN ACTIVATED

Explanation: The buffer pool specified in a CREATE or ALTER statement for a table space or index (index space) is not activated.

Table spaces and indexes (index spaces) can only be assigned or reassigned to buffer pools that are currently activated.

System action: The statement cannot be executed. The specified table space or index space was not created or altered.

Programmer response: Verify that the proper buffer pool was specified in the CREATE or ALTER statement. Use the -DISPLAY BUFFERPOOL command to display the attributes of the buffer pool and determine if the buffer pool is activated. If the buffer pool is not activated, use the -ALTER BUFFERPOOL command to change the VPSIZE from 0 to the desired size.

SQLSTATE: 57003

-650 THE ALTER STATEMENT CANNOT BE EXECUTED, REASON *reason*

Explanation: The ALTER statement cannot be executed for one of the following reasons:

- | | |
|----|---|
| 1 | Alter to type 1 index is not allowed for the index whose associated table space has a LOCKSIZE specification of ROW. |
| 2 | Alter to type 1 index is not allowed for the index defined with UNIQUE WHERE NOT NULL. |
| 3 | Alter to type 1 index is not allowed for the index whose associated table space has been defined as a LARGE table space. |
| 4 | Alter to type 1 index is not allowed for an index on an ASCII table. |
| 5 | An ALTER statement with a PIECESIZE clause is not allowed for a partitioning index. |
| 6 | An ALTER statement with a PIECESIZE 4G clause is not allowed for non-partitioned indexes on a non-large table. |
| 11 | An ALTER statement with an ENDING AT clause is not allowed for an index on a partitioned base table with LOB columns or the table itself. |

- | | |
|----|--|
| 12 | ALTER INDEX is not allowed when there is a pending SQL statement. |
| 13 | ALTER TABLE is not allowed when there is a pending SQL statement. |
| 14 | An ALTER INDEX statement with an ENDING AT clause is not allowed when using table-controlled partitioning. |
| 15 | Using ALTER to change the attributes of a partition. |
| 16 | ALTER TABLE DATA CAPTURE CHANGES is not allowed for table spaces in Advisory REORG Pending state. |

System action: The ALTER statement is not executed.

Programmer response: Correct the error according to the given reason and reissue the statement.

SQLSTATE: 56090

-651 TABLE DESCRIPTION EXCEEDS MAXIMUM SIZE OF OBJECT DESCRIPTOR.

Explanation: The CREATE TABLE or ALTER TABLE statement causes the table descriptor (record OBD) to exceed the object descriptor size limit of 32KB.

Programmer response: Change the statement by reducing either the number or length (or a combination of both) of the user-defined default string constants or check constraints and execute the statement again.

System action: The statement is not executed. For an ALTER TABLE statement, the definition of the table is unchanged. For a CREATE TABLE statement, the table is not created.

SQLSTATE: 54025

-652 VIOLATION OF INSTALLATION DEFINED EDIT OR VALIDATION PROCEDURE *proc-name*

Explanation: The result of the SQL statement has been rejected by the installation defined edit or validation procedure 'proc-name' for the object table.

System action: The statement cannot be executed. The contents of the object table were not modified.

Programmer response: Determine the requirements imposed by the edit or validation procedure for inserts and updates of the object table.

SQLSTATE: 23506

-653 TABLE *table-name* IN PARTITIONED TABLE SPACE *tspc-name* IS NOT AVAILABLE BECAUSE ITS PARTITIONED INDEX HAS NOT BEEN CREATED

Explanation: An attempt has been made to insert or manipulate data in or create a view on a partitioned table (that is, a table residing in a partitioned table space) before the partitioned index for that table has been created.

A table residing in a partitioned table space cannot be referenced in any SQL manipulative statement or a CREATE VIEW statement before the partitioned index for that table has been created.

System action: The statement cannot be executed.

Programmer response: Verify that the correct table was specified in the statement. If so, ensure that the partitioned index for the table has been created successfully before attempting to execute any SQL manipulative statements that reference that table.

SQLSTATE: 57004

-655 THE CREATE OR ALTER STOGROUP IS INVALID BECAUSE THE STORAGE GROUP WOULD HAVE BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS

Explanation: One of the following error conditions occurred:

- Both a specific and a non-specific (*) volume ID are specified in the VOLUMES clause of a CREATE STOGROUP statement.
- Both a specific and a non-specific (*) volume ID are specified in an ADD VOLUMES clause of an ALTER STOGROUP statement.
- A specific volume ID is specified in an ADD VOLUMES clause of an ALTER of a storage group that has non-specific volume IDs or mixed volume IDs.
- A non-specific volume ID (*) is specified in an ADD VOLUMES clause of an ALTER of a storage group that has specific volume IDs or mixed volume IDs.

System action: The statement is not executed.

Programmer response: Specify either specific or non-specific volume IDs in the VOLUMES clause of CREATE STOGROUP statement and the ADD VOLUMES clause of the ALTER STOGROUP statement. To add specific volume IDs to a storage group with non-specific volume IDs, use the REMOVE VOLUMES clause to remove the non-specific volume IDs. To add non-specific volume IDs to a storage group with specific volume IDs, use the REMOVE VOLUMES clause to remove the specific volume IDs.

SQLSTATE: 56036

-658 A object-type CANNOT BE DROPPED USING THE statement STATEMENT

Explanation: A DROP statement was issued, but the object cannot be explicitly dropped. The object must be dropped by dropping an associated object:

TRIGGER PACKAGE

A *trigger package* cannot be dropped with the DROP PACKAGE statement. A trigger package can only be dropped implicitly when the associated trigger is dropped using the DROP TRIGGER statement.

CAST FUNCTION

A *cast function* cannot be explicitly dropped with the DROP FUNCTION statement. A cast function can only be dropped implicitly when the associated distinct type is dropped using the DROP DISTINCT TYPE statement.

System action: The SQL statement cannot be executed.

Programmer response: Issue the appropriate DROP statement to drop the intended objects.

SQLSTATE: 42917

-660 INDEX index-name CANNOT BE CREATED OR ALTERED ON PARTITIONED TABLE SPACE tspace-name BECAUSE KEY LIMITS ARE NOT SPECIFIED

Explanation: The CREATE INDEX or ALTER INDEX statement did not specify limit key values for the partitions of the table space. To create a clustering index for a table in a partitioned table space, or to modify those values using ALTER INDEX, you must include those values.

System action: The statement cannot be executed. The specified cluster index was not created or altered.

Programmer response: Verify that the correct table was specified in the CREATE INDEX or ALTER INDEX statement. If so, the definition for the partitioned table space must be examined so that a proper definition for the cluster index for the table may be constructed. Refer to Chapter 5 of *DB2 SQL Reference* for information about the requirements that must be satisfied by the definitions for the cluster indexes for partitioned tables.

SQLSTATE: 53035

-661 object-type index-name CANNOT BE CREATED ON PARTITIONED TABLE SPACE tspace-name BECAUSE THE NUMBER OF PART SPECIFICATIONS IS NOT EQUAL TO THE NUMBER OF PARTITIONS OF THE TABLE SPACE

Explanation: The CREATE INDEX statement for the cluster index on a partitioned table (that is, a table residing in a partitioned table space) does not contain

the same number of PART specifications as there are partitions in the table space. The definition for the cluster index for a partitioned table must contain exactly as many PART specifications as there are partitions in the table space in which that table resides. Also, the part numbers must be valid and unique.

System action: The statement cannot be executed. The specified cluster index was not created.

Programmer response: Examine the definition of the partitioned table space to determine how many partitions have been specified, and then correct the syntax of the CREATE INDEX statement to provide the proper number of PART specifications. Refer to Chapter 5 of *DB2 SQL Reference* for information about the definitions for cluster indexes on partitioned tables.

SQLSTATE: 53036

-662 A PARTITIONED INDEX CANNOT BE CREATED ON A NON-PARTITIONED TABLE SPACE *tspace-name*

Explanation: The CREATE INDEX statement contains PART specifications, but the specified object table is not partitioned (that is, does not reside in a partitioned table space).

System action: The statement cannot be executed. The specified index was not created.

Programmer response: Verify that the proper object table was specified in the statement. Refer to Chapter 5 of *DB2 SQL Reference* for information about the proper usage of PART specifications in CREATE INDEX statements.

SQLSTATE: 53037

-663 THE NUMBER OF KEY LIMIT VALUES IS EITHER ZERO, OR GREATER THAN THE NUMBER OF COLUMNS IN THE KEY OF INDEX *index-name*

Explanation: The number of limit key value specifications provided in at least one of the PART specifications of the CREATE INDEX or ALTER INDEX statement is either zero or greater than the number of columns in the index key.

System action: The statement cannot be executed. The specified index was not created.

Programmer response: Correct the statement so that each PART specification contains exactly the same number of limit key value specifications as there are columns in the index key.

SQLSTATE: 53038

-665 THE PART CLAUSE OF AN ALTER STATEMENT IS OMITTED OR INVALID

Explanation: The ALTER statement is invalid for one of the following reasons:

- The table space or index is not partitioned and the PART clause is specified.
- The table space or index is partitioned, a partition attribute (FREEPAGE or PCTFREE) is specified, and the PART clause is not specified.
- The integer specified in the PART clause does not identify a partition of the table space or index.
- A USING, PRIQTY, SECQTY, or ERASE clause is used to alter storage attributes, but the partition is not specified.
- A GBPCACHE clause is used to alter the group buffer pool caching attributes, but the partition is not specified.
- The VALUES clause is specified without the PART clause. You must specify PART to change VALUES.
- Using ALTER to change the attributes of a partition *values* is not allowed for an index on a partitioned base table with LOB columns, or the table itself.

System action: The SQL statement cannot be executed.

Programmer response: Determine whether the table space or index you want to alter is partitioned. If it is partitioned, specify a PART clause that identifies the partition you want to alter. If it is not partitioned, do not specify the PART clause.

SQLSTATE: 53039

-666 *stmt-verb object* CANNOT BE EXECUTED BECAUSE *function* IS IN PROGRESS

Explanation: The SQL statement could not be executed because the named function was executing at the time.

stmt-verb

The type of data definition language (DDL) statement

object

The DB2 object type

function

A utility, the governor, or the distributed data facility (DDF)

If the object is part of the communications database, it cannot be dropped while the DDF is active.

System action: The statement was not executed.

Programmer response: If the function is a utility, wait for the function to complete or stop. Then resubmit the statement for execution.

If the function is the governor, the statement cannot be executed until the resource limit facility is stopped or switched to a different resource limit specification table

(RLST). In a DB2 data sharing environment, the resource limit facility must be stopped on all members of the DB2 data sharing group or all members must switch to an RLST that is not associated with the object.

If the function is the DDF, the facility must be stopped before the object can be dropped. In a DB2 data sharing environment, the facility must be stopped on all members of the DB2 data sharing group.

SQLSTATE: 57005

-667 THE CLUSTERING INDEX FOR A PARTITIONED TABLE SPACE CANNOT BE EXPLICITLY DROPPED

Explanation: The DROP INDEX statement attempted to drop the cluster index for a table residing in a partitioned table space. The cluster index for such a table cannot be dropped explicitly with the DROP INDEX statement.

System action: The statement cannot be executed. The specified index was not dropped.

Programmer response: The cluster index for a table in a partitioned table space can only be dropped implicitly when the associated partitioned table space is dropped.

SQLSTATE: 42917

-668 THE COLUMN CANNOT BE ADDED TO THE TABLE BECAUSE THE TABLE HAS AN EDIT PROCEDURE

Explanation: The ALTER TABLE statement attempted to add a column to a table that has an edit procedure. If a table has an edit procedure, no columns can be added to it.

System action: The statement cannot be executed. The specified table was not altered.

Programmer response: Verify that the correct table was specified in the ALTER statement. Do not attempt to ALTER the definition of a table that has an installation-written edit procedure associated with it.

SQLSTATE: 56018

-669 THE OBJECT CANNOT BE EXPLICITLY DROPPED. REASON *reason-code*

Explanation: The DROP statement failed for the reason indicated by the *reason-code* as follows:

- 0001** The DROP TABLE statement attempted to drop a table that resides in a partitioned table space.
- 0002** The DROP INDEX statement attempted to drop an index required to enforce the primary key, unique key, or referential constraint of the table.

System action: The statement cannot be processed. The object is not dropped.

Programmer response: If the statement is a DROP TABLE statement, the table of a partitioned table space can only be dropped implicitly when the table space itself is dropped.

If the statement is a DROP INDEX statement and you do not want to keep the primary key, unique key, or referential constraint, use the DROP CONSTRAINT clause of the ALTER TABLE statement to remove the constraint, then drop the index.

SQLSTATE: 42917

-670 THE RECORD LENGTH OF THE TABLE EXCEEDS THE PAGE SIZE LIMIT

Explanation: The row length for a table cannot exceed the page size of the table space in which that table resides (or is to reside). The page size of the table space is determined by the buffer pool used by that table space.

One of following conditions may occur:

- As defined in a CREATE TABLE statement, the row length for the table would exceed the page size of the specified (or default) table space.
- In the case of an ALTER TABLE statement, addition of the specified column would cause the row length of the table to exceed the page size of the table space.
- In the case of an ALTER TABLE statement used to alter the length of an existing variable length column, the new length of the altered column would cause the row length of the table to exceed the page size of the table space.
- The row length in the result of a join exceeds the page size of a work file table space.
- The row length of a large sort record exceeds the page size of a work file table space. The sort record includes columns that are being sorted and columns that the user selects. The length of the columns that are being sorted is the sort key length. The length of the columns that the user selects is the sort data length.

System action: The statement cannot be executed. The object table was not created or altered.

Programmer response: In the case of CREATE TABLE, either (1) the row length of the table must be reduced (by eliminating or reducing the lengths of one or more of the columns), or (2) the table must be assigned to a table space that uses a larger buffer pool (assuming that the row length of the table does not exceed that page size limit).

In the case of ALTER TABLE, either (1) the length of the column to be added to the table must be reduced or, (2) if the row length of the table is already at the

maximum, the table cannot be altered to add any additional columns.

In the case of a row length that exceeds the page size of a work file table space, eliminate columns from the result of the join.

In the case of a large sort record in which the row length exceeds the page size of a work file table space, eliminate columns from the SELECT list or reduce the number of columns that are being sorted.

SQLSTATE: 54010

-671 THE BUFFERPOOL ATTRIBUTE OF THE TABLE SPACE CANNOT BE ALTERED AS SPECIFIED BECAUSE IT WOULD CHANGE THE PAGE SIZE OF THE TABLE SPACE

Explanation: For example, the change to the buffer pool attribute for the table space specified in the ALTER TABLESPACE statement would change the page size of the table space—either from 4KB to 32KB, 8KB to 16KB, or vice versa.

Use of the ALTER TABLESPACE statement to change the page size of a table space is not permitted.

System action: The statement cannot be executed. The table space definition was not altered.

Programmer response: For example, if the table space uses one of the 4KB buffer pools (for example, BP0, BP1, or BP2), it can be reassigned to one of the other 4KB buffer pools (but not buffer pool BP32K). If, however, it is assigned to buffer pool BP32K, the buffer pool assignment cannot be subsequently altered.

SQLSTATE: 53040

-672 OPERATION DROP NOT ALLOWED ON TABLE *table_name*

Explanation: The DROP operation failed for one of the following reasons:

- The table being dropped has the RESTRICT ON DROP attribute.
- The table space or database being dropped contains the specified table, which has the RESTRICT ON DROP attribute.

System action: The DROP statement cannot be executed.

Programmer response: Before dropping the table, alter the table, specifying DROP RESTRICT ON DROP.

For DROP TABLESPACE or DROP DATABASE, make sure that there are no other tables within the table space or database with the RESTRICT ON DROP attribute. The following SELECT statement can identify the tables:

```
SELECT CREATOR, NAME
FROM SYSIBM.SYSTABLES
WHERE TYPE = 'T'
AND CLUSTERTYPE = 'Y'
AND DBNAME = 'database_name'
AND TSNAME = 'tablespace_name';
```

SQLSTATE: 55035

-676 ONLY A 4K PAGE BUFFERPOOL CAN BE USED FOR AN INDEX

Explanation: A buffer pool having a page size other than 4KB was specified in the CREATE INDEX statement. Only 4KB buffer pools (that is, BP0, BP1, and BP2) can be specified for indexes.

System action: The statement cannot be executed. The specified index was not created.

Programmer response: Correct the statement to specify a 4KB buffer pool. Refer to Chapter 5 of *DB2 SQL Reference* for information about the syntax of SQL statements.

SQLSTATE: 53041

-677 INSUFFICIENT VIRTUAL STORAGE FOR BUFFERPOOL EXPANSION

Explanation: An attempt to either open (create) or expand a buffer pool has failed because insufficient virtual storage was available.

This error may occur under either of two circumstances:

- An attempt to create a buffer pool while opening a table space or index(space), or
- An attempt to expand a buffer pool from its current size to its maximum size.

System action: The statement cannot be executed.

Programmer response: If this error should occur during interactive execution of an SQL statement or execution of an application program, installation administration should be notified.

Installation Action: It may be necessary to reexamine the buffer pool storage strategy.

One of the following messages has also been sent to the MVS console: DSNB601I, DSNB603I, or DSNB605I.

Refer to *DB2 Messages* for explanations of these messages.

SQLSTATE: 57011

-678 THE LITERAL *literal* SPECIFIED FOR THE INDEX LIMIT KEY MUST CONFORM TO THE DATA TYPE *data-type* OF THE CORRESPONDING COLUMN *column-name*

Explanation: The index limit key value *literal* has been

specified incorrectly in the CREATE INDEX or ALTER INDEX statement.

Limit key value specifications must conform to the data type of the corresponding index key column. In this case, *literal* must be of data type *data-type* to conform to the data type of column *column-name*.

System action: The statement cannot be executed. The index was not created.

Programmer response: Correct the statement so that each limit key value *literal* is of precisely the same data type as that of the corresponding index key column.

SQLSTATE: 53045

-679 THE OBJECT *name* CANNOT BE CREATED BECAUSE A DROP IS PENDING ON THE OBJECT

Explanation: The application program has executed a DROP for the specified object, and then tried to re-create an object with the same name (and of the same type) before the DROP was completed.

System action: The statement cannot be executed. The specified object was not created.

Programmer response: The logic of the application program must be modified to issue a COMMIT (or the IMS or CICS equivalent) between the DROP and CREATE statements.

SQLSTATE: 57006

-680 TOO MANY COLUMNS SPECIFIED FOR A TABLE, VIEW OR TABLE FUNCTION

Explanation: The maximum number of columns permitted per table, view, or table function is 750. The statement attempted to perform one of the following actions:

- CREATE or ALTER a table to contain more than 750 columns
- CREATE a view with more than 750 columns
- CREATE a table function with more than 750 columns in the RETURNS TABLE clause

System action: The statement cannot be executed.

Programmer response: Change the CREATE statement to not include more than 750 columns, or do not try to alter an existing table to contain more than 750 columns.

SQLSTATE: 54011

-681 COLUMN *column-name* IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE. RT: *return-code*, RS: *reason-code*, MSG: *message-token*

Explanation: An installation field procedure returned

an error for 'column-name'. The 'reason-code' and 'message-token' are defined by the field procedure. They may give additional information to help determine the cause of the problem.

Return code

Error	
4	Invalid value on encode or decode or invalid column description on define
8	Invalid parameter value
12	Field procedure error on any function

Use 'reason-code' and 'message-token' for additional information.

System action: The statement cannot be executed.

Programmer response: If it is not a field procedure error, determine the requirements imposed by the field procedure. If it is a field procedure error, examine the field procedure.

SQLSTATE: 23507

-682 FIELD PROCEDURE *procedure-name* COULD NOT BE LOADED

Explanation: The field procedure 'procedure-name' cannot be loaded.

System action: The statement cannot be executed.

Programmer response: The application should either commit or roll back to previous COMMIT. Then, in general, the application should terminate.

SQLSTATE: 57010

-683 THE SPECIFICATION FOR COLUMN, DISTINCT TYPE, FUNCTION, OR PROCEDURE *data-item* CONTAINS INCOMPATIBLE CLAUSES

Explanation: There is an error in the data item specification in a CREATE or ALTER statement. Incompatible specifications are present such as "INTEGER and FOR BIT DATA". The location of the error is given by *data-item* as follows:

- For a CREATE or ALTER TABLE statement, *data-item* gives the name of the column containing the error. The error could be an invalid specification of FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or FIELDPROC for column *data-item*.
- For a CREATE FUNCTION or CREATE PROCEDURE statement, *data-item* is a token that identifies the area of the problem in the statement. For example, "PARAMETER 3" or "RETURNS" or "CAST FROM".
- For a CREATE DISTINCT TYPE statement, *data-item* gives the name of the type being defined.
- *generation-alteration* cannot be specified for a column that is not defined as an identity column.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement by removing the incompatible specification.

SQLSTATE: 42842

-684 THE LENGTH OF LITERAL LIST BEGINNING *string* IS TOO LONG

Explanation: The length of the literal list beginning with 'string', excluding insignificant blanks and delimiting parentheses is greater than 255.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 54012

-685 INVALID FIELD TYPE, *column-name*

Explanation: The field description returned by the field procedure is invalid. The data type code denotes a long string or has an invalid value.

System action: The statement cannot be executed.

Programmer response: Correct the field procedure so that it returns a valid data type code.

SQLSTATE: 58002

-686 COLUMN DEFINED WITH A FIELD PROCEDURE CAN NOT COMPARE WITH ANOTHER COLUMN WITH DIFFERENT FIELD PROCEDURE

Explanation: The columns specified are not compatible. Different field procedures are specified, or only one field procedure is specified.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement. Refer to Chapter 2 of *DB2 SQL Reference* for comparison restrictions between columns defined with a field procedure.

SQLSTATE: 53043

-687 FIELD TYPES INCOMPARABLE

Explanation: One column cannot be compared with another column that has incompatible field types.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement. Refer to Chapter 2 of *DB2 SQL Reference* for comparison restrictions between columns defined with a field procedure.

SQLSTATE: 53044

-688 INCORRECT DATA RETURNED FROM FIELD PROCEDURE, *column-name*, *msgno*

Explanation: Unexpected data returned from field procedure for column 'column-name'. For more information see 'msgno'.

System action: The statement cannot be executed.

Programmer response: Correct the field procedure so that it returns values that are consistent with their descriptions.

SQLSTATE: 58002

-689 TOO MANY COLUMNS DEFINED FOR A DEPENDENT TABLE

Explanation: The maximum number of columns allowed for a dependent table is 749. The code is used to report that the statement is invalid because of one of the following:

- A CREATE TABLE statement is creating a dependent table with 750 columns.
- An ALTER TABLE statement is altering a dependent table with 749 columns to add a column, or altering a table with 750 columns to become a dependent table.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement to conform to the column limit for a dependent table.

SQLSTATE: 54011

-690 THE STATEMENT IS REJECTED BY DATA DEFINITION CONTROL SUPPORT. REASON *reason-code*

Explanation: The code is issued by the data definition control support to report that the statement is rejected for the reason indicated by 'reason-code' after consulting the application registration table and object registration table.

The explanation of the given reason code:

- 0001
Data definition control support is running under the controlling by application name mode. The statement is rejected because the current application is not registered in application registration table with DEFAULTAPPL on.
- 0002
Data definition control support is running under the controlling by application name with exceptions mode. The statement is rejected because the object is not registered in object registration table and the current application is not registered in application registration table with DEFAULTAPPL on.
- 0003

Data definition control support is running under the controlling by application name with exceptions mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

• 0004

Data definition control support is running under the controlling by object name with exceptions mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

• 0005

Data definition control support is running under the controlling by object name mode. The statement is rejected because the object is registered in object registration table but the current application does not match.

• 0006

Data definition control support is running under the controlling by object name mode. The statement is rejected because the object is not registered in object registration table.

System action: The statement cannot be executed.

Programmer response: None if valid rejection. Otherwise, check to see if data definition control support is running under the desired mode. Check one or both registration table(s) to determine if the entries of the registration table(s) are correct. If they are not, then update the registration table(s).

SQLSTATE: 23508

-691 THE REQUIRED REGISTRATION TABLE *table-name* DOES NOT EXIST

Explanation: The data definition control support assumes the existence of the application registration table and object registration table. But either one or both tables is not defined.

System action: The statement cannot be executed.

Programmer response: Determine whether the required registration tables do exist. If not, create the required tables.

SQLSTATE: 57018

-692 THE REQUIRED UNIQUE INDEX *index-name* FOR DDL REGISTRATION TABLE *table-name* DOES NOT EXIST

Explanation: A unique index must be defined for each registration table. The code is issued when either the required index does not exist or the index defined is not a unique index.

System action: The statement cannot be executed.

Programmer response: Determine whether the required unique index does exist. If not, create the

required index. If the index does exist, but is not unique, drop it and recreate it as a unique index.

SQLSTATE: 57018

-693 THE COLUMN *column-name* IN DDL REGISTRATION TABLE OR INDEX *table-name (index-name)* IS NOT DEFINED PROPERLY

Explanation: An error occurred during verification of the application or object registration table.

The table is improperly defined for the following reasons:

- A required column is missing.
- A column description is invalid because its name, column number, data type, length, or null attribute is incorrect.

or

The index is improperly defined for the following reasons:

- A required key column is missing.
- A key column description is invalid because of its key sequence or because its ordering is incorrect.
- A defined key column should not be part of the unique key.

System action: The statement cannot be executed.

Programmer response: Correct or alter the definition of the required registration table or index.

SQLSTATE: 55003

-694 THE SCHEMA STATEMENT CANNOT BE EXECUTED BECAUSE A DROP IS PENDING ON THE DDL REGISTRATION TABLE *table-name*

Explanation: An error occurred while accessing the application registration table or object registration table. The application registration table or object registration table was dropped, but the DROP statement was not committed.

System action: The statement cannot be executed.

Programmer response: Resubmit the job. If the same error happens, check for the application that issued the DROP statement for the application registration table or the object registration table. Either commit the DROP statement which dropped the table and create a new application registration table or object registration table, or issue a ROLLBACK for the DROP statement to put the tables back.

SQLSTATE: 57023

-695 **INVALID VALUE *seclabel* SPECIFIED FOR SECURITY LABEL COLUMN OF TABLE *table-name***

Explanation: For an INSERT or an UPDATE to table *table-name*, the value that was specified for the security label was invalid.

System action: The INSERT or UPDATE cannot be performed.

Programmer response: Ensure that the value that is specified for the security label column is a valid security label. Alternatively, insert the row that specifies DEFAULT for the security label column, or remove the security label column from the insert column list.

SQLSTATE: 23523

-696 **THE DEFINITION OF TRIGGER *trigger-name* INCLUDES AN INVALID USE OF CORRELATION NAME OR TRANSITION TABLE NAME *name*. REASON CODE=*reason-code***

Explanation: The trigger definition included an invalid use of *name*

trigger-name

The trigger that encountered the error

name The transition variable correlation name or transition table name

reason-code

A reason-code indicating the specific problem as follows:

1. NEW correlation name and NEW_TABLE name are not allowed in a DELETE trigger.
2. OLD correlation name and OLD_TABLE name are not allowed in an INSERT trigger.
3. OLD_TABLE name and NEW_TABLE name are not allowed in a BEFORE trigger.

System action: The statement cannot be executed. The trigger was not created.

Programmer response: Remove the invalid correlation name or transition table name along with the preceding keyword.

SQLSTATE: 42898

-697 **OLD OR NEW CORRELATION NAMES ARE NOT ALLOWED IN A TRIGGER DEFINED WITH THE FOR EACH STATEMENT CLAUSE. OLD_TABLE OR NEW_TABLE NAMES ARE NOT ALLOWED IN A TRIGGER WITH THE BEFORE CLAUSE.**

Explanation: The trigger, as defined, includes a REFERENCING clause with one of the following invalid combinations:

- OLD or NEW correlation names specified (or both) and the FOR EACH STATEMENT clause.
- NEW_TABLE or OLD_TABLE correlation names specified (or both) and the BEFORE clause.

System action: The statement cannot be executed. The trigger was not defined.

Programmer response: Remove invalid correlation names or change the trigger granularity to FOR EACH ROW.

SQLSTATE: 42899

-713 **THE REPLACEMENT VALUE *value* FOR *special-register* IS INVALID**

Explanation: The *value* specified in the SET special-register statement is not a valid value of the indicated special register.

System action: The statement cannot be executed.

Programmer response: Correct the replacement value. See *DB2 SQL Reference* for an explanation of the valid values of each special register.

SQLSTATE: 42815

-715 **PROGRAM *program-name* WITH MARK *release-dependency-mark* FAILED BECAUSE IT DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALLBACK HAS OCCURRED**

Explanation: Program '*program-name*' depends on a function of DB2 that is not supported by the current active release.

program-name

Name of the application program.

release-dependency-mark

A 1-character mark showing the oldest DB2 release supporting this program.

System action: The BIND operation for this plan or package is not performed.

User response: The program cannot be used until the DB2 subsystem is remigrated to the newer release.

Operator response: Notify the system programmer.

System programmer response: Warn users not to use plans or packages containing this program until the DB2 subsystem has been remigrated to the newer release.

SQLSTATE: 56064

-716 **PROGRAM *program-name* PRECOMPILED WITH INCORRECT LEVEL FOR THIS RELEASE**

Explanation: Program '*program-name*' was

precompiled under a release not supported by the current level of DB2, or the contents of the DBRM have been modified after the precompilation phase.

User response: Precompile the named program again using the current precompiler. Reissue the BIND subcommand.

Problem determination: If the program was precompiled at an appropriate release, and the problem persists, collect the following:

- A hexadecimal print of the first record of the failing DBRM
- The listing from the precompile job that generated the DBRM
- Output from the BIND attempt.

SQLSTATE: 56065

-717 *bind-type* **FOR** *object-type* *object-name*
WITH MARK *release-dependency-mark*
FAILED BECAUSE *object-type* **DEPENDS**
ON FUNCTIONS OF THE RELEASE
FROM WHICH FALLBACK HAS
OCCURRED

Explanation: The plan or package indicated depends on a function of DB2 which is not supported by the currently active release.

bind-type
REBIND

object-type
PLAN | PACKAGE

object-name
Name of the application plan, or the package

release-dependency-mark
A one-character mark showing the oldest release of DB2 can support this plan or package. The release dependency mark for the plan is kept in the IBMREQD columns in the DB2 catalog in SYSIBM.SYSPPLAN (plans), SYSIBM.SYSPACKAGE(packages).

System action: The REBIND operation for this plan or package is not performed.

User response: The plan or package cannot be used until the DB2 subsystem is remigrated to the newer release.

Operator response: Notify the system programmer.

System programmer response: Warn users not to use the plan or package until the DB2 subsystem has been remigrated to the newer release.

SQLSTATE: 56066

-718 **REBIND OF PACKAGE** *package-name*
FAILED BECAUSE IBMREQD OF
ibmreqd **IS INVALID**

Explanation: The IBMREQD column of the SYSIBM.SYSPACKAGE catalog table for the named package contains an unrecognizable character.

package-name
Name of the package
(location.collection.package.version)

System action: The REBIND failed.

User response: You must do a BIND ACTION(REPLACE) for this package.

SQLSTATE: 56067

-719 **BIND ADD ERROR USING** *auth-id*
AUTHORITY PACKAGE *package-name*
ALREADY EXISTS

Explanation: An attempt is made to add a package that already exists. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE table. In addition, the combination of 'location.collection.package.consistency-token' must be unique.

auth-id Authorization ID of the invoker of the BIND subcommand.

package-name
Name of the package
(location.collection.package.version).

System action: No package is created.

System programmer response: Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages. Re-invoke the BIND subcommand with a 'location.collection.package.version' that is not in use.

SQLSTATE: 42710

-720 **BIND ERROR, ATTEMPTING TO**
REPLACE PACKAGE = *package_name*
WITH VERSION = *version2* **BUT THIS**
VERSION ALREADY EXISTS

Explanation: An attempt is made to create a version of a package that already exists. The version specified in the REPLVER keyword is different from the version specified for the precompile. The version specified for the precompile already exists in the catalog. The combination of 'location.collection.package.version' must be unique in the SYSIBM.SYSPACKAGE catalog table. A common mistake is that the user may believe that the version he is creating is the one specified in the REPLVER keyword. This is not the case. The version specified in the REPLVER keyword is the name of the version being replaced. The version that will be created

is the version that was given to the program when it was precompiled.

package_name

Fully qualified package name

version2

Version-id of package that is to be created

System action: The bind will fail.

System programmer response: There are two approaches to solve this problem. The first is to precompile the program again with a new version name and reissue the original BIND subcommand. The other approach is not to do the precompile but reissue the BIND subcommand with REPLVER(SAME).

SQLSTATE: 42710

-721 BIND ERROR FOR PACKAGE = *pkg-id* CONTOKEN = *contoken*'X IS NOT UNIQUE SO IT CANNOT BE CREATED

Explanation: An attempt is made to add or replace a package with a consistency token that is not unique for that package. In other words, the combination of *location.collection.package.consistency-token* already exists.

pkg-id Fully qualified name of the package.

contoken

Consistency token in hexadecimal.

System action: The BIND will fail.

System programmer response: Check the SYSIBM.SYSPACKAGE catalog table for names of existing application packages with the indicated consistency token. Reissue the BIND subcommand such that the *location.collection.package.consistency-token* is unique within the catalog. The following SQL statement can be used to query the catalog:

```
SELECT COLLID,NAME
FROM loc-id.SYSIBM.SYSPACKAGE
WHERE HEX(CONTOKEN) = contoken
```

SQLSTATE: 42710

-722 *bind-type* ERROR USING *auth-id* AUTHORITY PACKAGE *package-name* DOES NOT EXIST

Explanation: The indicated subcommand was issued against a package that does not exist. The individual variable fields contain:

bind-type

Type of bind subcommand (BIND | REBIND | FREE).

auth-id Authorization ID of the invoker of the BIND subcommand.

package-name

Name of the package
(location.collection.package.version)

System action: Package not rebound or freed.

System programmer response: Check the SYSPACKAGE catalog table for the correct 'location.collection.package.version' to use.

SQLSTATE: 42704

-723 AN ERROR OCCURRED IN A TRIGGERED SQL STATEMENT IN *trigger-name*. INFORMATION RETURNED: SQLCODE: *sqlerror*, SQLSTATE: *sqlstate*, MESSAGE TOKENS *token-list*, SECTION NUMBER *section-number*

Explanation: During execution of an UPDATE, INSERT, or DELETE statement, a trigger was activated. One of the triggered SQL statements received an SQL error condition.

trigger-name

The trigger that was activated when the error occurred.

section-number

The section number associated with the failing triggered SQL statement. For triggers that contain a WHEN clause, the WHEN clause is section number one. The triggered SQL statements are numbered sequentially, beginning with section number two. This is true for triggers with or without a WHEN clause.

sqlcode The SQLCODE received by the activated trigger.

sqlstate The corresponding SQLSTATE for the SQLCODE received by the activated trigger.

token-list

The list of tokens from the original SQL error. This list might be truncated.

System action: The trigger and the original INSERT, UPDATE, or DELETE statement cannot be processed. The triggering table is unchanged.

Programmer response: Contact your Database Administrator to determine why the trigger named in the message received the error.

System programmer response: Use the trigger name and section number to determine the failing SQL statement. If the trigger definition is available, use the section number to determine the failing statement. Alternatively, the failing statement can be retrieved from the SYSIBM.SYSPACKSTMT catalog table: SELECT TEXT, SEQNO FROM SYSIBM.SYSPACKSTMT WHERE COLLID = 'schema-name' AND NAME = 'trigger-name' AND SECTNO = section-number

ORDER BY SEQNO Refer to the explanation of the reported SQLCODE. Follow the action suggested by that SQLCODE.

SQLSTATE: 09000

-724 THE ACTIVATION OF THE *object-type* OBJECT *object-name* WOULD EXCEED THE MAXIMUM LEVEL OF INDIRECT SQL CASCADING

Explanation: Cascading of indirect SQL occurs when a trigger, user-defined function or stored procedure invokes another trigger, user-defined function or stored procedure which in turn invokes another. The activation of some of the triggers in this chain might be due to the enforcement of referential constraint delete rules. The depth of this cascading is limited to 16.

Note that recursive situations where a trigger includes a triggered SQL statement that directly or indirectly causes the same trigger to be activated are very likely to cause this error. The trigger should contain logic to check for a terminating condition to prevent this error.

object-type

Names the type of object being called. Object type is TRIGGER, FUNCTION, or PROCEDURE.

object-name

Specifies the name of the trigger, user-defined function or stored procedure that would have been activated at the seventeenth level of cascading.

System action: The original statement could not be executed. All SQL statements executed by all triggers, user-defined functions, and stored procedures in the cascade chain are rolled back. External actions performed by the indirect SQL, such as sending a network message might have already occurred.

Programmer response: Start with the indirect SQL that is activated by the original SQL operation. Check for recursive patterns in any invoked user-defined functions or in any triggers defined on the subject of an update operation. If the chain is not recursive, the cascade chain must be simplified by altering the triggers, user-defined functions, or stored procedures involved.

SQLSTATE: 54038

-725 THE SPECIAL REGISTER *register* AT LOCATION *location* WAS SUPPLIED AN INVALID VALUE

Explanation: DB2 received a SET statement with an invalid value. Valid SETs might be allowed or retained. Further processing stops at the named site until the SET statement is corrected.

System action: All SQL statements at the named

remote site are rejected until the SET statement that was in error is corrected.

Programmer response: The SET statement should be reissued with a valid value. This situation can be corrected with a local SET statement or with a DRDA SET statement executed at the remote site. Once the special register has been supplied a valid value, the application can resume execution.

SQLSTATE: 42721

-726 BIND ERROR ATTEMPTING TO REPLACE PACKAGE = *package-name*. THERE ARE ENABLE OR DISABLE ENTRIES CURRENTLY ASSOCIATED WITH THE PACKAGE

Explanation: The BIND subcommand was issued to replace a package that has ENABLE or DISABLE entries currently associated with the package.

System action: Package not bound.

System programmer response: FREE the package first and then BIND the package.

SQLSTATE: 55030

-728 DATA TYPE *data-type* IS NOT ALLOWED IN DB2 PRIVATE PROTOCOL PROCESSING

Explanation: An SQL statement uses a data type that cannot be used with DB2 private protocol. Data types such as LOBs (large objects), row IDs and user defined types cannot be accessed using DB2 private protocol.

System action: The statement cannot be executed.

Programmer response: If this is an invalid data type, correct the statement. If this is a valid (but disallowed) data type, you can:

- Remove access to the data type listed, and re-execute the statement.
- Change the application program so that DRDA is used to access the data.
- BIND the package containing the statement to the remote site with bind option DBPROTOCOL(DRDA) and rerun the program.

Refer to the *DB2 SQL Reference* for more information.

SQLSTATE: 56080

-729 A STORED PROCEDURE SPECIFYING COMMIT ON RETURN CANNOT BE THE TARGET OF A NESTED CALL STATEMENT

Explanation: A stored procedure defined with the COMMIT ON RETURN attribute was called from a stored procedure, user-defined function, or trigger. Stored procedures defined with COMMIT ON

RETURN cannot be nested in this way.

System action: The SQL statement is not executed. If the CALL statement references a remote server, the unit of work is placed in a must rollback state.

Programmer response: Remove the CALL to the stored procedure that was defined with the COMMIT ON RETURN attribute.

SQLSTATE: 429B1

-730 THE PARENT OF A TABLE IN A READ-ONLY SHARED DATABASE MUST ALSO BE A TABLE IN A READ-ONLY SHARED DATABASE

Explanation: An attempt was made to define a relationship between a table in a read-only shared database and a table that is not.

System action: The statement cannot be executed.

Programmer response: Insure that the correct tables are being used for the relationship being defined.

SQLSTATE: 56053

-731 USER-DEFINED DATASET *dsname* MUST BE DEFINED WITH SHAREOPTIONS(1,3)

Explanation: The VSAM SHAREOPTIONS must be (1,3) for all of the indexes and table spaces in the database. The user-defined data set identified did not meet this requirement.

System action: The statement cannot be executed.

Programmer response: Insure that the data sets used in the shared database are defined with the proper SHAREOPTIONS.

SQLSTATE: 56054

-732 THE DATABASE IS DEFINED ON THIS SUBSYSTEM WITH THE ROSHARE READ ATTRIBUTE BUT THE TABLE SPACE OR INDEX SPACE HAS NOT BEEN DEFINED ON THE OWNING SUBSYSTEM

Explanation: Prior to creating a table space or index in a database with the ROSHARE READ attribute, that object must first be defined on the owning subsystem.

System action: The statement cannot be executed.

Programmer response: Verify that the table space or index has been defined on the owning system in a ROSHARE OWNER database.

SQLSTATE: 56055

-733 THE DESCRIPTION OF A TABLE SPACE, INDEX SPACE, OR TABLE IN A ROSHARE READ DATABASE MUST BE CONSISTENT WITH ITS DESCRIPTION IN THE OWNER SYSTEM

Explanation: This code is issued while creating a table space, index, or table in the ROSHARE READ database. These objects must be consistent with their descriptions in the ROSHARE OWNER database as follows:

- For a table space, the following attributes must be the same:
 - Page size
 - Segment size
 - Number of partitions
- For an index, the following attributes must be the same:
 - Number of partitions
 - Number of subpages
 - Table OBID
 - Total key length
 - Index type (Type 1 or Type 2 Index)
 - Number of key columns
- For a table, the following attributes must be the same:
 - Table OBID
 - Maximum record length
 - Number of columns
 - Whether an edit procedure exists

System action: The statement cannot be executed.

Programmer response: Ensure that the definition of the table space, index, or table is consistent with that in the ROSHARE OWNER database.

SQLSTATE: 56056

-734 THE ROSHARE ATTRIBUTE OF A DATABASE CANNOT BE ALTERED FROM ROSHARE READ

Explanation: An attempt was made to ALTER a database from ROSHARE READ to either ROSHARE OWNER or ROSHARE NONE.

System action: The statement cannot be executed.

Programmer response: Verify that the correct database was specified on the ALTER DATABASE statement. The ROSHARE attribute of a read-only shared database cannot be altered. To change this, DROP and recreate the database.

SQLSTATE: 56057

-735 DATABASE *dbid* CANNOT BE ACCESSED BECAUSE IT IS NO LONGER A SHARED DATABASE

Explanation: An attempt was made to access an object in the database identified by *dbid*, that is known to the

system as having the ROSHARE READ attribute. The database, however, is no longer defined as ROSHARE OWNER on the owning subsystem.

System action: The statement cannot be processed.

Programmer response: Verify that the correct object is specified on the statement.

SQLSTATE: 55004

-736 INVALID OBID *obid* SPECIFIED

Explanation: An invalid OBID value was given on the CREATE statement. The OBID is invalid for one of the following reasons:

- The specified OBID does not fall within the acceptable range for OBIDs, which is 1 to 32767.
- The specified OBID is already in use for the given database.

System action: The statement cannot be executed.

Programmer response: Verify that the given OBID is a valid value for an OBID. If so, ensure that the OBID is correct for the object to be created, then query the catalog to find the object that is already defined as having the same OBID in the database. If an invalid OBID was given for the object to be created, correct the statement and execute it again. If the existing object is in error, then DROP and CREATE that object using the correct OBID value.

It is possible that the OBID “in use” is the OBID for an object that had been previously dropped. If that is the case, and the CREATE was issued for a table in a non-ROSHARE READ database, then select a different OBID for use in the OBID clause. If the object had been previously dropped and the CREATE was issued for a table in a ROSHARE READ database, COMMIT and re-submit the CREATE TABLE request.

SQLSTATE: 53014

-737 IMPLICIT TABLE SPACE NOT ALLOWED

Explanation: A CREATE TABLE statement was issued using an implicit table space. An implicit table space may not be used in a database that has been defined as a read-only shared database.

System action: The statement cannot be executed.

Programmer response: CREATE a table space for the table, using the same name as is given on the owning system. Then resubmit the CREATE TABLE statement.

SQLSTATE: 56056

-739 CREATE OR ALTER FUNCTION *function-name* FAILED BECAUSE FUNCTIONS CANNOT MODIFY DATA WHEN THEY ARE PROCESSED IN PARALLEL.

Explanation: The function cannot be created or altered because ALLOW PARALLEL and MODIFIES SQL DATA were both specified explicitly or implicitly. A function cannot be parallelized if it modifies data.

System action: The statement cannot be processed.

Programmer response: Specify DISALLOW PARALLEL or change the MODIFIES SQL DATA to NO SQL, CONTAINS SQL or READS SQL DATA.

SQLSTATE: 56088

-740 FUNCTION *name* IS DEFINED WITH THE OPTION MODIFIES SQL DATA WHICH IS NOT VALID IN THE CONTEXT IN WHICH IT WAS INVOKED

Explanation: A user-defined function defined with MODIFIES SQL DATA is only allowed in:

- VALUES clause of an INSERT statement
- SET clause of an UPDATE statement
- VALUES statement in a trigger
- SET Assignment statement
- CALL procedure statement

System action: The SQL statement failed.

Programmer response: Remove the user-defined function from the failing statement. or remove the MODIFIES SQL DATA option from the definition of the function.

SQLSTATE: 51034

-741 A *database-type* DATABASE IS ALREADY DEFINED FOR MEMBER *member-name*

Explanation: A CREATE DATABASE statement was issued for a WORK FILE or TEMP database, but the database can not be created because one is already defined for the named DB2 subsystem or data sharing group member.

database-type

WORK FILE or TEMP

member-name

Name of the DB2 subsystem or data sharing group member that already has a *database-type* database.

System action: The statement cannot be executed.

Programmer response: Verify the identity and validity of the existing *database-type* database for the named

DB2 subsystem or data sharing member. The existing database can be altered or dropped if necessary. If the existing database is dropped, resubmit the CREATE DATABASE statement.

SQLSTATE: 55020

-742 DSNCB07 IS THE IMPLICIT WORK FILE DATABASE

Explanation: The WORKFILE clause cannot be used on a CREATE DATABASE statement to create a work file database for a DB2 subsystem that is not a member of a DB2 data sharing group. The system database, DSNCB07, is the implicit work file database.

System action: The statement cannot be executed.

Programmer response: To create the work file database for a DB2 subsystem that is not a member of a DB2 data sharing group, create database DSNCB07 without the WORKFILE clause.

SQLSTATE: 53004

-746 THE SQL STATEMENT IN AN EXTERNAL FUNCTION, TRIGGER, OR IN STORED PROCEDURE *name* VIOLATES THE NESTING SQL RESTRICTION

Explanation: If a table is being modified (by INSERT, DELETE or UPDATE), the table can not be accessed by the lower level nesting SQL statement.

If any table is being accessed by a SELECT statement, no table can be modified (by INSERT, DELETE or UPDATE) in any lower level nesting SQL statement.

System action: The SELECT, INSERT, DELETE or UPDATE SQL statement failed.

Programmer response: Remove the failing statement from the named external function, trigger or the stored procedure.

SQLSTATE: 57053

-747 TABLE *table-name* IS NOT AVAILABLE UNTIL THE AUXILIARY TABLES AND INDEXES FOR ITS EXTERNALLY STORED COLUMNS HAVE BEEN CREATED

Explanation: An attempt was made to access or reference a table with one or more LOB columns, however either

- an auxiliary table for storing one of the LOB columns has not been created, or
- an index has not been created for an auxiliary table, or
- there is not an auxiliary table for each partition of the table space.

System action: The statement was not executed.

Programmer response:

1. Use CREATE TABLESPACE to create a LOB table space.
2. Use CREATE TABLE to create the auxiliary table for storing the column.
3. Use CREATE INDEX to create an index on the auxiliary table.
4. Resubmit the statement that failed.

SQLSTATE: 57054

-748 AN INDEX ALREADY EXISTS ON AUXILIARY TABLE *table-name*

Explanation: The CREATE INDEX statement would create a second index on the specified auxiliary table. An auxiliary table can have only one index.

System action: The statement cannot be executed.

Programmer response: An index already exists. Another index cannot be created.

SQLSTATE: 54042

-750 THE SOURCE TABLE *source-name* CANNOT BE RENAMED BECAUSE IT IS REFERENCED IN EXISTING VIEW, MATERIALIZED QUERY TABLE, OR TRIGGER DEFINITIONS

Explanation: The *source table* in a RENAME statement cannot be renamed because it is referenced in one or more existing triggers:

- It is referenced in one or more materialized query table definitions
- It is referenced as the triggering table in one or more existing triggers.

System action: The statement cannot be executed.

Programmer response: Change the source name to the name of an object that can be renamed and reissue the statement. Drop any triggers defined on the table before issuing the RENAME statement. These can be found by querying the system catalog: SELECT * FROM SYSIBM.SYSTRIGGERS WHERE TBNAME = 'source-name'

SQLSTATE: 42986

-751 *object-type object-name* (SPECIFIC NAME *specific name*) ATTEMPTED TO EXECUTE AN SQL STATEMENT *statement* THAT IS NOT ALLOWED

Explanation: A stored procedure or user-defined function attempted to execute an SQL statement that is not allowed.

Stored procedure

A stored procedure issued an SQL statement

that forced the DB2 thread to roll back the unit of work. The SQL statement that caused the thread to be placed in the MUST_ROLLBACK state is one of the following:

COMMIT
ROLLBACK

All further SQL statements are rejected until the SQL application that issued the SQL CALL statement rolls back the unit of work. When control returns to the SQL application that issued the SQL CALL statement, the SQL application must roll back the unit of work. This can be done by issuing an SQL ROLLBACK statement or the equivalent IMS or CICS operation.

User-defined function

External function *object-name* issued one of the following SQL statements:

- COMMIT
- ROLLBACK

System action: The statement cannot be executed.

Programmer response: Remove the unsupported statement from your stored procedure or user-defined function.

Remotely called stored procedures cannot execute embedded SQL Commit and/or Rollback statements unless:

- The connection with the requester system uses one phase commit protocols
 - The requester system indicates that commits are allowed (via sending a DRDA RDBCMTOK=TRUE indication) when the stored procedure is called.
- Attention:** For DB2 Connect requester systems, this requires that the client application must use Connect Type 1, or Remote Unit of Work connections. Connect Type 2 or Distributed Unit of Work connections will cause DB2 Connect to indicate that commits are not allowed, thus embedded SQL Commit and/or Rollback statements in a stored procedure will fail.

Any Commit or Rollback statements in the stored procedure must be removed, or the client application should be modified to establish an environment that allows the stored procedure to execute SQL Commit and/or Rollback statements.

SQLSTATE: 38003

-752 THE CONNECT STATEMENT IS INVALID BECAUSE THE PROCESS IS NOT IN THE CONNECTABLE STATE

Explanation: The application process attempted to execute a CONNECT statement while in the unconnectable state. See the description of the CONNECT statement in the *DB2 SQL Reference* for an explanation of connection states.

System action: The statement cannot be executed. The connection state of the application process is unchanged.

Programmer response: Modify the application program to execute a commit or rollback operation prior to executing the CONNECT statement.

SQLSTATE: 0A001

-763 INVALID TABLE SPACE NAME *table-space-name*

Explanation: The named table space is invalid for one of the following reasons:

- It is a LOB table space and therefore cannot reside in a work file database.
- It is a LOB table space and therefore cannot contain a non-auxiliary table.
- It is not a LOB table space and therefore cannot contain an auxiliary table.

System action: The statement cannot be executed.

Programmer response: Either

- Create the LOB table space in a non-workfile database.
- Create the table in a non-LOB table space.
- Create the auxiliary table in a LOB table space.

SQLSTATE: 560A1

-764 A LOB TABLE SPACE AND ITS ASSOCIATED BASE TABLE SPACE MUST BE IN THE SAME DATABASE

Explanation: An attempt was made to create an auxiliary table in a LOB table space that is not in the same database as the associated base table space.

System action: The statement cannot be executed.

Programmer response: Correct the statement to specify a LOB table space in the same database as the associated base table space.

SQLSTATE: 560A2

-765 TABLE IS NOT COMPATIBLE WITH DATABASE

Explanation: A CREATE TABLE or ALTER TABLE statement defines a LOB column in a table whose database attribute is ROSHARE OWNER or ROSHARE READ. This is not permitted.

System action: The statement is not executed.

Programmer response: If CREATE TABLE, either assign the table to an ROSHARE NONE database or create the table without a LOB column. If ALTER TABLE, redefine the column as a non-LOB column or move the table to an ROSHARE NONE database.

SQLSTATE: 560A3

-766 THE OBJECT OF A STATEMENT IS AN AUXILIARY TABLE FOR WHICH THE REQUESTED OPERATION IS NOT PERMITTED

Explanation: An auxiliary table was named in one of the following statements:

- ALTER TABLE
- CREATE ALIAS
- CREATE FUNCTION
- CREATE SYNONYM
- CREATE VIEW
- DELETE
- DESCRIBE TABLE
- INSERT
- SELECT
- UPDATE

There are no attributes of an auxiliary table that can be altered.

Aliases and synonyms cannot be created on an auxiliary table.

Data in an auxiliary table cannot be accessed by specifying the auxiliary table name in the SELECT, INSERT, DELETE, UPDATE, CREATE PROCEDURE, or CREATE FUNCTION statement. Data in an auxiliary table can only be accessed through operations on the base table columns.

| Additionally, do not specify CLUSTER on ALTER
| TABLE if the table is an auxiliary table.

System action: The statement cannot be executed.

Programmer response: Correct the statement to specify the corresponding base table instead of the auxiliary table and resubmit the statement.

SQLSTATE: 560A4

-767 MISSING OR INVALID COLUMN SPECIFICATION FOR INDEX
index-name

Explanation: The CREATE INDEX statement failed for one of the following reasons:

- An index on a non-auxiliary table must specify the columns on which the index is defined.
- An index on an auxiliary table must not have a column specification.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the CREATE INDEX statement.

- To create an index on a non-auxiliary table, specify the columns on which the index is defined.
- To create an index on an auxiliary table, do not specify the name of any column.

SQLSTATE: 42626

-768 AN AUXILIARY TABLE ALREADY EXISTS FOR THE SPECIFIED COLUMN OR PARTITION

Explanation: An attempt was made to create an auxiliary table, but an auxiliary table for the specified column or partition already exists. When the base table belongs to a non-partitioned table space, there can be only one auxiliary table per LOB column of the table. When the base table belongs to a partitioned table space, for any given LOB column, all values of the LOB column for a given partition are stored in their own auxiliary table. There must be one auxiliary table per partition of the base table space.

System action: The statement is not executed.

Programmer response: Check that the correct table name, column name, and if applicable, partition number have been specified. If a different name is desired for the existing auxiliary table, the RENAME TABLE statement can be used to rename the auxiliary table.

SQLSTATE: 560A5

-769 SPECIFICATION OF CREATE AUX TABLE DOES NOT MATCH THE CHARACTERISTICS OF THE BASE TABLE

Explanation: Either an attempt was made to create an auxiliary table

- using the PART clause and the specified base table is not partitioned or
- without using the PART clause and the specified base table is partitioned

If the base table is not partitioned, then the PART keyword is not allowed on the CREATE AUXILIARY TABLE statement. If the base table is partitioned, then the PART keyword must be specified.

System action: The auxiliary table was not created.

Programmer response: Check whether the name of the base table specified in the CREATE AUXILIARY TABLE statement is correct. If it is correct and the table is not partitioned, remove the PART clause from the statement. If it is correct and the table is partitioned, add the PART clause to the statement. If the table name is not correct, correct the name and also check that the correct column name is specified.

SQLSTATE: 53096

-770 TABLE *table-name* CANNOT HAVE A LOB COLUMN UNLESS IT ALSO HAS A ROWID COLUMN

Explanation: An attempt was made to create a table

with a LOB column or to add a LOB column to a table, but the table does not have a ROWID column. A table with a LOB column must also have a ROWID column.

System action: The statement was not executed.

Programmer response: If creating a table with a LOB column, define a column with type ROWID in the same table. If using ALTER to add a LOB column to a table, first use ALTER to add a column with type ROWID to the table.

SQLSTATE: 560A6

-771 INVALID SPECIFICATION OF A ROWID COLUMN

Explanation: For an ALTER or CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:

- A ROWID column cannot be added to a temporary table.
- The *referential-constraint* clause cannot specify a ROWID column as a column of a foreign key.
- A ROWID column cannot be a column of a primary key or unique key.
- A ROWID column cannot be a column in a table with an EDITPROC.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 428C7

-797 ATTEMPT to CREATE TRIGGER *trigger-name* WITH AN UNSUPPORTED TRIGGERED SQL STATEMENT

Explanation: The trigger definition includes an unsupported triggered SQL statement. The SQL statements allowed as a triggered SQL statement depend on the type of trigger:

- A BEFORE trigger can include the following triggered SQL statements:
 - a fullselect or VALUES statement
 - a SET transition-variable statement (not allowed in a BEFORE DELETE trigger)
 - a SIGNAL SQLSTATE statement
 - a CALL statement
- An AFTER trigger can include the following triggered SQL statements:
 - a fullselect or VALUES statement
 - an INSERT statement
 - a searched UPDATE statement
 - a searched DELETE statement
 - a SIGNAL SQLSTATE statement
 - a CALL statement

System action: The CREATE TRIGGER statement cannot be executed, and the trigger is not created.

Programmer response: Check the triggered SQL statements in the trigger for any statement that is not listed above and remove it.

SQLSTATE: 42987

-798 YOU CANNOT INSERT A VALUE INTO A COLUMN THAT IS DEFINED WITH THE OPTION. GENERATED ALWAYS. COLUMN NAME *column-name*

Explanation: When inserting into a table, a value was specified for column *column-name* with the GENERATE ALWAYS attribute. GENERATED ALWAYS columns should not be specified in the column-list for an insertion unless the corresponding entry in the VALUES list is DEFAULT.

System action: The INSERT is not performed.

Programmer response: Remove the column from the column-list or specify DEFAULT for the GENERATED ALWAYS column in the VALUES clause.

You can also use the OVERRIDING clause as a possible solution for this situation. See INSERT in DB2 SQL Reference for more information about the OVERRIDING USER VALUE clause.

SQLSTATE: 428C9

-802 EXCEPTION ERROR *exception-type* HAS OCCURRED DURING *operation-type* OPERATION ON *data-type* DATA, POSITION *position-number*

Explanation: An exception error has occurred in the processing of an SQL arithmetic function or arithmetic expression. This error may be indicated by *exception-type*. Possible values for *exception-type* are FIXED POINT OVERFLOW, DECIMAL OVERFLOW, ZERO DIVIDE, DIVIDE EXCEPTION, EXPONENT OVERFLOW, or OUT OF RANGE. The exception error occurred in one of the following areas:

- In the SELECT list of an SQL SELECT statement.
- In the search condition of a SELECT, UPDATE, or DELETE statement.
- In the SET clause of the UPDATE statement.
- Found during the evaluation of an aggregate function.

Data-type may indicate the data types of the items being manipulated. Possible values for *data-type* are INTEGER, SMALLINT, DECIMAL, and FLOAT. The data type displayed in the message may indicate the data type of the temporary internal copy of the data, which may differ from the actual column or literal data type due to conversions by DB2.

Operation-type may indicate the arithmetic operation that was being performed at the time of the error. The possible operation-types are ADDITION,

SUBTRACTION, MULTIPLICATION, DIVISION,
| NEGATION, BUILT-IN FUNCTION, AGGREGATE
| FUNCTION, and JAVA CONVERSION.

Position-number may indicate the position of the expression in a SELECT list if the error was in the SELECT list of an outer SELECT statement

Note: Parts of *exception-type*, *data-type*, *operation-type*, and/or *position-number* may not be returned to the SQL communication area, depending on where the error was detected.

System action: The statement cannot be executed. In the case of an INSERT or UPDATE statement, no data is updated or deleted. If the statement was a cursor-controlled FETCH, then the CURSOR will remain open unless the exception occurred while processing an aggregate function (indicated by *operation-type* of AGGREGATE FUNCTION), in which case the CURSOR will be closed. If the CURSOR is closed, subsequent attempts to use that cursor without first doing an OPEN for it receive an SQLCODE -501. If the statement was a cursor-controlled OPEN then the CURSOR will remain closed.

Programmer response: Examine the SQL statement to see if the cause of the problem can be determined. The problem may be data-dependent, in which case it will be necessary to examine the data that was being processed at the time the error occurred.

If the arithmetic expression in error was within the SELECT list of the outer SELECT statement, then it is advisable to include an indicator variable for all expressions in the SELECT list. This allows processing to continue so that non-error column and expression values can be returned.

See the explanation of SQLCODE -405 for allowed ranges of numeric data types.

Problem determination: A fixed point overflow can occur during any arithmetic operation on either INTEGER or SMALLINT fields.

A divide exception can occur on a decimal division operation when the quotient exceeds the specified data field size. A zero divide occurs on a division by zero.

An exponent overflow can occur when the result characteristic of any floating-point operation exceeds 127 and the result fraction is not zero, for example, the magnitude of the result exceeds approximately 7.2E+75.

A decimal overflow exception can occur under either of the following circumstances:

- One or more non-zero digits are lost because the destination field in any decimal operation is too short to contain the result.
- A Java stored procedure or user-defined function sets a decimal value in an output parameter that has a precision or scale too small for the value.
operation-type is JAVA CONVERSION. *data-type* is

DECIMAL. *position-number* indicates which parameter of the CALL statement or user-defined function invocation is in error.

Any of the exceptions/overflows can occur during the processing of a Built-In Function. If the *operation-type* is FUNCTION, then the error occurred while processing either an input, intermediate, or final value. The exception may occur because the value of a parameter is out of range.

SQLSTATE: 22012 if ZERO DIVIDE.

22003 if other than ZERO DIVIDE.

-803

AN INSERTED OR UPDATED VALUE IS INVALID BECAUSE THE INDEX IN INDEX SPACE *indexspace-name* CONSTRAINS COLUMNS OF THE TABLE SO NO TWO ROWS CAN CONTAIN DUPLICATE VALUES IN THOSE COLUMNS. RID OF EXISTING ROW IS *Xrid*

Explanation: The table that is the object of the INSERT or UPDATE operation is constrained (by UNIQUE INDEX in the INDEX SPACE *indexspace-name* to have unique values in certain columns. Completion of the requested INSERT or UPDATE would result in duplicate values occurring in row *rid*.

If a view is the object of the INSERT or UPDATE statement, the table that defines the view is constrained. The update might also be caused by a DELETE operation of a parent row that cascades to a dependent row with a delete rule of SET NULL.

System action: The INSERT, UPDATE, or DELETE statement cannot be executed. The object table is unchanged.

Programmer response: Examine the definitions for UNIQUE INDEX in the INDEX SPACE *indexspace-name* to determine the uniqueness constraint imposed. Please refer to SYSIBM.SYSINDEXES for the *indexspace-name* and the associated *index-name*.

For an UPDATE statement, verify that the specified operation is consistent with the uniqueness constraint. If this does not indicate the error, examine the object table to determine the cause of the problem.

For an INSERT statement, examine the object table to determine which values violate the uniqueness constraint. If the INSERT statement contains a subquery, match the contents of the table addressed by the subquery and the contents of the object table to determine the cause of the problem.

For a DELETE statement, examine the index key columns in the table that defines the index. These columns contain a foreign key, which when set NULL on a cascade delete from the object table, causes the duplicate values.

SQLSTATE: 23505

-804 **AN ERROR WAS FOUND IN THE APPLICATION PROGRAM INPUT PARAMETERS FOR THE SQL STATEMENT, REASON** *reason*

Explanation: The call parameter list or the SQLDA is invalid.

- The call parameter list, which is created by the precompiler, might be invalid if the application programmer has modified the output of the precompiler, used a variable name beginning with 'SQL' in the application program, or overwritten the call parameter list in some other way.
- The SQLDA, which is created by the application program, has an invalid data type or data length.
- The value of SQLDABC is not consistent with the value of SQLD.

The following is the list of reason codes:

- | | |
|----|---|
| 01 | Open issued for non-cursor. |
| 02 | Close issued for non-cursor. |
| 03 | Prepare of EXECUTE IMMEDIATE. |
| 04 | Statement is not recognized. |
| 05 | No statement string present. |
| 06 | Bad SQLDA format in parameter list. |
| 07 | SQLDA length is invalid. |
| 08 | Unrecognized input data type. |
| 09 | Invalid length for input variable. |
| 10 | Invalid data length for output variable. |
| 11 | The value of SQLDABC is not consistent with the value of SQLD. |
| 12 | Invalid input data pointer. |
| 13 | Invalid output data pointer. |
| 14 | SQLN has too many items for SQLDABC. |
| 15 | Input RDI pointer is invalid. |
| 16 | Unrecognized output data type. |
| 17 | The value of the 7th byte of SQLDAID is not consistent with the data types contained in the SQLDA. The SQLDA contains a LOB type host variable, but the 7th byte of SQLDAID is not set to '2' or greater to indicate that the extended SQLVARs have been allocated. |

System action: The statement cannot be executed.

System programmer response: Examine the application program for any of the errors noted under the explanation above. In general, the application programmer should not attempt to modify the output of the precompiler.

SQLSTATE: 07002

-805 **DBRM OR PACKAGE NAME**
location-name.collection-id.dbrm-
name.consistency -token **NOT FOUND IN**
PLAN *plan-name. REASON* *reason*

Explanation: An application program attempted to use a DBRM or package 'location-name.collection-id.dbrm-name.consistency-token' that was not found.

Collection id is blank ('location-name..dbrm-name.consistency-token') if the CURRENT PACKAGESET special register was blank for the local program execution.

The REASON token is blank if the length of 'location-name' is 16, the length of 'collection-id' is 18, and the length of 'dbrm-name' is 8 due to the length of SQLERRMT.

The DBRM or package name was not found for one or more of the following reasons:

- 01
 - The DBRM name was not found in the member list of the plan and there is no package list for the plan. Refer to the first SQL statement under problem determination for assistance in determining the problem.
 - The package name was not found because there is no package list for the plan. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
- 02

The DBRM name 'dbrm-name' did not match an entry in the member list or the package list. Any of the following conditions could be the problem:

Bind conditions:

 - The 'collection-id' in the package list was not correct when the application plan 'plan-name' was bound. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
 - The 'location-name' in the package list was not correct when the application 'plan-name' was bound. Refer to the second SQL statement under Problem Determination for assistance in determining the problem.
 - The 'location-name' in the CURRENTSERVER option for the bind subcommand was not correct when the application plan 'plan-name' was bound. Refer to the third SQL statement under Problem Determination for assistance in determining the problem.
 - DB2 private protocols are not supported under the bind parameter.

Application conditions:

- The CURRENT PACKAGESET special register was not set correctly by the application.
- The application was not connected to the proper location.
- 03
The DBRM name 'dbrm-name' matched one or more entries in the package list and the search of those entries did not find the package. The conditions listed under reason 02 or the following conditions might be the problem.
 - The DBRM of the version of the application program being executed was not bound (A package with the same consistency token as that of the application program was not found.) Refer to the fourth and fifth SQL statements under the Problem Determination section.
 - The incorrect version of the application program is being executed.
- 04
The package, 'collection-id.dbrm-name.consistency-token', does not exist at the remote site, 'location-name'. Refer to the fifth SQL statement under the Problem Determination section.

System action: The statement cannot be executed.

System Programmer or Programmer response: Based on the above reasons, the programmer can perform **one or more** of the following operations for each reason to correct the error.

- 01
 - Add the DBRM name 'dbrm-name' to the MEMBER list of the BIND subcommand and bind the application plan 'plan-name', or
 - Add the PKLIST option with the appropriate package list entry to the REBIND subcommand and rebind the application plan 'plan-name'.
- 02
 - Correct the dbrm-name of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or
 - Correct the location-name of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or
 - Correct the location-name in the CURRENTSERVER option and use the REBIND subcommand to rebind the application plan 'plan-name', or
 - Set the CURRENT PACKAGESET special register correctly, or
 - Connect to the correct location name.
- 03
All the operations under reason 02 above might fix the problem, plus the following operations.
 - Correct the collection-id of the entry in the PKLIST option and use the REBIND subcommand to rebind the application plan 'plan-name', or

- Bind the DBRM of the version of the application program to be executed into the collection 'collection-id', or
- Execute the correct version of the application program. The consistency token of the application program is the same as the package that was bound.

• 04

All the operations under reason 02 and 03 might fix the problem.

Problem determination: The following queries aid in determining the problem. Run these queries at the local location.

1. This query displays the DBRMs in the member list for the plan. If no rows are returned, then the plan was bound without a member list.

```
SELECT PLCREATOR, PLNAME, NAME, VERSION
FROM SYSIBM.SYSDBRM
WHERE PLNAME = 'plan-name';
```
2. This query displays the entries in the package list for the plan. If no rows are returned, then the plan was bound without a package list.

```
SELECT LOCATION, COLLID, NAME
FROM SYSIBM.SYSPACKLIST
WHERE PLANNAME = 'plan-name';
```
3. This query displays the CURRENTSERVER value specified on the BIND subcommand for the plan.

```
SELECT NAME, CURRENTSERVER
FROM SYSIBM.SYSPLAN
WHERE NAME = 'plan-name';
```
4. This query displays if there is a matching package in SYSPACKAGE. If the package is remote, put the location name in the FROM clause. If no rows are returned, the correct version of the package was not bound.

```
SELECT COLLID, NAME, HEX(CONTOKEN), VERSION
FROM <location-name>.SYSIBM.SYSPACKAGE
WHERE NAME = 'dbrm-name'
AND HEX(CONTOKEN) = 'consistency-token';
```
5. This query displays if there is a matching package in SYSPACKAGE. If the package is remote, put the location name in the FROM clause. Use this query when collection-id is not blank. If no rows are returned, the correct version of the package was not bound.

```
SELECT COLLID, NAME, HEX(CONTOKEN), VERSION
FROM <location-name>.SYSIBM.SYSPACKAGE
WHERE NAME = 'dbrm-name'
AND HEX(CONTOKEN) = 'consistency-token'
AND COLLID = 'collection-id';
```

SQLSTATE: 51002

-807

ACCESS DENIED: PACKAGE
package-name **IS NOT ENABLED FOR**
ACCESS FROM *connection-type*
connection-name

Explanation: Access is denied for one of the following reasons:

- It is disabled, either from the 'connection-type' or from the 'connection-type' with the specific 'connection-name'.
- The attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

The variables are:

package-name

The package name (collection.package-id).

connection-type

One of the following: BATCH, DB2CALL, REMOTE, IMSBMP, IMSMPP, CICS, DLIBATCH, or UNKNOWN.

connection-name

Name of the connection that is restricted. If all connection names from a specific connection-type are restricted, this value is not specified.

System action: The statement is not executed and the package is not allocated.

System programmer response: One of the following:

- Rebind the package to enable it to execute with the required connection type and name.
- Check the SYSPLSYSTEM or SYSPKSYSTEM catalog table to find a connection from which the package can be executed.
- Correct the attach library.

SQLSTATE: 23509

-808 THE CONNECT STATEMENT IS NOT CONSISTENT WITH THE FIRST CONNECT STATEMENT

Explanation: The CONNECT semantics that apply to an application process are determined by the first CONNECT statement executed (successfully or unsuccessfully) by the application process. One of the following rules was violated:

- A type 2 CONNECT statement cannot be executed after a type 1 CONNECT statement was executed.
- A type 1 CONNECT statement cannot be executed after a type 2 CONNECT statement was executed.

System action: The statement cannot be executed.

Programmer response: The probable cause of this error is that different programs in the application process were precompiled with different CONNECT options.

Ensure that the application process uses either type 1 or type 2 CONNECT statements and then resubmit the job. The type of CONNECT to be used is a precompiler

option. The default is type 2 CONNECT.

SQLSTATE: 08001

-811 THE RESULT OF AN EMBEDDED SELECT STATEMENT OR A SUBSELECT IN THE SET CLAUSE OF AN UPDATE STATEMENT IS A TABLE OF MORE THAN ONE ROW, OR THE RESULT OF A SUBQUERY OF A BASIC PREDICATE IS MORE THAN ONE VALUE

Explanation: Execution of an embedded SELECT statement or a subselect in the SET clause of an UPDATE statement has resulted in a result table that contains more than one row. Alternatively, a subquery contained in a basic predicate has produced more than one value.

System action: The statement cannot be executed.

Programmer response: Examine the syntax of the statement to ensure that it contains the proper condition specifications. If the statement syntax is correct, there might be a problem with the data that is causing more than one row or value to be returned when you do not expect it.

SQLSTATE: 21000

-812 THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE A BLANK COLLECTION-ID WAS FOUND IN THE CURRENT PACKAGESET SPECIAL REGISTER WHILE TRYING TO FORM A QUALIFIED PACKAGE NAME FOR PROGRAM *program-name.consistency-token* USING PLAN *plan-name*

Explanation: A last or only entry in the package list for the plan contained asterisk (*) the 'collection-id' which requires the 'CURRENT PACKAGESET' special register to be set to a nonblank 'collection-id' in order to form a qualified package name.

System action: The statement cannot be executed.

Programmer response: Set the 'CURRENT PACKAGESET' special register to the desired 'collection-id' or have your system administrator check the plan's package list for correctness.

SQLSTATE: 22508

-815 A GROUP BY OR HAVING CLAUSE IS IMPLICITLY OR EXPLICITLY SPECIFIED IN A SUBSELECT OF A BASIC PREDICATE OR THE SET CLAUSE OF AN UPDATE STATEMENT

Explanation: A subselect of a basic predicate or a SET clause of an UPDATE statement either:

- directly contains a GROUP BY or HAVING clause
- specifies as its object a view having a definition that includes a GROUP BY or HAVING clause

Neither construct is permitted.

System action: The statement cannot be executed. No data was retrieved.

Programmer response: The implied function is not supported by DB2.

No coding workaround exists for the subselect. A GROUP BY or HAVING clause cannot be used within the subselect of a basic predicate because the subselect is allowed to return only a single value. For more information on basic predicates, refer to *DB2 SQL Reference*.

SQLSTATE: 42920

-817 THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE STATEMENT WILL RESULT IN A PROHIBITED UPDATE OPERATION.

Explanation: The application attempted to execute an SQL statement that would result in updates to user data or to the subsystem catalog. This is prohibited for one of the following reasons:

- The application is running as an IMS inquiry-only transaction.
- The application is an IMS or CICS application that is attempting to update data at a remote DBMS that does not support two-phase commit.
- The application is attempting to update data at multiple locations and one of the locations does not support two-phase commit.
- A trigger defined with activation time BEFORE was activated and its triggered action caused updates to the database.

These SQL statements include INSERT, UPDATE, DELETE, CREATE, ALTER, DROP, GRANT, and REVOKE.

System action: The statement cannot be executed.

Programmer response: If the application is running as an IMS inquiry-only transaction, see your IMS system programmer about changing the inquiry-only status of the transaction under which your application is running.

If the IMS or CICS application is attempting a remote update, either the application must be changed to run as a local application on the server DBMS, or the server DBMS must be upgraded to support two-phase commit.

If the application is attempting to update data at multiple locations, either the application must be changed, or all DBMSs involved must be upgraded to support two-phase commit.

If the error is due to an invalid statement during a trigger activation, contact your system administrator to correct the trigger definition.

SQLSTATE: 25000

-818 THE PRECOMPILER-GENERATED TIMESTAMP *x* IN THE LOAD MODULE IS DIFFERENT FROM THE BIND TIMESTAMP *y* BUILT FROM THE DBRM *z*

Explanation: The SQL precompiler places timestamp 'y' in the DBRM, and time stamp 'x' in the parameter list in the application program for each SQL statement. At BIND time, DB2 stores the DBRM timestamp for run-time use. At run-time, timestamp 'x', for the SQL statement being processed, is compared with timestamp 'y' derived from the DBRM 'z' at BIND time. If the two timestamps do not match, the DBRM and the application program were not the result of the same precompile.

This problem can occur if you:

- Precompile, compile, and link, without doing a BIND of the application,
- Precompile and BIND, without doing the compile and link for the application program, or
- BIND the application using a DBRM that resulted from a different precompile of the application program than that which produced the object module that is linked into the application module.

The timestamps 'x' and 'y' are DB2 internal timestamps. They do not have an external interpretation.

System action: The statement cannot be executed.

Programmer response: BIND the application again, using the DBRM for the application program that matches the object module.

SQLSTATE: 51003

-819 THE VIEW CANNOT BE PROCESSED BECAUSE THE LENGTH OF ITS PARSE TREE IN THE CATALOG IS ZERO

Explanation: SYSIBM.SYSVTREE.VTREE is a varying-length string column that contains the parse trees of views. In processing a view, the length control field of its parse tree was found to be zero.

System action: The statement cannot be executed.

Programmer response: This is a system error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 58004

-820 THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE *catalog-table* CONTAINS A VALUE THAT IS NOT VALID IN THIS RELEASE

Explanation: A column of the indicated catalog table contains a value that prevents further processing of an SQL statement. The meaning of the value is unknown to the release of DB2. If a fall back has occurred, the value is probably the result of the use of new function prior to the fall back.

System action: The statement cannot be executed.

Programmer response: Verify that the statement refers to the intended tables or views and that the problem is the result of a fall back. If this is the case, the statement cannot be corrected because it depends on a function that is not supported in the current release. If the problem is not the result of a fallback, -820 is a system error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 58004

-822 THE SQLDA CONTAINS AN INVALID DATA ADDRESS OR INDICATOR VARIABLE ADDRESS

Explanation: The application program has placed an invalid address in the SQLDA.

System action: The statement cannot be executed.

Programmer response: Correct the application program such that valid addresses are placed in SQLDA.

SQLSTATE: 51004

-840 TOO MANY ITEMS RETURNED IN A SELECT OR INSERT LIST

Explanation: The number of items returned in the select list or presented in an insert list exceeds the allowable maximum of 750.

System action: The statement cannot be executed.

Programmer response: Determine whether all the information is actually needed. (Note that the number of items returned by the select list * in the SQL statement SELECT * FROM A, B, C is the sum of the number of columns in all three tables.) If not, rewrite the SQL statement so that only the necessary items of information are returned. If so, break the SQL statement up into two or more statements, as required.

SQLSTATE: 54004

-842 A CONNECTION TO *location-name* ALREADY EXISTS

Explanation: One of the following situations occurred:

- A CONNECT statement identifies a location with which the application process has a private connection, using system-directed access.
- SQLRULES(STD) is in effect and a CONNECT statement identifies an existing SQL connection.
- A private connection, using system-directed access, cannot be established because of an existing SQL connection to that location.
- A CONNECT (type 2) request that includes the USER/USING clause identifies an existing SQL connection.

System action: The statement cannot be executed.

Programmer response: The correction depends on the error, as follows:

- If the location name is not the intended name, correct it.
- If SQLRULES(STD) is in effect and the CONNECT statement identifies an existing SQL connection, replace the CONNECT with SET CONNECTION or change the option to SQLRULES(DB2).
- If the CONNECT statement identifies an existing private connection, destroy that connection (by using the RELEASE statement in a previous unit of work) before executing the CONNECT statement. If the SQL statements following the CONNECT can be executed using system-directed access, an alternative solution is to change the application to use that method.
- If system-directed access cannot be used, destroy the conflicting SQL connection (by using the RELEASE statement in a previous unit of work) before executing the SQL statement that requires system-directed access. An alternative solution is to change the application so that only application-directed access is used.
- Destroy the connection (by using the RELEASE statement in a previous unit of work) before executing the CONNECT statement which includes the USER/USING clause.

Correct the error in the application, rebind the plan or package, and resubmit the job.

SQLSTATE: 08002

-843 THE SET CONNECTION OR RELEASE STATEMENT MUST SPECIFY AN EXISTING CONNECTION

Explanation: One of the following rules was violated:

- A SET CONNECTION statement must identify an existing SQL connection of the application process.

- A RELEASE statement must identify an existing connection of the application process.

System action: The statement cannot be executed.

Programmer response: The correction depends on the error, as follows:

- If the location name is not the intended name, correct it.
- If the location name does not identify an existing SQL connection, replace the SET CONNECTION with a CONNECT statement.
- If RELEASE CURRENT was executed in the unconnected state or the specified location name does not identify an existing SQL or DB2 private connection, delete the RELEASE statement.

Correct the error in the application, rebind, the plan and resubmit the job.

SQLSTATE: 08003

-845 **A PREVIOUS VALUE EXPRESSION
CANNOT BE USED BEFORE THE
NEXT VALUE EXPRESSION
GENERATES A VALUE IN THE
CURRENT SESSION FOR SEQUENCE**
sequence-name

| **Explanation:** A PREVIOUS VALUE expression
| specified sequence *sequence-name*, but a value has not
| yet been generated for this sequence. A NEXT VALUE
| expression must be issued in this application process to
| generate a value for this sequence before a PREVIOUS
| VALUE expression for the sequence can be issued.

| This error can also occur after a sequence has been
| dropped, and the DROP statement is rolled back.

System action: The statement cannot be executed.

Programmer response: Issue at least one NEXT VALUE expression for a sequence before issuing any PREVIOUS VALUE expression for the same sequence in a connection.

SQLSTATE: 51035

| **-846** **INVALID SPECIFICATION OF AN
| IDENTITY COLUMN OR SEQUENCE
| OBJECT** *object_type object_name.*
| **REASON CODE =** *reason_code*

| **Explanation:** For an identity column or sequence, the
| specification of an attribute in a CREATE or ALTER
| statement could be invalid for one of the following
| reasons:

- | **1** The underlying data type of the identity
| column or sequence object is not supported.
| Identity columns and sequence objects support
| the following data types: SMALLINT,
| INTEGER, and DECIMAL (or NUMERIC) with
| a scale of zero.

- | **2** The value for START WITH, INCREMENT BY,
| MINVALUE, MAXVALUE, or RESTART WITH
| is outside the range for the data type of the
| identity column or sequence object.

- | **3** MINVALUE must be less than or equal to
| MAXVALUE.

- | **5** An edit procedure was specified for the
| identity column.

- | **6** An identity column was specified for a global
| temporary table that was already defined by a
| CREATE GLOBAL TEMPORARY TABLE
| statement. This error could occur for a
| CREATE GLOBAL TEMPORARY TABLE
| statement, or an ALTER TABLE statement for
| a global temporary table when there is an
| attempt to add an identity column to an
| existing global temporary table that was
| already defined by a CREATE GLOBAL
| TEMPORARY TABLE statement.

System action: DB2 cannot process the statement.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 42815

-867 **INVALID SPECIFICATION OF A
ROWID COLUMN**

Explanation: For an ALTER or CREATE TABLE statement, the specification of a ROWID column might be invalid for one of the following reasons:

- A ROWID column can not be added to a temporary table.
- The *referential-constraint* clause can not specify a ROWID column as a column of a foreign key.
- A ROWID column can not be a column of a primary key.
- A ROWID column can not be a column in a table with an EDITPROC.

System action: The statement cannot be executed.

Programmer response: Correct the syntax and resubmit the statement.

SQLSTATE: 428C7

-870 **THE NUMBER OF HOST VARIABLES
IN THE STATEMENT IS NOT EQUAL
TO THE NUMBER OF DESCRIPTORS**

Explanation: The number of host variables in the SQL statement does not match the number of host variable descriptors.

System action: The statement cannot be executed.

Programmer response: Correct the application program. The most likely cause of this problem is a missing colon before a host variable.

Problem determination: If the SQL statement is bound locally, descriptors are built by the DB2 precompiler. For a remote SQL statement, descriptors are built by DDF and are passed in the array SQLSTTVRB.

SQLSTATE: 58026

-872 A VALID CCSID HAS NOT YET BEEN SPECIFIED FOR THIS SUBSYSTEM

Explanation: A valid CCSID was not specified on either the ASCII CODED CHAR SET, EBCDIC CODED CHAR SET, or UNICODE CODED CHAR SET subsystem parameter on installation panel DSNTIPF.

System action: The statement cannot be executed.

Programmer response: Contact your system administrator to have the necessary CCSID defined for your system.

SQLSTATE: 51032

-873 THE STATEMENT REFERENCED DATA ENCODED WITH DIFFERENT ENCODING SCHEMES OR CCSIDS IN AN INVALID CONTEXT

Explanation: The SQL statement referenced data from multiple encoding schemes or CCSIDs in a context where the reference is not allowed. This error can occur for one of the following reasons:

- The definition of new table is specified to be 'like' an existing view which references data from multiple encoding schemes.
- The parent and child tables referenced in the definition of a referential constraint containing one or more non-numeric columns are encoded with different encoding schemes.
- The definition of a materialized query table uses a different encoding scheme than the containing table space.
- The SELECT statement references data encoded in multiple encoding schemes, and also contains an INSERT statement that references data encoded with a single encoding scheme. This situation is not allowed so that an INSERT statement is processed the same way whether or not it is contained within a SELECT statement.
- In Version 8 compatibility mode, you cannot refer to a column in a table reference defined with one encoding scheme in the same SQL statement as a column of another table reference defined with a different encoding scheme. This situation can occur when a table created in either the ASCII, EBCDIC, or UNICODE encoding schemes is referenced in a statement with a table that is not in the same encoding scheme. This situation can also occur when a table is created; a DECP CCSID value is changed;

another table is created, and then the two tables are referenced in a single SQL statement.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 53090

-874 THE ENCODING SCHEME SPECIFIED FOR THE *object-type* MUST BE THE SAME AS THE CONTAINING TABLE SPACE OR OTHER PARAMETERS

Explanation: If CCSID ASCII was specified, then the containing table space is EBCDIC or UNICODE. If CCSID EBCDIC was specified, then the containing table space is ASCII or UNICODE. If CCSID UNICODE was specified, then the containing table space is ASCII or EBCDIC.

The encoding scheme of a table must be the same as the table space which contains the table.

If a table is created using a fullselect, then the following must be the same:

- The encoding scheme of the result table of the fullselect
- The encoding scheme in the CCSID clause (if specified)
- The encoding scheme of the target table space

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 53091

-875 *operand* CANNOT BE USED WITH THE ASCII DATA REFERENCED

Explanation: ASCII data was referenced in one of the following situations:

- A LIKE predicate refers to a mixed data column in an ASCII table. The LIKE predicate is not supported for mixed ASCII data.
- A VARGRAPHIC function was specified for a column in an ASCII table. The VARGRAPHIC function is not supported for ASCII data.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement.

SQLSTATE: 42988

-876 *object* CANNOT BE CREATED OR ALTERED, REASON *reason*

Explanation: The object, *object*, cannot be created in the SQL statement.

Possible values for *object*:

TYPE 1 INDEX

The object being created is a type 1 index.

INDEX The object being created is an index.
TABLE The object being created or altered is a table.

Possible values for *reason*:

TABLE DEFINED AS ASCII

The underlying table is defined as ASCII. Only type 2 indexes are supported for ASCII tables.

PIECESIZE IS NOT VALID

PIECESIZE is only valid for non-partitioned indexes.

| **COLUMN NAME IN EBCDIC EXCEEDS 18 BYTES,
 | OR THE CONVERSION FROM UNICODE TO
 | EBCDIC FAILED**

| The table being created or altered has either an
 | EDITPROC or a VALIDPROC, in which case
 | the column name in EBCDIC cannot exceed 18
 | EBCDIC bytes in length, or the conversion of a
 | column name from UNICODE to EBCDIC
 | failed.

System action: The statement cannot be executed.

Programmer response: Correct the SQL statement for the object being created.

SQLSTATE: 53092

**-877 CCSID ASCII OR CCSID UNICODE IS
 NOT ALLOWED FOR THIS
 DATABASE OR TABLE SPACE**

Explanation: The database or table space specified is required to be in EBCDIC.

System action: The statement cannot be executed.

Programmer response: Remove the CCSID ASCII or CCSID UNICODE clause from the statement.

SQLSTATE: 53093

| **-878 THE PLAN_TABLE USED FOR
 | EXPLAIN CANNOT BE ASCII**

| **Explanation:** PLAN_TABLEs must be encoded in
 | EBCDIC or Unicode for use with EXPLAIN.

System action: The statement cannot be executed.

| **Programmer response:** Drop the existing
 | PLAN_TABLE, and recreate it with the EBCDIC
 | encoding scheme or use Unicode.

SQLSTATE: 53094

**-879 CREATE or ALTER STATEMENT FOR
 obj-name CANNOT DEFINE A
 COLUMN, DISTINCT TYPE,
 FUNCTION OR STORED PROCEDURE
 PARAMETER AS MIXED OR
 GRAPHIC WITH ENCODING
 SCHEME encoding-scheme**

Explanation: A CREATE or ALTER TABLE statement for *object-name* attempted to define a column, distinct type, or parameter of a user-defined function or stored procedure as mixed data or graphic when the system does not have an appropriate CCSID defined for the *encoding-scheme* encoding scheme.

- A CREATE, with CCSID UNICODE clause specified, cannot be processed because the proper level of OS/390 is not installed. Refer to the Program Directory for information on the level of OS/390 required for UNICODE support.
- A CREATE DISTINCT TYPE statement cannot define a distinct type, on EBCDIC or ASCII data, with a source type of CHAR FOR MIXED DATA, or GRAPHIC, VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.
- A CREATE FUNCTION or CREATE PROCEDURE statement cannot define a parameter or specify a RETURNS data type, for ASCII or EBCDIC data, as CHAR FOR MIXED DATA, or GRAPHIC, VARGRAPHIC, or DBCLOB, when the MIXED DATA install option is set to NO.

Note: This error only occurs when the encoding scheme in use is EBCDIC or ASCII. The MIXED DATA install option does not affect Unicode data.

Note: This error can occur when there is an attempt to define a column or parameter as character FOR MIXED DATA even though the keywords FOR MIXED DATA do not appear in the failing statement. This occurs when the MIXED value in DECP is YES, in this case the default subtype for the character types is FOR MIXED DATA.

System action: The statement cannot be processed.

Programmer response: Contact your system administrator to properly setup the installation options, or change the data types of the elements in columns in your CREATE or ALTER statement.

SQLSTATE: 53095

**-880 SAVEPOINT savepoint-name DOES NOT
 EXIST OR IS INVALID IN THIS
 CONTEXT**

Explanation: The RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT statement does not identify a savepoint that exists.

System action: DB2 does not process the statement.

Programmer response: Correct the statement to use a valid savepoint name.

SQLSTATE: 3B001

**-881 A SAVEPOINT WITH NAME
 savepoint-name ALREADY EXISTS, BUT
 THIS SAVEPOINT NAME CANNOT BE
 REUSED**

Explanation: The SAVEPOINT statement uses the same savepoint name as another savepoint, and it cannot be created because at least one of the savepoints was defined with the UNIQUE clause to indicate that the name cannot be reused within the transaction.

System action: The statement is not executed and a new savepoint is not set. The old savepoint still exists.

Programmer response: Correct the statement. Either use a different savepoint name, or omit the UNIQUE clause if the other savepoint was created without the UNIQUE clause and your intention is to reuse that savepoint name.

SQLSTATE: 3B501

-882 SAVEPOINT DOES NOT EXIST

Explanation: A ROLLBACK TO SAVEPOINT statement was specified without a savepoint name to rollback to the last active savepoint, but no savepoint exists.

System action: The statement is not executed.

Programmer response: Correct the application logic to either set a savepoint or to not attempt to rollback to a savepoint.

SQLSTATE: 3B502

**-900 THE SQL STATEMENT CANNOT BE
 EXECUTED BECAUSE THE
 APPLICATION PROCESS IS NOT
 CONNECTED TO AN APPLICATION
 SERVER**

Explanation: A previous failure has placed the application process in the unconnected state. The only SQL statements that can be successfully executed from the unconnected state are CONNECT, COMMIT, ROLLBACK, and local SET statements.

System action: The statement cannot be executed.

Programmer response: It is possible that no response is required because checking for -900 is one way of detecting the unconnected state. If this is not the case, the logic of the application program must be changed. For additional information, see the description of the CONNECT statement in Chapter 5 of *DB2 SQL Reference*.

SQLSTATE: 08003

**-901 UNSUCCESSFUL EXECUTION
 CAUSED BY A SYSTEM ERROR THAT
 DOES NOT PRECLUDE THE
 SUCCESSFUL EXECUTION OF
 SUBSEQUENT SQL STATEMENTS**

Explanation: A system error occurred that prevented successful execution of the current SQL statement. However, the error does not prevent successful execution of further SQL statements.

The error might occur if the length of the SQL statement is less than 0, or is greater than the DB2 maximum length for a statement.

This SQLCODE might also occur when distributed commit processing encounters an error. In this case, all servers in the unit of work that support distributed two-phase commit backed out the unit of work. If a server that does not support distributed two-phase commit has updates in the unit of work, that server must be queried to determine if its updates were committed or backed out.

Finally, this error might occur during commit if post-processing cannot be completed because of an update that changes the partition of a row. Resource unavailable problems can prevent the post-processing from completing. The existence of held cursors can prevent the post-processing from completing. Commit is failed. The transaction is aborted.

System action: The statement cannot be executed. A X'04E' abend might be requested for the application. The application program can have a recovery routine to recover from such an abend and can retry SQL statements.

Programmer response: If an abend occurred, notify the system programmer for analysis of the abend that caused this return code.

Even if an abend occurred, an application program receiving this return code can retry and is not prohibited from executing further SQL statements.

SQLSTATE: 58004

**-904 UNSUCCESSFUL EXECUTION
 CAUSED BY AN UNAVAILABLE
 RESOURCE. REASON *reason-code*, TYPE
 OF RESOURCE *resource-type*, AND
 RESOURCE NAME *resource-name***

Explanation: The SQL statement could not be executed because resource *resource-name* of type *resource-type* was not available at the time for the reason indicated by *reason-code*. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes. Refer to Part 3, "DB2 codes," on page 159 for an explanation of the given reason code.

| If this is issued in connection with Multilevel Security
| authorization (resource-type 402), then the Security

| Server return and reason codes for the unavailable
| resource appear as the *resource-name*. In this case, refer
| to the *z/OS Security Server RACROUTE Macro Reference*.

System action: The SQL statement cannot be executed. If the SQL statement being executed was a cursor FETCH, DB2 closes the cursor. Subsequent attempts to use that cursor without first doing an OPEN for it receive an SQLCODE -501.

Programmer response: Verify the identity of the resource that was not available. To determine why the resource was unavailable, refer to the specified *reason-code*.

SQLSTATE: 57011

**-905 UNSUCCESSFUL EXECUTION DUE
 TO RESOURCE LIMIT BEING
 EXCEEDED, RESOURCE NAME =
 resource-name LIMIT = *limit-amount1* CPU
 SECONDS (*limit-amount2* SERVICE
 UNITS) DERIVED FROM *limit-source***

Explanation: The execution of the SQL statement was terminated because a resource limit was exceeded.

resource-name

The name of the resource whose limit was exceeded. It is also the name of the column in the DB2 table from which the limit was derived. The *resource-name* can be ASUTIME, which is the number of CPU seconds permitted for each SQL statement.

limit-amount1

The maximum number of CPU seconds permitted

limit-amount2

The maximum number in service units permitted

limit-source

The source used to derive the limit-amount: the name of a resource limit specification table, a system parameter, or the SYSIBM.SYSROUTINES catalog table. If the source is a system parameter, the resource limit specification table did not contain an applicable entry or an error occurred while accessing the table.

System action: If the *limit-source* was a resource limit specification table or a system parameter, the execution of this SQL statement is terminated. A trace record containing more detailed information about this failure is generated. If an SQL cursor is associated with the failed instruction, its position is unchanged and a CLOSE or PREPARE statement can be issued. If any other operation is attempted with the cursor, it cannot be executed and SQLCODE -905 is returned. If there is no cursor, this statement was rolled back.

Programmer response: Determine why this SQL

statement or stored procedure took so long and take appropriate action. Consider simplifying the SQL statement, restructuring tables and indexes, or contacting the installation group responsible for maintaining the resource limit specification tables.

If the *limit-source* was a resource limit specification table or a system parameter, the application program that receives this return code can execute additional SQL statements.

SQLSTATE: 57014

**-906 THE SQL STATEMENT CANNOT BE
 EXECUTED BECAUSE THIS
 FUNCTION IS DISABLED DUE TO A
 PRIOR ERROR**

Explanation: Execution of the SQL statement failed because the requested function had been disabled by a prior error. This situation can arise if the application program has intercepted an abend (for instance, by an ON ERROR condition in a PL/I program) and continued to execute SQL statements. This situation may also arise if a DB2 CICS transaction encountered a create thread error yet continued to issue SQL requests without issuing a SYNCPOINT ROLLBACK first.

System action: The statement cannot be executed.

Programmer response: In general, an application program should terminate upon receipt of this return code. All subsequent attempts by the application to execute other SQL statements will also fail with the same return code. In the case of a DB2 CICS transaction, if the SQLERRP field in the SQLCA contains the module name DSNCEXT1, the transaction may issue a SYNCPOINT ROLLBACK and continue processing. If the transactions chooses to ROLLBACK and continue processing, it must be capable of correcting the situation that caused the create thread error to occur originally.

SQLSTATE: 51005

**-908 *bind-type* ERROR USING *auth-id*
 AUTHORITY. BIND, REBIND OR
 AUTO-REBIND OPERATION IS NOT
 ALLOWED**

Explanation: For BIND and REBIND, the indicated authorization ID is not allowed to perform the indicated bind-type against a plan or package. An entry in the resource limit specification table (RLST) prohibits binding and rebinding by this authorization ID, or all authorization IDs. For AUTO-REBIND, the system parameter controlling AUTO-REBIND operations is set to disallow AUTO-REBIND.

bind-type

Type of bind operation (BIND, REBIND or AUTO-REBIND).

auth-id Authorization ID of the invoker of the BIND

subcommand or primary authorization ID of the invoker of the plan for AUTO-REBIND operations.

System action: The plan or package is not bound.

System programmer response: If the indicated authorization id should be allowed to bind, change the entry in the active RLST table. If AUTO-REBIND operations are disabled, rebind the package before reexecuting the package.

SQLSTATE: 23510

-909 THE OBJECT HAS BEEN DELETED

Explanation: The application program has either:

1. Dropped a table and then attempted to access it.
2. Dropped an index and then tried to access its object table using that index.

System action: The statement cannot be executed.

System programmer response: The logic of the application program must be corrected such that it does not attempt to access or use an object after it has been dropped.

Dropping indexes within an application program is especially hazardous, because there is no way of determining whether or not the plan that has been generated for the application (by BIND or REBIND) actually uses a particular index for access to its object table. If the indicated authorization id should be allowed to bind, change the entry in the active RLST table. If AUTO-REBIND operations are disabled, rebind the package before reexecuting the package.

SQLSTATE: 57007

**-910 THE SQL STATEMENT CANNOT
ACCESS AN OBJECT ON WHICH
UNCOMMITTED CHANGES ARE
PENDING**

Explanation: The application program attempted to
access an object that has been modified and the
changes have not yet been committed. This error is
issued when an application program has issued a
DROP or ALTER against an object, and then attempted
to access that object before the DROP or ALTER is
completed. The error can also be issued when the
application program issued an ALTER statement when
a INSERT, UPDATE, or DELETE statement was
processed for the same object in the same commit
scope.

System action: The statement cannot be executed.

Programmer response: In the case of ALTER, the logic
of the application program must be modified so that a
COMMIT (or the IMS or CICS equivalent) is executed
between the ALTER and the failing SQL statement, or

between the data change statement and the ALTER
statement.

For DROP, the logic of the application program should be modified such that there is no attempt to access an object after the DROP has been executed.

Note that DROP includes the case when rollback to a savepoint includes rolling back to a CREATE.

SQLSTATE: 57007

**-911 THE CURRENT UNIT OF WORK HAS
BEEN ROLLED BACK DUE TO
DEADLOCK OR TIMEOUT. REASON
reason-code, TYPE OF RESOURCE
resource-type, AND RESOURCE NAME
resource-name**

Explanation: The current unit of work was the victim in a deadlock, or experienced a timeout, and had to be rolled back.

The reason code indicated whether a deadlock or timeout occurred. Refer to message DSNT500I under *DB2 Messages* for an explanation of 'resource-type' and 'resource-name'. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

Attention: The changes associated with the unit of work must be entered again.

SQLERRD(3) also contains the reason-code which indicates whether a deadlock or timeout occurred. The most common reason codes are:

- 00C90088 - deadlock
- 00C9008E - timeout

The changes associated with the unit of work must be entered again.

System action: The statement cannot be executed. The application is rolled back to the previous COMMIT.

Programmer response: A long-running application, or an application that is likely to encounter a deadlock, should (if possible) issue frequent COMMIT commands. This can lessen the possibility of a deadlock occurring. See message DSNT376I for other possible ways to avoid future deadlocks or timeouts. On receipt of the SQLCODE -911, the application should, in general, terminate.

For more information about how IMS, CICS, and TSO handle deadlocks, see Part 4 of *DB2 Application Programming and SQL Guide*.

SQLSTATE: 40001

**-913 UNSUCCESSFUL EXECUTION
CAUSED BY DEADLOCK OR
TIMEOUT. REASON CODE *reason-code*,
TYPE OF RESOURCE *resource-type*, AND
RESOURCE NAME *resource-name***

Explanation: The application was the victim in a deadlock or experienced a timeout. The reason code indicates whether a deadlock or timeout occurred.

Refer to message DSNT500I under *DB2 Messages* for an explanation of 'resource-type' and 'resource-name'. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

System action: The SQL statement cannot be executed. If the SQL statement being executed was a cursor FETCH, DB2 closes the cursor.

SQLERRD(3) also contains the reason-code which indicates whether a deadlock or timeout occurred. The most common reason codes are:

- 00C90088 - deadlock
- 00C9008E - timeout

Programmer response: The application should either commit or roll back to the previous COMMIT. Then, generally, the application should terminate. See message DSNT376I for possible ways to avoid future deadlocks or timeouts.

For more information about how CICS and TSO handle deadlocks, see Part 4 of *DB2 Application Programming and SQL Guide*.

SQLSTATE: 57033

-917 BIND PACKAGE FAILED

Explanation: An error has occurred which prevents the package from being created. This SQLCODE can be issued during bind or commit processing.

System action: The bind fails and the package is not created. If issued during commit processing, all changes to the database are rolled back. If issued during bind processing, only package creation fails. Other changes within the logical unit of work are committable.

Programmer response: Correct the cause of the problem and try again.

Problem determination: Inspect the SQLCODES issued for the SQL statements of the package.

SQLSTATE: 42969

**-918 THE SQL STATEMENT CANNOT BE
EXECUTED BECAUSE A
CONNECTION HAS BEEN LOST**

Explanation: Execution of the SQL statement failed because a communications link between the local DB2 and at least one remote server no longer exists. A

previous failure caused this condition.

System action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer response: In general, an application program should issue a static ROLLBACK. Attempts by the application to issue SQL statements other than static ROLLBACK might fail. Once the static ROLLBACK is issued, the application can resume execution.

SQLERRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

SQLSTATE: 51021

**-919 A ROLLBACK OPERATION IS
REQUIRED**

Explanation: The unit of work was placed in a state where a rollback operation is required. This can happen for the following reasons:

- An SQL statement updated a distributed database server, but the database server can be used only for read-only operations. Either updates are currently restricted to servers that support distributed two-phase commit and this application server does not support distributed two-phase commit, or updates are restricted to a single server that does not support distributed two-phase commit and this application server is not that server.
- The unit of work must be terminated by a rollback operation because the update made (but not committed) at the application server cannot be committed consistently with other current or future updates made to this distributed unit of work.
- An abend occurred during the execution of a stored procedure, or a restricted SQL statement was issued from a stored procedure.
- An abend occurred during the execution of a function, or a restricted SQL statement was issued from a function.
- The unit of work is part of a Global Transaction, and another unit of work in the Global Transaction has initiated a ROLLBACK. All units of work in the Global Transaction must now ROLLBACK.

System action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer response: Correct the application, function, or stored procedure, rebind it, and resubmit the job.

SQLERRP contains the name of the module that

detected the previous failure and placed the application in the must-abort state.

SQLSTATE: 56045

-922 AUTHORIZATION FAILURE: *error-type*
ERROR. REASON *reason-code*

Explanation: Authorization failed because of the error indicated by *error-type*

error-type

Types of authorization failure

- User authorization
- Plan access
- Duplicate exit requested
- Installation error
- Connect

reason-code

DB2 reason code associated with authorization failure

System action: The statement cannot be processed. The connection to DB2 is not established.

Programmer response: If *error-type* is *user authorization*:, the authorization-ID specified to DB2 through your attachment facility is not valid for DB2. See your system programmer or your CICS, IMS, or TSO system administrator.

If *error-type* is *plan access*, then the authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist. See your system administrator.

If *error-type* is *duplicate exit*, then you requested a duplicate exit.

If *error-type* is *installation error*, a connection or sign-on exit denied your request. See your system programmer.

If *error-type* is *Connect*, an SQL CONNECT request failed to connect to the local DB2 with USER/USING specified. See the reason code for a description of the failure. The application program has been placed in the connectable and unconnected state. The only SQL statements that can be successfully completed in this state are CONNET, COMMIT, ROLLBACK, and local SET statements. Any attempt to execute other SQL statements will result in an error (SQLCODE -900).

Look up the reason code in Part 3, "DB2 codes," on page 159 for further information.

Any attempts to issue SQL statements following the -922 SQLCODE when *error-type* is not *Connect* causes unpredictable results.

SQLSTATE: 42505

-923 CONNECTION NOT ESTABLISHED:
DB2 condition REASON *reason-code*, **TYPE**
resource-type, **NAME** *resource-name*

Explanation: The connection to DB2 failed for the reason indicated by *condition*, which can be any of the following:

- DB2 not up
- DB2 not operational
- DB2 shutdown in progress
- DB2 restricted access mode
- Allocation error
- DB2 - CICS attachment not up
- DB2 - CICS ENTRY disabled
- The object is dependent on facilities of a release of DB2 that is newer than the release that you are currently running (fall back).
- DB2 restarted in LIGHT(YES) mode

Possible causes of an allocation error are:

- The application plan does not exist.
- The application plan is inoperative. An explicit REBIND or BIND is required.
- The application plan is invalid. Underlying resources have changed.
- A required database, table space, table, or index is unavailable.
- Data set allocation failed for a required data set.
- There is insufficient virtual storage.
- The application is trying to execute the plan from a system (environment) that was restricted when the plan was bound or rebound. Check the SYSPLSYSTEM table to determine from which systems (for example, IMS or CICS) the plan can be executed.

If the *condition* is "CICS attachment not up", then NAME indicates the DB2 subsystem that is not available. The *reason code* indicates the reason the attachment is not available.

If the *condition* is "CICS entry disabled", then NAME indicates the entry that is disabled.

System action: The statement cannot be executed. The connection to DB2 is not established.

Programmer response: If the connection failed because either DB2 or a required database, table space, table, or index was unavailable, wait until it is available before invoking the application again.

If allocation failed for an application plan, REBIND the plan to determine the problem. Error messages are produced explaining why the plan could not be allocated.

For other types of allocation errors, installation action might be required to correct the problem.

For CICS attachment failures, resolve the primary cause

as noted by the reason code. Then restart the attachment.

Problem determination: The *reason-code*, *resource-type*, and *resource-name* might not be available. If they are not available, nothing appears. If they are available, refer to Part 3, “DB2 codes” for an explanation of the *reason-code*, *resource-type*, and *resource-name*.

Refer to message DSNT500I under *DB2 Messages* for an explanation of resource type and resource name. Refer to Table 3 in Appendix C, “Problem determination,” on page 735 for an explanation of resource type codes. Any attempts to issue SQL statements after receiving SQLCODE -923 will cause unpredictable results.

SQLSTATE: 57015

-924 DB2 CONNECTION INTERNAL ERROR, *function-code*, *return-code*, *reason-code*

Explanation: Connection to DB2 has failed because of an unexpected internal error, identified by the 'reason-code'.

System action: The statement cannot be executed. The connection to DB2 is not established.

Programmer response: Look up the abend 'reason-code' in Part 3, “DB2 codes” for further information. The requested 'function-code' and 'return-code' may provide additional information. Any attempts to issue SQL statements following the SQLCODE -924 will cause unpredictable results.

SQLSTATE: 58006

-925 COMMIT NOT VALID IN IMS, CICS OR RRSF ENVIRONMENT

Explanation: An application executing in either an IMS or CICS environment or an application executing in an RRSF environment when DB2 is not the only resource manager has attempted to execute a COMMIT statement. The SQL COMMIT statement cannot be executed in these environments.

System action: The statement cannot be executed. No commit is performed.

Programmer response: The IMS, CICS or RRS protocols should be used to commit work in these environments.

If a stored procedure is being called from IMS or CICS, ensure that the stored procedure is not defined to perform a commit on return.

SQLSTATE: 2D521

-926 ROLLBACK NOT VALID IN IMS, CICS OR RRSF ENVIRONMENT

Explanation: An application executing in either an IMS or CICS environment or an application executing in an RRSF environment when DB2 is not the only resource manager has attempted to execute a ROLLBACK statement. The SQL ROLLBACK statement cannot be executed in these environments.

System action: The statement cannot be executed. No roll back is performed.

Programmer response: The IMS, CICS or RRS protocols should be used to rollback work in these environments.

SQLSTATE: 2D521

-927 THE LANGUAGE INTERFACE (LI) WAS CALLED WHEN THE CONNECTING ENVIRONMENT WAS NOT ESTABLISHED. THE PROGRAM SHOULD BE INVOKED UNDER THE DSN COMMAND

Explanation: In the TSO environment, the user has attempted to execute an application program without first establishing the correct execution environment by issuing the DSN command. In the IMS, CICS, or call attachment facility (CAF) environment, the user has attempted to execute an application program that is not using the correct language interface module.

System action: The statement cannot be executed.

Programmer response: In the TSO environment, DB2 application programs should be invoked under the RUN subcommand of the DSN command processor. In the IMS, CICS or CAF environment check that the application was link-edited with or is dynamically allocating the correct language interface module. The language interface modules required in each environment are as follows:

- IMS: DFSLI000
- CICS: DSNCLI
- CAF: DSNALI
- TSO: DSNELI

The DYNAM option can result in the incorrect language interface module being loaded at runtime.

SQLSTATE: 51006

-929 FAILURE IN A DATA CAPTURE EXIT: *token*

Explanation: 'token' is an information string provided by DPROP's exit routine which captures data changes in tables defined with DATA CAPTURE CHANGES.

System action: The information string is placed in in the SQLERRM area of the SQLCA.

System programmer response: For documentation of the actions associated with this SQLCODE, refer to the Data Propagator (DPROP) publications.

SQLSTATE: 58002

**-939 ROLLBACK REQUIRED DUE TO
UNREQUESTED ROLLBACK OF A
REMOTE SERVER**

Explanation: A dynamic commit was executed preceding the execution of this request. The remote server to which the application was CONNECTed during the dynamic COMMIT successfully committed. However, at least one other remote server (which was read-only) rolled back its portion of the distributed unit of work during the dynamic commit.

To ensure that an application that uses cursor-hold cursors does not incorrectly assume cursor position is being maintained at any remote server that rolled back, the application must perform a rollback operation.

Communications are still established with all remote servers.

System action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer response: Issue the appropriate (depending on the environment) request to cause a rollback. Re-establish any cursor positioning and continue the application with the first request that received the -939 SQLCODE.

SQLERRP contains the name of the module that detected the previous failure and placed the application in the must-abort state.

SQLSTATE: 51021

**-947 THE SQL STATEMENT FAILED
BECAUSE IT WILL CHANGE A TABLE
DEFINED WITH DATA CAPTURE
CHANGES, BUT THE DATA CANNOT
BE PROPAGATED**

Explanation: The DPROP SUPPORT option on the installation panel is set to 2 (support DPROP only). The SQL statement would have changed a table defined with DATA CAPTURE CHANGES. However, the data cannot be propagated because the SQL statement did not originate from an IMS subsystem, or monitor trace class 6 was not active at the beginning of the unit of work for that change.

System action: The statement is not executed.

System programmer response: Take one of the following actions:

- Change the installation option to 1 (no propagation) or 3 (permit changes from any subsystem).

- Change the application program that receives this SQLCODE so that it can be run in an IMS subsystem, and activate monitor trace class 6.

If the installation option is changed to 3, SQL changes to tables defined with DATA CAPTURE CHANGES are permitted from any subsystem, but they are not propagated unless the environment is set up for propagation.

SQLSTATE: 56038

**-948 DISTRIBUTED OPERATION IS
INVALID**

Explanation: The unit of work was initiated before DDF was started, and the application attempted to perform a distributed operation. The unit of work must be terminated by a rollback operation.

System action: In the IMS and CICS environments, all SQL statements are rejected until a rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer response: An application that performs local database updates before DDF is started cannot perform distributed operations within the same unit of work. The current unit of work must be terminated by a rollback operation and a new unit of work must be initiated before any SQL operations can be performed.

Restart the current unit of work.

SQLSTATE: 56062

**-950 THE LOCATION NAME SPECIFIED IN
THE CONNECT STATEMENT IS
INVALID OR NOT LISTED IN THE
COMMUNICATIONS DATABASE**

Explanation: One of the following conditions applies:

- The location name is blank.
- The data type of the host variable is not character string.
- The length attribute of the host variable is greater than 16.
- The location name does not appear in the LOCATIONS column of the SYSIBM.LOCATIONS table, nor is it the name of the local DB2 subsystem.

System action: The statement cannot be executed. The application process is placed in the unconnected state.

Programmer response: If the location name is specified as the value of a host variable, ensure that the name is left justified in the host variable and, if necessary, padded on the right with blanks. If this is not the problem, either SYSIBM.LOCATIONS must be updated to include the specified name, or the specified name must be changed to match a name in SYSIBM.LOCATIONS.

SQLSTATE: 42705

**-952 PROCESSING WAS INTERRUPTED BY
A CANCEL REQUEST FROM A
CLIENT PROGRAM**

Explanation: A client program issued a cancel request that terminated processing of the SQL statement.

System action: The SQL statement was terminated and any changes made by that statement have been undone. If an SQL cursor is associated with the interrupted SQL statement, that cursor is closed.

SQLSTATE: 57014

**-981 THE SQL STATEMENT FAILED
BECAUSE THE RRSAF CONNECTION
IS NOT IN A STATE THAT ALLOWS
SQL OPERATIONS, REASON
reason-code.**

Explanation: The application attempted to execute an SQL operation, but the RRSAF connection was not in a state that allows the processing of SQL statements.

System action: The statement cannot be executed.

Programmer response: See reason-code in Part 3, "DB2 codes," on page 159 for an explanation of the problem. Correct the error in the application, REBIND, and run the application again.

SQLSTATE: 57015

**-989 AFTER TRIGGER *trigger-name*
ATTEMPTED TO MODIFY A ROW IN
TABLE *table-name* THAT WAS
INSERTED BY AN INSERT
STATEMENT WITHIN A SELECT
STATEMENT**

Explanation: An INSERT statement was specified in the FROM clause of a SELECT statement of a subselect or a SELECT INTO statement, but the underlying target base table of the INSERT has an AFTER trigger defined which modifies the table being inserted. This is disallowed.

System action: The statement cannot be processed.

Programmer response: Avoid using the INSERT statement within SELECT, or change the trigger so that it does not modify the table that is the target of the INSERT statement.

SQLSTATE: 560C3

**-991 CALL ATTACH WAS UNABLE TO
ESTABLISH AN IMPLICIT CONNECT
OR OPEN TO DB2. RC1= *rc1* RC2= *rc2***

Explanation: Call attach attempted to perform an implicit connect and open as the result of an SQL

statement. The connect or open failed with the returned values.

rc1 The value returned in FRBRC1 for the failed CONNECT or OPEN request.

rc2 The value returned in FRBRC2 for the failed CONNECT or OPEN request.

System action: The statement cannot be executed.

Programmer response: Verify that the application intended to use the call attachment facility (CAF) as the mechanism to connect to DB2. For functions or stored procedures running in the WLM-established stored procedure address space the application must be link-edited with or dynamically allocate the RRS attachment language interface module (DSNRLI), not CAF.

SQLSTATE: 57015

**-1403 THE USERNAME AND/OR
PASSWORD SUPPLIED IS
INCORRECT**

Explanation: The username and/or password supplied is incorrect. If either a username or password is supplied, then both must be supplied and both must have a non-zero length.

System action: The statement cannot be executed.

User response: Supply the correct username and password combination.

SQLSTATE: 08004

**-1760 CREATE PROCEDURE FOR
procedure-name MUST HAVE VALID
LANGUAGE AND EXTERNAL
CLAUSES**

Explanation: A LANGUAGE or EXTERNAL clause is missing in the CREATE statement for procedure *procedure-name*. This clause must be specified.

System action: The statement cannot be executed.

Programmer response: Change the CREATE statement to include the missing clause and reissue the statement.

SQLSTATE: 42601

**-2001 THE NUMBER OF HOST VARIABLE
PARAMETERS FOR A STORED
PROCEDURE IS NOT EQUAL TO THE
NUMBER OF EXPECTED HOST
VARIABLE PARAMETERS. ACTUAL
NUMBER *sqlданum*, EXPECTED
NUMBER *опnum***

Explanation: DB2 received an SQL CALL statement for a stored procedure. However, the number of host variable parameters supplied on the CALL statement

does not match the expected number of host variable parameters.

sqlianum

The number of host variable parameters as determined by examining the SQLDA.

opnum

The expected number of host variable parameters as determined by parsing the statement.

System action: The statement cannot be executed.

Programmer response: If the SQL CALL statement is coded incorrectly, modify the SQL application to provide the correct number of parameters on the SQL CALL statement.

SQLSTATE: 53089

-4302 **JAVA STORED PROCEDURE OR USER-DEFINED FUNCTION**
routine-name (**SPECIFIC NAME**
specific-name) **HAS EXITED WITH AN EXCEPTION** *exception-string*

Explanation: User-defined function or stored procedure *routine-name* exited with a Java exception that was not a java.sql.SQLException.

If present, *exception-string* contains as much as will fit of the toString() of the exception that was uncaught.

System action: Execution of the SQL statement is terminated.

Programmer response: The user-defined function or stored procedure probably needs to be corrected. See your database administrator, or the author of the routine to find out if the exception can be avoided, or if the user-defined function or stored procedure needs to be fixed before it can be used.

SQLSTATE: 38000

-4700 **ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE**

Explanation: Functions that this release of DB2 introduces cannot be used before new function mode has been enabled. An attempt was made to execute one of these functions. In addition, support for extending the length of a VARCHAR (supported in V7) is restricted in V8 until new function mode has been enabled.

To use the new functions that have been introduced in this release of DB2, new-function mode must first be enabled. This error code will be given after an attempt to use a new function before new-function mode has been enabled.

Additionally, the following statements are restricted in DB2 for z/OS Version 8 until new-function mode is enabled:

- Altering a table to increase the length of a VARCHAR column
- Altering a catalog table to DATA CAPTURE CHANGES

System action: The statement cannot be executed.

Programmer response: Either delay running your program until new-function mode has been enabled, or restrict your program to functions that are allowed before new-function mode is enabled.

SQLSTATE: 56038

-4701 **THE NUMBER OF PARTITIONS, OR THE COMBINATION OF THE NUMBER OF TABLE SPACE PARTITIONS AND THE CORRESPONDING LENGTH OF THE PARTITIONING LIMIT KEY EXCEEDS THE SYSTEM LIMIT**

Explanation: When ALTER TABLE or CREATE INDEX is used to change or create limit keys, the length of the partitioning limit key exceeds the allowed maximum. The combination of the number of table space partitions and the corresponding limit key size are subject to the following limit:

$$A * (106 + B) < 65394$$

Where A = Number of partitions, and B = Limit key size (in bytes)

The intended operation would exceed this limit.

When an ALTER TABLE statement is used to add partitions, the maximum number of partitions already exist. For non-LARGE table spaces, the limit is 8, 16, 32, or 64, depending on the initial definition. For LARGE table spaces, see *DB2 SQL Reference* for more information on the limits.

System action: The statement cannot be executed.

Programmer response: Decrease the size of limit key or the number of table space partitions to satisfy the constraint.

SQLSTATE: 54054

-4702 **THE MAXIMUM NUMBER OF ALTERS ALLOWED HAS BEEN EXCEEDED FOR** *object-type*

Explanation: The ALTER statement cannot be processed because the maximum number of alters for the object has already been exceeded. This can occur for the following reasons:

- The SET DATA TYPE keyword was specified on an ALTER TABLE ALTER COLUMN statement, but the maximum number of ALTER statements for this table has already been reached.

• The statement attempts to alter an index, but the maximum number of ALTER statements for this index has already been reached.

System action: The statement cannot be executed.

Programmer response: Run MODIFY to instruct DB2 that copies of a certain age will no longer be employed in recovery, and versions only used in those copies can be reused.

SQLSTATE: 54055

-4703 THE ALTER TABLE STATEMENT CANNOT BE EXECUTED BECAUSE COLUMN *column-name* IS MIXED DATA, OR THE DATA TYPE OR LENGTH SPECIFIED DOES NOT AGREE WITH THE EXISTING DATA TYPE OR LENGTH

Explanation: The ALTER TABLE statement for column *column-name* could not be processed for one of the following reasons:

- the existing column is MIXED and the statement attempted to convert the column to SBCS. This conversion is not supported.
- the data type or length in the ALTER statement did not match the existing data type or length of the column in the table being altered.

System action: The statement cannot be executed

Programmer response: Correct the SQL statement to specify a conversion that is supported.

SQLSTATE: 429BQ

-4708 TABLE *table-name* CANNOT BE CREATED AS SPECIFIED

Explanation: A CREATE or DECLARE statement attempted to define a new table with column attributes that are similar to an existing table, view, or the result table of a fullselect.

The table creation is not allowed when a column of the target table, view, or result table is defined as a security label column.

System action: The statement cannot be processed.

Programmer response: Change the CREATE or DECLARE statement to remove the LIKE or AS(FULLSELECT) clause, and to explicitly specify the desired attributes of the table being defined.

SQLSTATE: 56038

-5011 HOST STRUCTURE ARRAY *host-structure-array* IS EITHER NOT DEFINED OR IS NOT USABLE

Explanation: TBD with respect to host arrays as well as host struct arrays. PLS COMMENT

System action: The statement cannot be processed.

Programmer response: Correct any of the following, and precompile the program again. TBD Please comment

-5012 HOST VARIABLE *host-variable* IS NOT EXACT NUMERIC WITH SCALE ZERO

Explanation: HOST VARIABLE *host-variable* was specified, but it is not valid in the context in which it was used. HOST VARIABLE *host-variable* was specified as part of ABSOLUTE or RELATIVE in a FETCH statement, or in a ROWS clause of a FETCH or INSERT statement.. The host variable was not usable for one of the following reasons:

- It is not an exact numeric type
- The scale is not zero

System action: The statement cannot be processed.

Programmer response: Change the host variable to be an exact numeric with a scale of zero.

SQLSTATE: 42618

-20003 GBPCACHE NONE CANNOT BE SPECIFIED FOR TABLESPACE OR INDEX IN GRECP

Explanation: GBPCACHE NONE was specified on an ALTER TABLESPACE or ALTER INDEX statement, but the table space, index, or the partition to be altered is in GRECP.

System action: The statement cannot be processed.

User response: Use the START DATABASE command to recover the table space or index from the GRECP then STOP the table space or index before reissuing the ALTER statement.

SQLSTATE: 560A7

-20004 8K or 16K BUFFERPOOL PAGESIZE INVALID FOR A WORKFILE OBJECT

Explanation: This message is issued when a statement specifies an 8K or 16K pagesize in the BUFFERPOOL clause for a workfile object. The error can occur for the following SQL statements:

- A CREATE or ALTER DATABASE statement.
- A CREATE or ALTER TABLESPACE statement.

System action: The statement cannot be executed.

User response: Correct the statement to specify a 4K or 32K bufferpool pagesize.

SQLSTATE: 560A8

-20005 THE INTERNAL ID LIMIT OF *limit* HAS BEEN EXCEEDED FOR OBJECT TYPE *object-type*

Explanation: An internal ID is used to uniquely identify objects of type *object-type*. The limit for internal IDs for this type of object is *limit*, and this limit has been exceeded.

| This could occur during a CREATE DISTINCT TYPE,
| CREATE FUNCTION, CREATE PROCEDURE, CREATE
| SEQUENCE, or CREATE or ALTER TABLE statement
| that defines an identity column.

System action: The SQL statement cannot be executed.

| **Programmer response:** Drop objects of *object-type* that
| are not being used, and retry the statement.

SQLSTATE: 54035

-20006 LOBS CANNOT BE SPECIFIED AS PARAMETERS WHEN NO WLM ENVIRONMENT IS SPECIFIED

Explanation: On a CREATE PROCEDURE statement, one or more LOBs (or distinct types based on LOBs) were specified in the parameter list, and the NO WLM ENVIRONMENT option was also specified.

Option NO WLM ENVIRONMENT cannot be used with LOBs in the parameter list for a stored procedure.

Note: This message is still issued with Version 8 prior to New Function Mode.

System action: The statement is not executed.

Programmer response: Either do not specify a LOB as a parameter, or specify a WLM ENVIRONMENT name rather than NO WLM ENVIRONMENT on your CREATE PROCEDURE statement.

SQLSTATE: 53097

-20008 UNSUPPORTED OPTION *keyword* SPECIFIED

Explanation: *keyword* is a deprecated feature that was supported in releases prior to DB2 Version 8, and is no longer supported.

For indexes, only one type is currently supported — type 2.

System action: The statement cannot be executed.

Programmer response: Correct the syntax of the SQL statement to remove reference to the unsupported keyword. Refer to the *DB2 SQL Reference* for more information.

SQLSTATE: 560A9

-20058 THE FULLSELECT SPECIFIED FOR MATERIALIZED QUERY TABLE *table-name* IS NOT VALID.

Explanation: The materialized query table definition has specific rules regarding the contents of the fullselect. When DISABLE QUERY OPTIMIZATION is specified, the following additional restrictions apply:

- The fullselect cannot contain a reference to a created global temporary table or a declared global temporary table.
- The fullselect cannot reference another materialized query table.

When a materialized query table is defined with ENABLE QUERY OPTIMIZATION specified, more restrictions apply:

- The fullselect must be a subselect.
- The subselect cannot reference to a user-defined scalar or table function with the EXTERNAL ACTION or NON-DETERMINISTIC attributes, or built-in function RAND.
- The subselect cannot contain any predicates which include subqueries.
- The subselect cannot contain a nested table expression or view that requires temporary materialization.
- The subselect cannot contain a join using the INNER JOIN syntax.
- The subselect cannot contain an outer join.
- The subselect cannot contain a special register.
- The subselect cannot contain a scalar fullselect.
- The subselect cannot contain a row expression predicate.
- The subselect cannot contain sideways references.
- | • The subselect cannot contain table objects with
| multiple CCSID sets.
- | • The subselect cannot contain more than one table
| with a security label column, and the security label
| column must be one of the select list items of the
| subselect.
- If the subselect references a view, the fullselect in the view definition must satisfy the above restrictions.

System action: The statement cannot be processed.

Programmer response: Change the fullselect in the CREATE TABLE or ALTER TABLE statement so that it conforms to the rules listed above.

SQLSTATE: 428EC

-20070 AUXILIARY TABLE *table-name* CANNOT BE CREATED BECAUSE COLUMN *column-name* IS NOT A LOB COLUMN

Explanation: An auxiliary table cannot be created for

a non-LOB column. A CREATE AUXILIARY TABLE statement must refer to a LOB column in the associated base table.

System action: The statement cannot be executed. The specified table was not created.

Programmer response: Change the name of the column to correctly refer to a LOB column in the base table.

SQLSTATE: 53098

-20071 WLM ENVIRONMENT NAME MUST BE SPECIFIED *function-name*

| **Explanation:** The WLM ENVIRONMENT option was
| not specified on CREATE FUNCTION or CREATE
| PROCEDURE, and there is no default WLM
| environment for the installation.

System action: The statement could not be processed.

| **Programmer response:** Select a WLM
| ENVIRONMENT name and include it in the CREATE
| FUNCTION or CREATE PROCEDURE statement.
| Contact your system administrator to find out the
| names of the WLM environments that have been
| defined for your installation.

SQLSTATE: 53099

-20072 csect-name bind-type bind-subtype ERROR USING auth-id AUTHORITY OPERATION IS NOT ALLOWED ON A TRIGGER PACKAGE *package-name*

Explanation: The package specified is a trigger package. The bind-type operation cannot be performed against a trigger package using this statement or subcommand.

csect-name
Name of the CSECT that issued the message.

bind-type
Type of bind operation (BIND, REBIND, DROP, or FREE).

bind-subtype
Subtype of bind operation (COPY or blank).

auth-id Authorization ID of the invoker of the BIND, REBIND or FREE subcommand or primary authorization ID of the currently executing process for a DROP statement.

package-name
Name of the package in the following format: 'collection.package'.

System action: The plan or package is not bound, copied, or freed.

System programmer response: A trigger package cannot be explicitly bound. A trigger package cannot be copied. To rebind a trigger package locally, the REBIND

TRIGGER PACKAGE subcommand must be used. A trigger package cannot be rebound remotely. To drop a trigger package, the DROP TRIGGER statement must be used.

SQLSTATE: 56052

-20073 THE FUNCTION *function-name* **CANNOT BE ALTERED BECAUSE IT IS REFERENCED IN EXISTING VIEW OR MATERIALIZED QUERY TABLE DEFINITIONS**

| **Explanation:** The *function-name* in an ALTER
| FUNCTION statement cannot be altered to NOT
| DETERMINISTIC or EXTERNAL ACTION. It is
| referenced in one or more existing view definitions or
| materialized query table definitions.

System action: The statement cannot be executed.

| **Programmer response:** Drop the views that reference
| the function before issuing the ALTER FUNCTION
| statement. Drop the materialized query tables that
| reference the functions or alter the materialized query
| tables that reference the functions into base tables
| before issuing the ALTER FUNCTION statement.

SQLSTATE: 42927

-20074 THE OBJECT *object-name* **CANNOT BE CREATED BECAUSE THE FIRST THREE CHARACTERS ARE RESERVED FOR SYSTEM OBJECTS**

Explanation: In general, SYS is a reserved prefix for names. The only exceptions to this rule include the following conditions:

- | • SYSADM and SYSTOOLS are valid schema names.
- | • SYSPROC is a valid schema name for stored procedures.
- | • SYSIBM is a valid schema name for a stored procedure when the current application process has the SYSADM or SYSCTRL privilege.
- | • SYSTOOLS is a valid schema name when the current application process has the SYSADM or SYSCTRL privilege.

This message is also issued if an attempt is made to grant the CREATEIN, ALTERIN or DROPIN privileges on a schema with the SYS prefix. The same exceptions apply to the grant.

This condition is similar to the condition reported in precompiler message DSNH794I.

System action: The statement is not executed.

Programmer response: Select a name that does not start with a reserved prefix.

SQLSTATE: 42939

-20091 A VIEW NAME WAS SPECIFIED AFTER LIKE IN ADDITION TO THE INCLUDING IDENTITY COLUMN ATTRIBUTES CLAUSE

Explanation: The LIKE clause specified the name of a view in combination with the INCLUDING IDENTITY COLUMN ATTRIBUTES clause. This usage is not supported.

System action: The statement is not executed.

Programmer response: Remove the INCLUDING IDENTITY COLUMN ATTRIBUTES clause and resubmit the statement to copy the existing view definition without the identity column attributes.

In the case of DECLARE GLOBAL TEMPORARY TABLE, it is possible to get the identity column attributes for a column of a view using the AS *subselect* clause with INCLUDING IDENTITY COLUMN ATTRIBUTES instead. For example:

```
DECLARE GLOBAL TEMPORARY TABLE ....
AS (SELECT * FROM view-name) DEFINITION ONLY
INCLUDING IDENTITY COLUMN ATTRIBUTES
```

SQLSTATE: 560AD

-20092 A VIEW WAS SPECIFIED FOR LIKE BUT IT INCLUDES A ROWID COLUMN

Explanation: The LIKE clause specified the name of a view that contains a ROWID column. This is not supported.

System action: The statement is not executed.

Programmer response: Specify the name of a view that does not contain a ROWID column (or distinct type column for which the source type is ROWID), or specify the name of a table and resubmit the statement.

SQLSTATE: 560AE

-20093 THE TABLE *table-name* CANNOT BE CONVERTED TO OR FROM A MATERIALIZED QUERY TABLE, OR THE MATERIALIZED QUERY TABLE PROPERTY CANNOT BE ALTERED. REASON CODE = *reason-code*.

Explanation: The ALTER TABLE statement was not able to change a table from a materialized query table to a base table, to convert a base table to a materialized query table, or to change the materialized query table properties. The ALTER TABLE statement failed because of one of the following error situations, as indicated by *reason-code*:

reason-code

Description

2 The table is not a materialized query table, and DROP MATERIALIZED QUERY is specified.

- 4** The table has at least one trigger defined.
- 5** The table has at least one check constraint defined.
- 6** The table has at least one unique constraint or index defined.
- 7** The table has at least one referential constraint defined.
- 8** The table is referenced in the definition of an existing materialized query table, or it is referenced in the definition of a view when altering to a system-maintained materialized query table.
- 9** The table is referenced directly or indirectly (through a view, for example) in the fullselect.
- 10** The table is already a materialized query table.
- 11** The number of columns of the existing table does not match the number of columns that are defined in the select list of the fullselect.
- 12** The data types of the columns of the existing table do not exactly match the corresponding columns in the select list of the fullselect.
- 13** The column names of the columns of the existing table do not exactly match the corresponding column names in the select list of the fullselect.
- 14** The nullability, default, or other characteristics of the columns of the existing table do not exactly match the characteristics of the corresponding columns in the select list of the fullselect.
- 15** The conversion cannot be performed if there are any other table alterations in the same ALTER TABLE statement.
- 16** The table is not a materialized query table, and alteration of materialized query table properties was specified.

System action: The statement cannot be processed.

Programmer response: Depending on *reason-code*, take the following action:

reason-code

Action

- 2** There is no need to convert this table. No action is required.
- 4** Drop any triggers, and try the ALTER TABLE statement again.
- 5** Drop any check constraints, and try the ALTER TABLE statement again.
- 6** Drop any unique constraint and unique indexes. Try the ALTER TABLE statement again.

- | 7 Drop the referential constraints, and try the ALTER TABLE statement again.
 - | 8 Drop the materialized query table that references the table, and try ALTER TABLE statement again.
 - | 9 A materialized query table cannot reference itself. Modify the fullselect to remove the direct or indirect reference to the table being altered.
 - | 10 The operation is not allowed since the table is already a materialized query table.
 - | 11 Modify the fullselect to include the correct number of columns in the select list.
 - | 12 Modify the fullselect so that the result column data types exactly match the data types of the corresponding existing columns.
 - | 13 Modify the fullselect so that the result column names exactly match the column names of the corresponding existing columns.
 - | 14 The table cannot be converted to a materialized query table unless the the nullability characteristics can be matched. Create a new materialized query table instead.
 - | 15 Perform the other table alterations in an ALTER TABLE statement that do not include the ADD MATERIALIZED QUERY clause.
 - | 16 Either correct the table name to specify a materialized query table, or use the ALTER TABLE statement to convert the table to a materialized query table with the required properties.
- | **SQLSTATE:** 428EW

-20100 AN ERROR OCCURRED WHEN BINDING A TRIGGERED SQL STATEMENT. INFORMATION RETURNED: SECTION NUMBER : *section-number* SQLCODE *sqlerror*, SQLSTATE *sqlstate*, AND MESSAGE TOKENS *token-list*

Explanation: During execution of a CREATE TRIGGER statement, the SQL statements specified in the triggered action are bound into a trigger package. During that processing, an error was discovered in one of those statements.

section-number

The section number associated with the failing triggered SQL statement. For triggers that contain a WHEN clause, the WHEN clause is section number one. The triggered SQL statements are numbered sequentially, beginning with section number two. This is true for triggers with or without a WHEN clause.

sqlcode The SQLCODE received when binding the statement.

sqlstate The corresponding SQLSTATE for the SQLCODE received when binding the statement.

token-list

The list of tokens from the original SQL error. This list might be truncated.

System action: The CREATE TRIGGER statement was not processed. The trigger and the trigger package were not created.

Programmer response: Use the section number determine the failing triggered SQL statement. Refer to the explanation of the reported SQLCODE. Follow the action suggested by that message.

SQLSTATE: 56059

-20101 THE FUNCTION *function* FAILED WITH REASON *rc*

Explanation: The statement attempted to execute a function *function*. The statement failed, Reason Code *rc*

Possible values for *rc* are: 00E73001, 00E73002, 00E73003, and 00E73004.

System action: The statement cannot be executed.

Programmer response: Correct the condition described by the DB2 reason code.

SQLSTATE: 56060

-20102 CREATE OR ALTER STATEMENT FOR ROUTINE *routine-name* SPECIFIED THE *option* OPTION WHICH IS NOT ALLOWED FOR THE TYPE OF ROUTINE

Explanation: An option was specified that is not allowed for the type of routine being created or altered.

- MODIFIES SQL DATA is not allowed for table functions.
- ALLOW PARALLEL is not allowed for table functions.
- CARDINALITY is not allowed for non-table functions.
- LANGUAGE SQL is not allowed for non-SQL functions or procedures.
- LANGUAGE specifying something other than SQL is not allowed for SQL functions or procedures.
- LANGUAGE JAVA is not allowed for table functions.
- PARAMETER STYLE JAVA is not allowed for table functions.

System action: The statement cannot be processed.

Programmer response: Remove the option from the statement and reissue the failing statement.

SQLSTATE: 42849

**-20104 AN ATTEMPT TO ALTER A CCSID
FROM *from-ccsid* TO *to-ccsid* FAILED**

Explanation: The statement attempted to alter the CCSID for a database or table space and the statement failed.

from-ccsid represents the CCSID that is currently in use for the database or table space.

to-ccsid is the CCSID that specified on the alter statement.

System action: The statement cannot be executed.

Programmer response: The SQL REFERENCE contains a list of CCSIDs that can be specified on this statement. Only these CCSIDs can be altered, and then, only to the corresponding value listed in the table. Altering the CCSID of a database or table space to a value not listed in the table is not permitted.

SQLSTATE: 42856

**-20106 THE CCSID FOR TABLE SPACE OR
DATABASE CANNOT BE CHANGED
BECAUSE THE TABLE SPACE OR
DATABASE ALREADY CONTAINS A
TABLE THAT IS REFERENCED IN
EXISTING VIEW OR MATERIALIZED
QUERY TABLE DEFINITIONS**

| **Explanation:** An ALTER statement cannot be used to
| alter the CCSID for a table space or database that
| contains a table that is referenced in existing view or
| materialized query table definitions.

System action: The statement cannot be executed.

| **Programmer response:** To alter the CCSID for the
| specified space, first drop any existing view or
| materialized query table definitions that refer to tables
| contained in the identified space and then reissue the
| ALTER statement.

SQLSTATE: 42945

**-20107 HOST VARIABLE OR PARAMETER
NUMBER *position-number* CANNOT BE
USED AS SPECIFIED BECAUSE
REASON *reason***

Explanation: DB2 received data that could not be used as specified in the statement because it is not convertible to an acceptable format in this machine environment.

position-number identifies either the host variable number (if the message is issued as a result of an INSERT, UPDATE, DELETE, SELECT, SET, or VALUES statement), or the parameter number (if the message is issued as the result of a CALL statement, or the invocation of a function).

reason

01 IEEE (BFP) floating point instructions or instruction emulation is not available. This support is called the basic-floating-point-extensions facility, and is discussed in detail in *z/Architecture Principles of Operation*.

System action: The statement cannot be executed.

Programmer response: This host variable or parameter requires machine instructions that are not available on this machine. These instructions must be available to DB2 to perform the requested operation. Run this statement on a machine that is capable of supporting the required operations. Contact your system administrator.

SQLSTATE: 53022

**-20108 A RESULT SET CONTAINS AN
UNSUPPORTED DATA TYPE IN
POSITION NUMBER *position-number*
FOR CURSOR *cursor-name* OPENED BY
STORED PROCEDURE *procedure-name***

| **Explanation:** Stored procedure *procedure-name* cannot
| return one or more query result sets. *cursor-name*
| indicates the first query result set that the stored
| procedure cannot return. The column at *position-number*
| in the query result set contains a data type that is not
| supported by the requester or the server.

| **System action:** The CALL statement cannot be
| executed.

| **Programmer response:** Modify the stored procedure at
| the server to return result sets that include only data
| types that are supported by the requester. You may also
| upgrade the level of code at the requester to one that
| supports the data type(s) that were returned by the
| server.

| **SQLSTATE:** 56084

**-20110 CANNOT IMPLICITLY CONNECT TO
A REMOTE SITE WITH A SAVEPOINT
OUTSTANDING**

Explanation: The statement referenced an object at a remote DBMS with an alias or a three-part name when an active savepoint exists. Such a reference requires an implicit connection to the remote DBMS, which is not allowed when there is an outstanding savepoint.

System action: The statement is not executed.

Programmer response: Either release the savepoint, or move the data.

SQLSTATE: 51036

-20111 **CANNOT ISSUE SAVEPOINT, RELEASE SAVEPOINT, ROLLBACK TO SAVEPOINT FROM A TRIGGER, FROM A USER-DEFINED FUNCTION, OR FROM A GLOBAL TRANSACTION**

Explanation: SAVEPOINT, RELEASE SAVEPOINT, and ROLLBACK TO SAVEPOINT statements can not be used in the body of a trigger or a global transaction.

System action: The statement is not executed.

Programmer response: Correct the logic of the application program so that this error does not occur.

SQLSTATE: 3B503

-20123 **CALL TO STORED PROCEDURE *procedure* FAILED BECAUSE THE RESULT SET RETURNED FOR CURSOR *cursor* IS SCROLLABLE, BUT THE CURSOR IS NOT POSITIONED BEFORE THE FIRST ROW**

Explanation: A scrollable result set for cursor *cursor* has been returned by a CALL to stored procedure *procedure*, and one or more of these cursors is not positioned before the first row.

System action: The Call to the stored procedure was unsuccessful. All result set cursors defined in the stored procedure were closed before returning to the caller. The scrollable cursor can not be used to FETCH from the result set. Actions completed by the stored procedure are not rolled back, and any external actions initiated by the stored procedure have completed because the error was detected upon completion of the stored procedure.

Programmer response: Modify the content of the stored procedure to ensure that the result set cursors are positioned before the first row before returning to the caller.

SQLSTATE: 560B1

-20124 **OPEN CURSOR *cursor* FAILED BECAUSE THE CURSOR IS SCROLLABLE BUT THE CLIENT DOES NOT SUPPORT THIS**

Explanation: The cursor *cursor* has been defined as scrollable, but the client is downlevel and does not support scrollable cursors. The DRDA Application Requestor is not able to process scrollable result sets.

System action: The statement cannot be processed.

Programmer response: Modify the definition of the cursor to not be scrollable.

SQLSTATE: 560B2

-20125 **CALL TO STORED PROCEDURE *procedure* FAILED BECAUSE THE RESULT SET FOR CURSOR *cursor* IS SCROLLABLE, BUT THE CLIENT DOES NOT SUPPORT THIS**

Explanation: A scrollable result set for cursor *cursor* has been returned by a CALL for stored procedure *procedure*, but the client is downlevel and does not support scrollable cursors. The DRDA Application Requestor is not able to process scrollable result sets.

System action: The statement cannot be processed. All result set cursors that are defined in the stored procedure were closed before returning to the caller. The scrollable cursor cannot be used to FETCH from the result set. Actions that were completed by the stored procedure are not rolled back, and any actions that were initiated by the stored procedure have completed because the error was detected at the end of the execution of the stored procedure.

Programmer response: Modify the content of stored procedure *procedure* to not define result set cursors as scrollable.

SQLSTATE: 560B3

-20127 **VALUE SPECIFIED ON FETCH STATEMENT FOR ABSOLUTE OR RELATIVE IS TOO LARGE FOR DRDA**

Explanation: The value that was specified after ABSOLUTE or RELATIVE on a FETCH statement is larger than 64 bits. DRDA limits this specification to 64 bits.

System action: The statement cannot be processed.

Programmer response: Modify the scroll specification on the FETCH statement.

SQLSTATE: 56051

-20129 **LOCAL SPECIAL REGISTER IS NOT VALID AS USED**

Explanation: Local special registers cannot be referenced in an assignment statement (SET or VALUES INTO) that assigns multiple values. For example, the following special registers are local: CURRENT SERVER and CURRENT PACKAGESET.

Additionally, the local special registers cannot be referenced in a SET host-variable statement that has parenthesis around the special register.

The following statements are not valid:

```
SET (:hv1) = (CURRENT SERVER);
SET (:hv1,:hv2) = (CURRENT SERVER,CURRENT
PATH);
VALUES CURRENT SERVER, CURRENT DATE
INTO :c1, :c2;
```

Severity: 8 (error)

System action: The statement cannot be executed.

Programmer response: Split the statement into multiple statements so that the local special registers are not referenced in a statement that assigns multiple values. Also be sure that a SET statement for a local special register does not use parenthesis on either side of the equal sign.

SQLSTATE: 560B5

-20142 SEQUENCE *sequence-name* CANNOT BE USED AS SPECIFIED

Explanation: *sequence-name* was referenced in a context in which it cannot be used. It was an invalid reference to a system-generated sequence object. *sequence-name* is a sequence that was generated by the system for an identity column. These sequences cannot be referenced in:

- An ALTER SEQUENCE statement
- A DROP SEQUENCE, COMMENT ON SEQUENCE, GRANT, or REVOKE statement
- A NEXT VALUE or PREVIOUS VALUE expression

System action: The statement cannot be executed.

Programmer response: Specify the name of a user-defined sequence object in this context.

SQLSTATE: 428FB

-20143 THE ENCRYPTION OR DECRYPTION FUNCTION FAILED, BECAUSE THE ENCRYPTION PASSWORD VALUE IS NOT SET

Explanation: The ENCRYPTION PASSWORD value is not set.

System action: The statement cannot be executed

Programmer response: Issue the SET ENCRYPTION PASSWORD statement to set the ENCRYPTION PASSWORD value. The length of the PASSWORD must be a minimum of 6 bytes and a maximum of 127 bytes.

SQLSTATE: 51039

-20144 THE ENCRYPTION IS INVALID BECAUSE THE LENGTH OF THE PASSWORD WAS LESS THAN 6 BYTES OR GREATER THAN 127 BYTES

Explanation: The data must be encrypted with a password length between 6 and 127 bytes.

System action: The statement cannot be executed

Programmer response: Ensure that your password length is between 6 and 127 bytes in length.

SQLSTATE: 428FC

-20146 THE DECRYPTION FAILED. THE DATA IS NOT ENCRYPTED

Explanation: The data must be encrypted before it is decrypted.

System action: The statement cannot be executed

Programmer response: Ensure that the data being decrypted has been encrypted using the ENCRYPT_TDES built-in-function.

SQLSTATE: 428FE

-20147 THE ENCRYPTION FUNCTION FAILED. MULTIPLE PASS ENCRYPTION IS NOT SUPPORTED

Explanation: Data that has already been encrypted, cannot be encrypted again.

System action: The statement cannot be executed

Programmer response: Ensure that the data that is being encrypted has not already been encrypted.

SQLSTATE: 55048

-20163 HEXADECIMAL CONSTANT GX IS NOT ALLOWED

Explanation: A hexadecimal graphic string constant, GX, was used in a statement when one of the following two conditions was true:

- The MIXED DATA install option is set to NO.
- The application encoding scheme is UNICODE.
- The GX constant was specified as a column default value in a WITH DEFAULT clause.
- The GX constant was specified as a limit key value in a VALUES clause.

System action: The statement cannot be executed.

Programmer response: If your data is not graphic, use an X hexadecimal constant instead of a GX constant. If your MIXED DATA install option is set to NO, contact your system administrator to set up the installation options properly for use with the GX constant. If your application encoding scheme is UNICODE, use a UX hexadecimal constant instead of GX.

SQLSTATE: 560B9

-20165 INSERT STATEMENT WITHIN A SELECT IS NOT ALLOWED IN THE CONTEXT IN WHICH IT WAS SPECIFIED

Explanation: An atomic INSERT statement can be specified in the FROM clause of a SELECT in specific contexts. It is only allowed as the only table-spec in the FROM clause of a SELECT statement (excluding the common table expressions) that is a subselect or a SELECT INTO statement. The INSERT statement must not include the NOT ATOMIC clause.

System action: The statement cannot be processed.

Programmer response: Change the statement so that the INSERT statement is used only in a SELECT statement that is a subselect or a SELECT INTO statement. Ensure that the INSERT statement in the FROM clause is the only table-spec in the FROM clause. Verify that NOT ATOMIC is not specified either as part of the INSERT statement, or, as part of the ATTRIBUTES clause of the PREPARE statement for a dynamic insert.

SQLSTATE: 428FL

**-20166 INSERT STATEMENT WITHIN A
SELECT SPECIFIED A VIEW *view-name*
WHICH IS NOT A SYMMETRIC VIEW**

Explanation: The target view of the INSERT statement within a SELECT statement must be defined WITH CASCADED CHECK OPTION or the fullselect in the view definition must not have a WHERE clause.

A symmetric view is a view defined implicitly or explicitly with the WITH CASCADED CHECK OPTION.

System action: The statement cannot be executed

Programmer response: Do not use the INSERT statement within a SELECT with the specified view.

SQLSTATE: 428FM

**-20177 SET DATA TYPE CLAUSE ON ALTER
TABLE SPECIFIED FLOATING POINT,
BUT THIS CHANGE IS DISALLOWED**

Explanation: The SET DATA TYPE clause of an ALTER TABLE statement specified floating point as the new data type. However, there is an existing unique index or constraint that is defined on the column. This type of change is not allowed when unique indexes or constraints are defined on the column to be changed.

Programmer response: Change the statement to specify a different compatible data type, and resubmit the statement.

SQLSTATE: 530A1

**-20180 COLUMN *column-name* IN TABLE
table-name CANNOT BE ALTERED AS
SPECIFIED**

Explanation: Column *column-name* cannot be altered for one of the following reasons:

- ALTER COLUMN cannot be specified on ALTER TABLE if:
 - The table is defined with DATA CAPTURE CHANGES
 - The column is involved in a referential integrity constraint (either as part of the parent key or foreign key)

- The column has a field procedure defined
- or the column is an identity column

- Additionally, SET DATA TYPE cannot be specified on ALTER TABLE if:

- The table is a materialized query table
- The table has an edit procedure or valid procedure

System action: The statement cannot be executed.

Programmer response: Change the name of the column to a column that can be altered, or drop and recreate the table with the necessary attributes.

SQLSTATE: 428FR

**-20181 COLUMN CANNOT BE ADDED TO
INDEX *index-name***

Explanation: An ALTER INDEX ADD COLUMN statement attempted to add a column to an index that is an auxiliary index, enforces a primary key, unique key, referential constraint, or ROWID column; or, the index is a partitioning index, and index-based partitioning is being used.

System action: The statement cannot be executed.

Programmer response: Change the statement to refer to an index that can have a column added to it.

SQLSTATE: 428FS

**-20182 PARTITIONING CLAUSE *clause* ON
stmt-type STATEMENT FOR *index-name*
IS NOT VALID**

Explanation: The *values* PARTITIONING clause was not accepted on CREATE or ALTER INDEX statement for one of the following reasons:

- On ALTER INDEX, if the table uses *table-based* CONTROLLED partitioning, or if the index is a partitioning index created in Version 8 or later releases.
- On CREATE INDEX, *values* partitioning attributes were specified on a previous CREATE or ALTER TABLE statement for the table.
- On CREATE INDEX, if the partitioning scheme of the index is predetermined by that of the underlying data.
- When altering partition limit key values, if there are any large object (LOB) columns in the table.

System action: The statement cannot be executed.

Programmer response: Change the name of the index to an index for which the *values* partitioning clause would be valid, and resubmit the statement.

SQLSTATE: 530A2

-20183 THE PARTITIONED, ADD PART, ADD PARTITIONING KEY, OR ALTER PART CLAUSE SPECIFIED ON CREATE OR ALTER FOR *name* IS NOT VALID

Explanation: The PARTITIONED, ADD PART, ADD PARTITIONING KEY, and ALTER PART clauses cannot be specified on ALTER TABLE, CREATE INDEX, or CREATE TABLE if:

- The table is a non-partitioned table
- The table is a materialized query table
- A materialized query table is defined on this table

Additionally, the ADD PARTITIONING KEY clause cannot be specified if the table is already complete by having established either table-based partitioning or index-based partitioning.

System action: The statement cannot be executed.

SQLSTATE: 428FT

-20185 CURSOR *cursor-name* IS NOT DEFINED TO ACCESS ROWSETS, BUT A CLAUSE WAS SPECIFIED THAT IS VALID ONLY WITH ROWSET ACCESS

Explanation: The FOR ROW *n* OF ROWSET clause was specified on a FETCH statement, but the cursor is not defined for rowset access.

System action: The statement cannot be processed.

Programmer response: Remove the FOR *n* ROWS clause from the FETCH statement, or redefine the cursor for multiple row access with the WITH ROWSET POSITIONING clause on DECLARE CURSOR or PREPARE.

SQLSTATE: 24518

-20186 A CLAUSE SPECIFIED FOR THE DYNAMIC SQL STATEMENT BEING PROCESSED IS NOT VALID

Explanation: A clause was not valid for one of the following reasons:

- On a PREPARE statement, a FOR SINGLE ROW or FOR MULTIPLE ROWS clause was specified. However, the statement that was being prepared was not an INSERT statement.
- On a PREPARE statement, an ATOMIC or NOT ATOMIC clause was specified. However, the statement that was being prepared was not an INSERT statement.
- On a PREPARE statement, a rowset-positioning clause was specified. However, the statement that was being prepared was not an INSERT statement.
- On a PREPARE statement, a SENSITIVE DYNAMIC clause and SCROLL clause were specified. However, the content of the query requires the use of a temporary table for processing.

- On an EXECUTE statement, a multiple-row-insert clause was specified. However, the statement that was being executed was not an INSERT statement.
- On an EXECUTE statement, a multiple-row-insert clause was specified. However, the statement that was being executed was not an INSERT statement that was prepared with FOR MULTIPLE ROWS specified as part of the ATTRIBUTES clause on the PREPARE statement.
- On an EXECUTE statement, a multiple-row-insert clause was not specified. However, the statement that was being executed was an INSERT statement, and FOR MULTIPLE ROWS was specified as part of the ATTRIBUTES clause on the PREPARE statement.
- On an EXECUTE statement, a FOR *n* ROWS clause was specified. However, the INSERT statement that was being executed also contained a FOR *n* ROWS clause.
- On an EXECUTE statement, host variable arrays were provided. However, the FOR *n* ROWS clause was not specified (on either the EXECUTE or INSERT statement).

System action: The statement cannot be processed.

Programmer response: Remove the clause that was not valid in the context in which it was used.

SQLSTATE: 07501

-20200 THE INSTALL OR REPLACE OF *jar-id* WITH URL *url* FAILED DUE TO REASON *reason-code* (*reason-string*).

Explanation: The URL that was specified on the install or replace JAR procedure did not identify a valid JAR file.

jar-id Name of the JAR that was specified for SQLJ.INSTALL_JAR or SQLJ.REPLACE_JAR

url Up to 80 characters of the URL are displayed.

The following list shows the possible values for *reason-code* and *reason-string*:

1 (FILE NOT FOUND)

No HFS file was found with the name specified.

2 (URL FORMAT)

The URL must begin with 'file:/' or 'file:///'.

3 (FILE SIZE)

The file must not be larger than 100MB.

System action: The statement cannot be processed.

SQLSTATE: 46001

User response: Reissue the install or replace the JAR procedure with a URL that identifies a valid JAR file.

-20201 THE INSTALL, REPLACE, OR REMOVE OF *jar-name* FAILED DUE TO REASON *reason-code* (*reason-string*)

Explanation: The JAR name *jar-name* that was specified on the install, replace, or remove JAR procedure was invalid. For example, this message could be issued for one of the following reasons:

- The JAR name might have the improper format
- The JAR procedure cannot be replaced or removed because it does not exist
- The JAR procedure cannot be installed because it already exists

The following list contains the possible values for *reason-code* and *reason-string*:

1 (UNDEFINED JAR)

A JAR with the name specified on SQLJ.REPLACE_JAR or SQLJ.REMOVE_JAR does not exist in DB2.

2 (SCHEMA LENGTH)

In the *jar-name* parameter, the schema exceeded the maximum length of 128 bytes.

3 (NAME LENGTH)

In the *jar-name* parameter, the name exceeded the maximum of 128 bytes.

4 (PARSER ERROR)

During SQLJ.INSTALL_JAR or SQLJ.REMOVE_JAR processing, the DB2 parser was invoked and returned an error. This error can occur due to invalid characters or an invalid length of the *jar-name* parameter.

5 (DUPLICATE JAR)

A JAR with the name specified on SQLJ.INSTALL_JAR already exists in DB2.

System action: The statement cannot be processed.

SQLSTATE: 46002

User response: Correct the jar identifier parameter and re-issue the request.

-20202 THE REPLACE OR REMOVE OF *jar-name* FAILED AS *class* IS IN USE

Explanation: The specified class in the jar file is currently in use by a defined routine, or the replacement jar file does not contain the specified class for which a routine is defined.

System action: The statement cannot be processed.

User response: Ensure all routines referencing the classes being removed are dropped, and resubmit the replace or remove procedure.

SQLSTATE: 46003

-20203 USER-DEFINED FUNCTION OR PROCEDURE *name* HAS A JAVA METHOD WITH AN INVALID SIGNATURE. THE ERROR IS AT OR NEAR PARAMETER *number*. THE SIGNATURE IS *signature*.

Explanation: The signature of the java method that was used to implement the function or procedure was invalid. For example, the method may have parameters that are not mappable to the parameters on the corresponding CREATE PROCEDURE statement.

name identifies the specific name of the external Java function or procedure whose signature caused the error

number indicates the position of the parameter within the signature closest to the error

signature provides at most the first 100 characters of the invalid signature

System action: The statement is not executed.

Programmer response: Reissue the corresponding CREATE statement specifying parameters that match the Java method, or correct the specified procedure or function signature.

SQLSTATE: 46007

-20204 THE USER-DEFINED FUNCTION OR PROCEDURE *routine-name* WAS UNABLE TO MAP TO A SINGLE JAVA METHOD

Explanation: A CREATE or ALTER FUNCTION or PROCEDURE statement for *routine-name* specified a Java method in the EXTERNAL NAME clause that cannot be used. The EXTERNAL NAME clause did not contain a matching Java method, or contained more than one matching Java method.

System action: The statement cannot be processed.

Programmer response: The EXTERNAL NAME clause of the identified function or procedure must be altered to uniquely identify a valid Java method for the routine, or the Java class must be changed to have a single method with the specified or implicit signature.

SQLSTATE: 46008

-20207 THE INSTALL OR REMOVE OF *jar-name* SPECIFIED THE USE OF A DEPLOYMENT DESCRIPTOR.

Explanation: The DEPLOY or UNDEPLOY parameter of the install or remove jar procedure for *jar-name* was non-zero. Use of deployment descriptors is not supported, and this parameter must be zero.

System action: The JAR is not installed, or removed.

| **User response:** Reissue the INSTALL_JAR or REMOVE_JAR procedure call with the DEPLOY or UNDEPLOY parameter set to zero.

| **SQLSTATE:** 46501

| **-20210** **THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS AT A LEVEL THAT IS INCOMPATIBLE WITH THE CURRENT VALUE OF THE ENCODING BIND OPTION OR SPECIAL REGISTER**

| **Explanation:** The SQL statement was precompiled at a level prior to Version 7, but the current value of the ENCODING bind option or special register does not represent the system EBCDIC CCSIDs. The information that is necessary to execute the SQL statement is unavailable for processing, and the SQL statement cannot be successfully completed. Additional processing of the SQL statement is terminated.

| An application that was precompiled prior to DB2 Version 7 may not be bound, either implicitly or explicitly, with an ENCODING bind option of anything other than ENCODING(EBCDIC) or ENCODING(*ccsid*) where *ccsid* represents the system EBCDIC CCSID. If the value of MIXED DATA for the system is YES, then *ccsid* must be the default EBCDIC mixed CCSID. Otherwise, *ccsid* must be the default EBCDIC single byte CCSID.

| **System action:** The statement cannot be executed.

| **Programmer response:** To correct the situation, you can:

- | • Precompile the program again using the current precompiler and reissue the BIND command
- | • Reissue the BIND command using ENCODING(EBCDIC) or ENCODING(*ccsid*) where *ccsid* represents the system EBCDIC CCSID.

| **SQLSTATE:** 560B8

| **-20212** **USER-DEFINED ROUTINE *name* ENCOUNTERED AN EXCEPTION ATTEMPTING TO LOAD JAVA CLASS *class-name* FROM JAR *jar-name*. ORIGINAL EXCEPTION: *exception-string*.**

| **Explanation:** A Java exception occurred while DB2 was trying to load a Java class. The error can occur when loading the class that is identified in the EXTERNAL NAME clause, or a referenced class. This message could indicate more than that a class was not found. Some examples would be an I/O error occurring when reading the JAR file, or an SQL error occurring when reading the BLOB containing the JAR from the DB2 catalog.

| *name* the specific name of the external Java function

| or procedure that caused the ClassNotFoundException

| *class-name*

| the Java class DB2 was trying to load when the error occurred

| *jar-name*

| the jar that the class was being loaded from, if any

| *exception-string*

| contains as much of the toString() of the underlying exception that resulted in this ClassNotFoundException as fits, if any

| **System action:** The statement cannot be executed. A DSNX961 message describing the error will be displayed on the MVS system console.

| **Programmer response:** Correct the condition reported by the *exception-string*.

| **SQLSTATE:** 46103

| **-20213** **STORED PROCEDURE *procedure-name* HAS RETURNED A DYNAMIC RESULT SET OF AN INVALID CLASS. PARAMETER *number* IS NOT A DB2 RESULT SET**

| **Explanation:** A Java Stored Procedure has returned a DYNAMIC RESULT SET parameter that is not an instance of the Java class that was used by the JDBC driver to represent result sets.

| *procedure-name*

| identifies the external Java procedure whose returned parameter caused the error.

| *number*

| indicates the position of the parameter whose returned class was not an instance of the Java class that is used by the JDBC driver to represent result sets.

| **System action:** The CALL statement fails.

| **Programmer response:** Recreate the Java method to make returned DYNAMIC RESULT SET parameters be instances of the class produced by the DB2 for OS/390 JDBC driver (COM/ibm/db2os390/sqlj/jdbc/DB2SQLJResultSet).

| **SQLSTATE:** 46502

| **-20223** **THE ENCRYPT_TDES OR DECRYPT FUNCTION FAILED. ENCRYPTION FACILITY NOT AVAILABLE *return-code*, *reason-code***

| **Explanation:** The encryption facility is not available, or not able to service the encryption or decryption request.

| **System action:** The statement cannot be executed

| **Programmer response:** If the encryption facility is not

installed, then install it before using the ENCRYPT_TDES or DECRYPT functions. If the encryption facility is installed, then verify that it is working correctly. returncode and reason-code may give further information on the regarding why this message was issued. If the encryption facility is not installed, then install it before using the ENCRYPT_TDES or DECRYPT functions. If the encryption facility is installed, then verify that it is working correctly. returncode and reason-code may give further information on the regarding why this message was issued. Consult *ICSF Application Programmers Guide*, Appendix A, for the ICSF Return Code and ICSF Reason Codes for further information.

SQLSTATE: 560BF

-20227 REQUIRED CLAUSE IS MISSING FOR ARGUMENT *number* OF *expression*

Explanation: The *expression* expression requires that a clause be specified for argument *number*.

- If *expression* is XMLATTRIBUTES, then an AS clause is required for the XML attribute name.
- If *expression* is XMLFOREST, then an AS clause is required for the XML element name.

System action: The statement cannot be processed.

Programmer response: Correct the statement by providing the required clause for the argument.

SQLSTATE: 42633

-20232 CHARACTER CONVERSION FROM CCSID *from-ccsid* TO *to-ccsid* FAILED WITH ERROR CODE *error-code* FOR TABLE *dbid.obid* COLUMN *column-number* REQUESTED BY *csect-name*

Explanation: A conversion error occurred during the conversion of a string to a different coded character set.

from-ccsid

identifies the coded character set of the string to be converted.

to-ccsid

identifies the coded character set to which it must be converted.

error-code

indicates the type of error as defined as follows:

- 8 - Length exception (for example, expansion required for PC MIXED data exceeds the maximum length of the string).
- 20 - Translate procedure error (for example, an error during Unicode/390 stage 2 conversions or an exit set the length control field of the string to an invalid value).

- 24 - The conversion services have not been setup correctly or the conversion is not supported.

dbid.obid

gives the database id and the table obid of the object with the conversion error. This could be either the target or the source of the conversion.

column-number

gives the column number of the failing object. This could be either the target or the source of the conversion.

csect-name

describes the reason codes returned from DB2. Reason codes returned from DB2 begin with 'DSN' and identify the context in which the conversion was requested. Values other than those that start DSN' are returned from other DB2 platforms and are described in the documentation for the platform.

System action: The statement cannot be processed.

Programmer response: If the error-code is 24 and the conversion request is correct, refer to the section entitled "Character conversion" of *DB2 Installation Guide* for information on how to add conversion support. For all the other error-codes, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SQLSTATE: 57017

-20235 THE COLUMN *column-name* CANNOT BE ADDED OR ALTERED BECAUSE *table-name* IS A MATERIALIZED QUERY TABLE

Explanation: The alter table statement attempted to add or alter column *column-name* of materialized query table *table-name*. This is not allowed.

System action: The statement could not be processed.

Programmer response: Columns of materialized query tables cannot be added, altered, or dropped. Alter the materialized query table to become a regular table before adding, altering, or dropping a column.

SQLSTATE: 428FY

-20240 INVALID SPECIFICATION OF A SECURITY LABEL COLUMN *column-name* REASON CODE *reason-code*

Explanation: For a security label column the specification of an attribute in a CREATE TABLE, or ALTER TABLE, DECLARE GLOBAL TEMPORARY TABLE, or CREATE GLOBAL TEMPORARY TABLE statement may be invalid for one of the following reasons:

| • The underlying data type of the security label column is not supported. A security label column must be defined as CHAR(8) for single-byte data.

| • An edit procedure was specified for the table with a security label column.

| • A security label column must be defined as NOT NULL WITH DEFAULT.

| • A security label column cannot be defined for a created global temporary table.

| • The data type of a security label column cannot be altered.

| • A security label column cannot be defined for a table that is the source for a materialized query table.

| • A check constraint cannot specify a security label column.

| **System action:** The statement cannot be executed.

| **Programmer response:** Correct the syntax and resubmit the statement.

| **SQLSTATE:** 42963

| -20248 **ATTEMPTED TO EXPLAIN ALL CACHED STATEMENTS OR A CACHED STATEMENT WITH STMTID OR STMTOKEN *ID-token* BUT THE REQUIRED EXPLAIN INFORMATION IS NOT ACCESSIBLE.**

| **Explanation:** The EXPLAIN statement cannot be executed because the required explain information is not accessible due to one of the following reasons:

| 1. If the EXPLAIN statement specifies an ID or token (STMTCACHE STMTID or STMTCACHE STMTOKEN):

| 2. The SQL statement with specified ID or token has never been cached because dynamic statement caching was not on when the statement was executed.

| 3. The statement with specified ID or token was cached before but is not in cache anymore (it was either invalidated or removed from cache by LRU algorithm).

| 4. The current user is not authorized to explain the statement with specified ID or token.

| 5. If the EXPLAIN statement specifies all cached statements (STMTCACHE ALL):

| 6. No statements are cached because dynamic statement caching has not been turned on.

| 7. The current user is not authorized to explain any of the statements that are in the dynamic statement cache.

| **System action:** The statement cannot be executed.

| **Programmer response:** Perform the following steps:

| 1. If the EXPLAIN statement specifies an ID or token (STMTCACHE STMTID or STMTCACHE STMTOKEN):

| 2. Check if dynamic statement caching is on and if the statement ID or token is correct. The EXPLAIN statement cannot be executed if dynamic statement caching has never been turned on.

| 3. Re-execute (or re-prepare) the statement to be explained, find the updated statement ID or token, and explain it again.

| 4. Correct the authorization problem and re-execute the EXPLAIN statement.

| 5. If the EXPLAIN statement specifies all cached statements (STMTCACHE ALL):

| 6. Check that dynamic statement caching is on.

| 7. Re-execute (or re-prepare) the statements to be explained

| 8. Correct any authorization problems, and re-execute the EXPLAIN statement.

| 9.

| **SQLSTATE:** 26501

| -20249 **THE PACKAGE *package-name* NEEDS TO BE REBOUND IN ORDER TO BE SUCCESSFULLY EXECUTED (*token*)**

| **Explanation:** The package needs to be rebound for one of the following reasons:

| • Package *package-name* was bound on a system with an older maintenance level that is no longer supported. The package needs to be rebound on a system with a maintenance level that is supported.

| • Package *package-name* was bound on a newer maintenance level, but it was sent to execute on a system with an older maintenance level. In this case, the APAR *token* needs to be applied to the server before executing this package.

| **System action:** The statement cannot be executed.

| **Programmer response:** Take the appropriate action as explained in the explanation.

| **SQLSTATE:** 560C5

| -20252 **DIAGNOSTICS AREA FULL. NO MORE ERRORS CAN BE RECORDED FOR THE NOT ATOMIC STATEMENT**

| **Explanation:** A statement with the NOT ATOMIC CONTINUE ON SQLEXCEPTION clause encountered more errors than could be recorded in the diagnostics area. NOT ATOMIC processing with CONTINUE ON SQLEXCEPTION allows DB2 to continue processing a statment after one or more errors is encountered. DB2 will continue processing until it is no longer able to record errors in the diagnostic area (See the GET DIAGNOSTICS statment for information on how to retrieve error information). When DB2 is no longer able

| to record error diagnostics, processing of the statement is terminated, and this error is returned.

| **System action:** The statement is terminated.

| **Programmer response:** Analyze the warning and error conditions using the GET DIAGNOSTICS statement. Determine how to change the statement to eliminate or reduce the number of warnings and errors. It is up to the programmer to determine if a ROLLBACK or COMMIT should be issued for this message. Either is appropriate depending on the application logic.

| **SQLSTATE:** 429BI

| **-20264** **FOR TABLE** *table-name*, *primary-auth-id*
| **WITH SECURITY LABEL**
| *primary-auth-id-seclabel*, **IS NOT**
| **AUTHORIZED TO PERFORM** *operation*
| **ON A ROW WITH SECURITY LABEL**
| *row-seclabel*. **THE RECORD IDENTIFIER**
| **(RID) OF THIS ROW IS** *rid-number*.

| **Explanation:** *primary-auth-id* attempted an MLS READWRITE operation on a row without having the proper Multilevel Security (MLS) authorization. The RID identifies this row.

| The RID might be *N when a RID identifier is not available for the row.

| **System action:** The operation that was attempted could not be performed.

| **Programmer response:** If this user is authorized to perform this operation, ensure that this user has been properly defined to MLS. If the row data needs to be viewed, use DSN1PRINT.

| In the case of a view or cursor, where the primary authorization ID is able to access more rows than it can update or delete, you can add the WHERE clause to limit the rows accessed, based on the security label of the primary authorization ID. The security label can be retrieved using GETVARIABLE(SYSIBM.SECLABEL).

| **SQLSTATE:** 42512

| **-20265** **SECURITY LABEL IS** *reason* **FOR**
| *primary-auth-id*

| **Explanation:** User *primary-auth-id* has a blank security label, or the security label is not accessible. *reason* is BLANK or INACCESSIBLE.

| **System action:** The operation that was attempted could not be performed.

| **Programmer response:** Ensure the value that was specified for the security label of this user is a valid security label. If it is valid, then this error may be caused if the SECLABEL class in the Security Server has not been activated.

| **SQLSTATE:** 42501

| **-20266** **ALTER VIEW FOR** *view-name* **FAILED**
| **INFORMATION RETURNED:**
| **SQLCODE:** *sqlcode*, **SQLSTATE:** *sqlstate*,
| **MESSAGE TOKENS** *token-list*

| **Explanation:** An ALTER VIEW statement was issued for *view-name*, but the view cannot be successfully regenerated.

| **System action:** The statement cannot be processed.

| **SQLSTATE:** 560C7

| **-20281** *primary-auth-id* **DOES NOT HAVE THE**
| **MLS WRITE-DOWN PRIVILEGE**

| **Explanation:** This operation requires the Multilevel Security write-down privilege.

| **System action:** This operation cannot be performed.

| **Programmer response:** Ensure that the user has the MLS write-down privilege when write-down is in effect.

| **SQLSTATE:** 42513

| **-20283** **A DYNAMIC CREATE STATEMENT**
| **CANNOT BE PROCESSED WHEN THE**
| **VALUE OF CURRENT SCHEMA**
| **DIFFERS FROM CURRENT SQLID**

| **Explanation:** A dynamic CREATE statement was issued when the value of the CURRENT SCHEMA special register contained a value different from the content of the CURRENT SQLID special register.

| **System action:** The statement cannot be executed.

| **Programmer response:** Change the value of the CURRENT SCHEMA special register to be the same as the content of the CURRENT SQLID special register.

| **SQLSTATE:** 429BN

| **-20286** **DB2 CONVERTED STRING** *token-type*
| *token* **FROM** *from-ccsid* **TO** *to-ccsid*, **AND**
| **RESULTED IN SUBSTITUTION**
| **CHARACTERS**

| **Explanation:** A conversion error occurred during the conversion of a string for *token-type* *token* to a different coded character set. One or more substitution characters have been placed in the string during the conversion process.

| **System action:** The statement cannot be processed.

| **Programmer response:** Ensure that the data that is provided to DB2 can be converted from *from-ccsid* to *to-ccsid* without data loss.

| **SQLSTATE:** 428GB

| -20289 **INVALID STRING LENGTH UNIT** *unit*
| **SPECIFIED FOR FUNCTION**
| *function-name*

| **Explanation:** The statement invoked a built-in
| function using a string length unit that is not valid
| with the type of data that is provided to the function.
| This can occur for the following reasons:
| • non-string data that is specified with an explicit
| length unit *unit* for the LENGTH function. A string
| length unit cannot be specified for non-string data.
| • bit data or binary data was specified with *unit*.
| CODEUNITS16, or CODEUNITS32 are not valid with
| bit data or binary string data.
| • graphic data was specified with OCTETS as the
| string length unit. OCTETS is not valid with graphic
| data.
| **System action:** The statement cannot be executed.
| **Programmer response:** Change the invocation of the
| function to remove the invalid string length unit or
| change it to a valid unit for the data type being
| processed.
| **SQLSTATE:** 428GC

| -29295 **THE EXECUTION OF A BUILT IN**
| **FUNCTION** *function* **RESULT IN AN**
| **ERROR REASON CODE** *reason-code*

| **Explanation:** The execution of a built-in function (BIF),
| *function*, resulted in an error. The reason code,
| *reason-code*, further explains the reason for the error:
| 4 A string longer than allowed returned as a
| result of an UPPER or LOWER function
| execution. Correct the usage of the function by
| using a varying-length string long enough to
| contain the expanded result.
| **System action:** The statement cannot be executed.
| **Programmer response:** Correct the use of the built-in
| function, *function*.
| **SQLSTATE:** 22531

-30000 **EXECUTION FAILED DUE TO A**
 DISTRIBUTION PROTOCOL ERROR
 THAT WILL NOT AFFECT THE
 SUCCESSFUL EXECUTION OF
 SUBSEQUENT COMMANDS OR SQL
 STATEMENTS: REASON *reason-code*
 (*sub-code*)

Explanation: A DRDA protocol error has resulted
which prevented successful execution of the current
SQL statement. The error was such that it will not
preclude the successful execution of further SQL
statements.
System action: The statement cannot be executed. The
SQLCA is formatted. Message DSNL031I or DSNL032I,

which might contain additional diagnostic information,
might be issued to the MVS console.

Programmer response: Notify the DBA for assistance
in analysis of the SQL statement which yielded this
SQLCODE.

Problem determination: The 'reason-code' identifies
the DDM code point which represents the DDM reply
message received from the remote server in response to
the attempt to execute the SQL statement. These
represent internal errors detected at the remote server
or possibly, by the local DB2 functions.

The 'reason-code' value is the two-byte hexadecimal
code point for the DDM reply message that represents
the error and is one of the following:

X'1254' - CMDCHKRM
X'220A' - DSCINVRM
X'220E' - DTAMCHRM
X'1245' - PRCCNVRM
X'2202' - QRYNOPRM
X'220F' - QRYPOPRM
X'2207' - RDBACCRM
X'2204' - RDBNACRM
X'124C' - SYNTAXRM

A two-byte 'sub-code' accompanies 'reason-codes'
X'220A' (DSCINVRM), X'1245' (PRCCNVRM), and
X'124C' (SYNTAXRM). In all other cases, the 'sub-code'
is zero.

The 'sub-code' when nonzero, consists of two bytes
such that the high-order byte indicates the site at which
the error was detected. This is X'01' if the error was
detected by the local DB2; it is X'02' if the error was
detected by the remote server. The low-order byte is
dependent on the 'reason-code' as follows:

1. Description Error Code (DSCERRCD) if
'reason-code' = X'220A' (DSCINVRM).
2. Syntax Error Code (SYNERRCD) if 'reason-code' =
X'124C' SYNTAXRM).
3. Conversational Protocol Error Code (PRCCVNCD)
if 'reason-code' = X'1245' (PRCCNVRM).

Refer to the *IBM Distributed Data Management (DDM)*
Reference Guide for a detailed discussion of the
semantics of the DDM terms DSCERRCD, SYNERRCD,
and PRCCNVCD.

SQLSTATE: 58008

-30002 **THE SQL STATEMENT CANNOT BE**
 EXECUTED DUE TO A PRIOR
 CONDITION IN A CHAIN OF
 STATEMENTS

Explanation: An SQL statement was chained to
PREPARE, but the PREPARE statement has received a
warning SQLCODE that requires the program or end
user to either re-issue the chained statement or issue a

different SQL request. This error can occur only in a client/server environment.

- A distributed client using DRDA has chained an OPEN statement to a PREPARE, but the PREPARE statement received SQLCODE +495.

System action: The statement cannot be executed as chained.

Programmer response: The statement must be sent again as a separate request.

SQLSTATE: 57057

-30005 EXECUTION FAILED BECAUSE FUNCTION NOT SUPPORTED BY THE SERVER: LOCATION *location* PRODUCT ID *pppvrr* REASON *reason-code* (*sub-code*)

Explanation: The current SQL statement failed because the SQL statement was routed to a server that does not support the requested function. The error was such that it will not preclude the successful processing of further SQL statements.

System action: The statement cannot be executed. The SQLCA is formatted.

Programmer response: Notify the DBA for assistance in analyzing the SQL statement that prompted this SQL code.

Problem determination: *location* identifies the name of the server that could not support the required database protocols to perform the requested function. The product identifier is in the form *pppvrrm*. It is an eight-byte field with alphanumeric characters, and identifies the product that could not support the function. *ppp* identifies the specific database product. *vv* identifies the product version. *rr* identifies the product release level. *m* identifies the product modification level.

Possible values for *pppvrrm*:

ppp	DSN for z/OS, ARI for VM/VSE, SQL for Unix/Windows/NT, QSQ for iSeries, and JCC for Java
vv	Version number
rr	Release level
m	Modification level

To correct the problem, first identify the function that is not supported. To determine what function was not supported, and why, refer to the *reason-code* that was specified. Here are the possible values for *reason-code*, and the functions that they correspond to:

0010	LONG_STMTS
0010	LONG255_IDS
0030	EXTENDED_DESCRIBE

0040	EXTENDED_DIAGNOSTICS
0050	KEEP_DYNAMIC
0060	MULTI_ROW_FETCH
0070	MULTI_ROW_INSERT
0080	SQL_CANCEL
0090	SCROLLABLE_CURSORS
0100	CURSOR_ATTRIBUTES
0110	MONITORING
0120	SELECT_WITH_INSERT
0130	DATA_ENCRYPTION
0140	PACKAGE_PATH

Lastly, you may use the *sub-code* value to further identify the problem. When non-zero, the *sub-code* consists of a one-byte code to indicate how the error was detected in the network:

- If '01'x, then the local DB2 that is acting as the requester detected the error. The LOCATION and PRDID identify the server in error.
- If '02'x, then the server detected the error. The LOCATION and PRDID identify the location and level of the local DB2 server.
- If '03'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.
- If '04'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.

SQLSTATE: 56072

-30020 EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT CAUSED DEALLOCATION OF THE CONVERSATION: REASON *<reason-code>* (*sub-code>*)

Explanation: A DRDA protocol error has occurred that prevented the successful execution of the current SQL statement or command, as well as any subsequent SQL statements.

The 'reason-code' identifies the DDM code point which represents the DDM reply message received from the remote server in response to the attempt to execute the SQL statement. These represent internal errors detected at the remote server site or possibly, by the local DB2 functions.

The 'reason-code' value is the two-byte hexadecimal code point for the DDM reply message that represents the error and is one of the following:

X'1232'	- AGNPRMRM
X'1254'	- CMDCHKRM
X'220A'	- DSCINVRM
X'220E'	- DTAMCHRM

X'0010' - FDODSC
 X'1218' - MGRDEPRM
 X'1245' - PRCCNVRM
 X'241A' - QRYDSC
 X'2202' - QRYNOPRM
 X'220F' - QRYPOPRM
 X'2207' - RDBACCRM
 X'2204' - RDBNACRM
 X'124C' - SYNTAXRM

A two byte sub-code accompanies 'reason codes'. The sub-code, when nonzero, consists of two bytes such that the high-order byte indicates the site at which the error was detected. This is X'01' if the error was detected by the local DB2; It is X'02' if the error was detected by the remote server. The low-order byte is dependent upon the 'reason code' as follows:

Description Error Code (DSCERRCD) if reason code = X'220A' (DSCINVRM).
 Syntax Error Code (SYNERRCD) if reason code = X'124C' (SYNTAXRM).
 Conversational Protocol Error Code (PRCCVNCD) if reason code = X'1245' (PRCCNVRM).
 Manager Dependency Error Code (DEPERRC) if reason code = X'1218' (MGRDEPRM).

Refer to *IBM Distributed Data Management (DDM) Reference Guide* for a detailed discussion of the semantics of the DDM terms DSCERRCD, SYNERRCD, PRCCNVCD, and DEPERRC.

System action: The statement cannot be executed. The SQLCA is formatted and the conversation on which the error was detected is deallocated. Message DSNL031I or DSNL032I, which might contain additional diagnostic information, might be issued to the MVS console.

Programmer response: The connection to the server has been broken, and the server has, therefore, rolled back the unit of work. In this case, the only SQL statement that may be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

SQLSTATE: 58009

-30021 EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT WILL AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS: MANAGER *manager* AT LEVEL *level* NOT SUPPORTED ERROR

Explanation: A DRDA error occurred that prevented the successful execution of the current SQL statement or command and any subsequent SQL statements.

A manager-level conflict was detected during the processing of the DDM EXCSAT command. Refer to the

IBM Distributed Data Management (DDM) Reference Guide for a detailed description of EXCSAT processing and errors.

The *manager* value is the 2-byte hexadecimal code point of the DDM manager class identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRLVL in the *IBM Distributed Data Management (DDM) Reference Guide* for the 2-byte hexadecimal values.

The *level* value is the 2-byte hexadecimal value of the manager level identified as not supported in the EXCSATRD that reported the error. Refer to the DDM term MGRLVL in the *IBM Distributed Data Management (DDM) Reference Guide* for the 2-byte hexadecimal values.

System action: The statement cannot be executed.

Programmer response: Notify the system programmer for analysis of the condition that caused this SQLCODE.

SQLSTATE: 58010

-30025 EXECUTION FAILED BECAUSE FUNCTION IS NOT SUPPORTED BY THE SERVER WHICH CAUSED TERMINATION OF THE CONNECTION: LOCATION *location* PRODUCT ID *pppvrrr* REASON *reason-code* (*sub-code*)

Explanation: The current SQL statement failed because the SQL statement was routed to a server that does not support the requested function. A new connection is required to allow the successful execution of further SQL statements.

System action: The statement cannot be executed. The correct unit of work is rolled back. The SQLCA is formatted.

Programmer response: Notify the DBA for assistance in analyzing the SQL statement that prompted this SQL code.

Problem determination: *location* identifies the name of the server that could not support the required database protocols to perform the requested function. The product identifier is in the form *pppvrrr*. It is an eight-byte field with alphanumeric characters, and identifies the product that could not support the function. *ppp* identifies the specific database product. *vv* identifies the product version. *rr* identifies the product release level. *m* identifies the product modification level.

Possible values for *pppvrrr*:

ppp DSN for z/OS, ARI for VM/VSE, SQL for Unix/Windows/NT, QSQ for iSeries, and JCC for Java

vv Version number

| **rr** Release level

| **m** Modification level

| To correct the problem, first identify the function that is not supported. To determine what function was not supported, and why, refer to the *reason-code* that was specified. Here are the possible values for *reason-code*, and the functions that they correspond to:

| **0010** LONG_STMTS

| **0010** LONG255_IDS

| **0030** EXTENDED_DESCRIBE

| **0040** EXTENDED_DIAGNOSTICS

| **0050** KEEP_DYNAMIC

| **0060** MULTI_ROW_FETCH

| **0070** MULTI_ROW_INSERT

| **0080** SQL_CANCEL

| **0090** SCROLLABLE_CURSORS

| **0100** CURSOR_ATTRIBUTES

| **0110** MONITORING

| **0120** SELECT_WITH_INSERT

| **0130** DATA_ENCRYPTION

| **0140** PACKAGE_PATH

| Lastly, you may use the *sub-code* value to further identify the problem. When non-zero, the *sub-code* consists of a one-byte code to indicate how the error was detected in the network:

- | • If '01'x, then the local DB2 that is acting as the requester detected the error. The LOCATION and PRDID identify the server in error.
- | • If '02'x, then the server detected the error. The LOCATION and PRDID identify the location and level of the local DB2 server.
- | • If '03'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.
- | • If '04'x, then an intermediate server (hop site) detected the error. The error, the LOCATION, and PRDID identify the server in error.

| **SQLSTATE:** 56073

-30030 COMMIT REQUEST WAS UNSUCCESSFUL, A DISTRIBUTION PROTOCOL VIOLATION HAS BEEN DETECTED, THE CONVERSATION HAS BEEN DEALLOCATED. ORIGINAL SQLCODE=*original-sqlcode* AND ORIGINAL SQLSTATE=*original-sqlstate*

Explanation: The application requested COMMIT

operation was unsuccessful and the response from the remote server and the SQLCODE that was returned from the remote server are inconsistent. For example, the reply message from the remote server indicates that a COMMIT operation did not complete successfully but the SQLCODE returned from the remote server was greater than or equal to zero. The unit of work has been rolled back and the connection with the remote server has been deallocated.

System action: An alert was generated. A DSNL031I message may have been written to the console. Refer to the description of this message for further information.

The SQLCODE returned by the remote server is replaced with -30030 and the SQLSTATE returned by the AS is replaced with '158013' and the connection with the remote server has been deallocated.

The SQLCODE and SQLSTATE values that were returned from the remote server are stored in the SQLERRM field in a string of the following format:

'original-sqlcode 'FF'X original-sqlstate'

Programmer response: Notify the system programmer for assistance in analyzing the trace data that was generated.

SQLSTATE: 58013

-30040 EXECUTION FAILED DUE TO UNAVAILABLE RESOURCES THAT WILL NOT AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS. REASON *reason-code* TYPE OF RESOURCE *resource-type* RESOURCE NAME *resource-name* PRODUCT ID *pppvrrm* RDBNAME *rdbname*

Explanation: The SQL statement or command requires a non RDB resource that is currently unavailable. The *reason-code* identifies why the resource identified by the *resource-type* and *resource-name* is unavailable. The product, product level, and RDB are identified.

Values for *reason-code*

This is product specific and can be found in the remote server documentation.

Values for *resource-type*

Two byte hexadecimal number defined as follows:

This is product specific and can be found in the remote server documentation.

Values for *resource-name*

Variable length field with alphanumeric characters and a maximum length of 35 bytes.

Values for *pppvrrm*

Eight-byte field with alphanumeric characters defined as follows:

ppp..... DSN for OS/390, ARI for SQL/DS SQL
and QSQ for AS/400 (3 bytes)
vv..... version number (2 bytes)
rr..... release level (2 bytes)
m..... modification level (1 byte)

Values for *rdbname*

Sixteen-byte field with the RDBNAME.

System action: The statement cannot be processed.
The local DB2 is disconnected from the remote server.

Programmer response: Verify the identify of the
resource that was not available. The reason the resource
is unavailable is identified by the *reason-code*.

Collect the following diagnostic items to help
determine the cause of the unavailable resource.

- Console output from the system identified by
RDBNAME, and a listing of SYSLOG data set for the
period of time spanning the failure.
- Information described for the reason code received.

SQLSTATE: 57012

-30041 EXECUTION FAILED DUE TO
UNAVAILABLE RESOURCES THAT
WILL AFFECT THE SUCCESSFUL
EXECUTION OF SUBSEQUENT
COMMANDS AND SQL
STATEMENTS. REASON *<reason-code>*
TYPE OF RESOURCE *<resource-type>*
RESOURCE NAME *<resource-name>*
PRODUCT ID *<pppvrrm>* RDBNAME
<rdbname>

Explanation: The SQL statement or command requires
a non RDB resource that is currently unavailable. The
<reason-code> identifies why the resource identified by
the *<resource-type>* and *<resource-name>* is
unavailable. The product, product level, and RDB are
identified.

Values for *<reason-code>*

Four byte binary number that is product specific.
This can be found in the remote server
documentation.

Values for *<resource-type>*

Two byte hexadecimal number that is product
specific. This can be found in the remote server
documentation.

Values for *<resource-name>*

Variable length field with alphanumeric characters
and a maximum length of 35 bytes.

Values for *<pppvrrm>*

Eight byte field with alphanumeric characters
defined as follows:

ppp..... DSN for DB2, ARI for SQL/DS, SQL for
OS/2 and QSQ for AS/400 (3 bytes)
vv..... version number (2 bytes)
rr..... release level (2 bytes)
m..... modification level (1 byte)

Values for *<rdbname>*

Sixteen byte field with the RDBNAME.

System action: The statement cannot be executed. The
local DB2 is disconnected from the remote server.

Programmer response: Verify the identity of the
resource that was not available. The reason the resource
is unavailable is identified by the *reason-code*.

Collect the following diagnostic items to help
determine the cause of the unavailable resource.

- Console output from the system identified by
RDBNAME, and a listing of SYSLOG data set for the
period of time spanning the failure.
- Information described for the *<reason-code>*
received.

SQLSTATE: 57013

-30050 *<command-or-SQL-statement-type>*
COMMAND OR SQL STATEMENT
INVALID WHILE BIND PROCESS IN
PROGRESS

Explanation: A remote command or remote SQL
execution was attempted while a remote bind was in
progress. The only commands allowed during bind are,
BIND STATEMENT, END BIND, ROLLBACK, or
COMMIT.

System action: The request is rejected. The local DB2
is disconnected from remote server.

Programmer response: Ensure the remote bind has
completed before attempting to execute an SQL
statement or process a remote command. COMMIT and
ROLLBACK will terminate the bind processing.

SQLSTATE: 58011

-30051 BIND PROCESS WITH SPECIFIED
PACKAGE NAME AND
CONSISTENCY TOKEN NOT ACTIVE

Explanation: Binding of a statement or end bind was
attempted while the package was not undergoing bind
processing.

System action: The bind statement request or end
bind request is rejected. The local DB2 is disconnected
from the remote server.

Programmer response: Ensure that the server
processing the bind request was not abending when
this request was being processed, or that the package

name hasn't changed before terminating the remote bind package request.

SQLSTATE: 58012

**-30052 PROGRAM PREPARATION
ASSUMPTIONS ARE INCORRECT**

Explanation: The program preparation assumptions in effect for binding a statement (i.e. BINDSQLSTT command) are incorrect.

System action: The statement is rejected.

Programmer response: The creation of the package following this error is dependent on the package creation options specified at begin bind time.

SQLSTATE: 42932

-30053 OWNER AUTHORIZATION FAILURE

Explanation: An authorization error associated with the package owner is detected. The AS, for example, has determined that the binder has specified a package owner that the binder has no authorization to specify.

System action: The begin bind request is rejected.

Programmer response: Correct the authorization problem and reissue the request.

SQLSTATE: 42506

-30060 RDB AUTHORIZATION FAILURE

Explanation: The user is not authorized to access an RDB.

System action: The request is rejected.

Programmer response: Correct the authorization problem and resubmit the job.

SQLSTATE: 08004

-30061 RDB NOT FOUND

Explanation: An attempt was made to access an RDB which cannot be found. This usually means that a requester specified the server location name incorrectly. The server responded by indicating that the requester's specification of the server location name is incorrect. Requester or server changes are needed to make the location names consistent. Location names for DB2 systems are defined in the BSDS DDF record and are also in the DSNL004I console message when DDF is started. For more information about defining location names, see Part 3 of *DB2 Installation Guide*.

System action: The request is not processed.

Programmer response: Ensure the RDB name was correctly specified and resubmit the job.

SQLSTATE: 08004

**-30070 *command* COMMAND NOT
SUPPORTED ERROR**

Explanation: The target does not support a particular command. The error causes termination of the connection between the local DB2 and the remote server.

Values for *command*

Two byte hexadecimal DDM code point.

System action: The command is rejected. The local DB2 is disconnected from the remote server.

Programmer response: Ensure the proper command was issued.

SQLSTATE: 58014

**-30071 *object-type* OBJECT NOT SUPPORTED
ERROR**

Explanation: The target does not support a particular object. The error causes the termination of the connection between the local DB2 and the remote server.

Values for *object-type*

Two byte hexadecimal DDM code point.

System action: The command/SQL statement is rejected. The local DB2 is disconnected from the remote server.

Programmer response: Ensure the object has been correctly specified and resubmit the job or reissue the command.

SQLSTATE: 58015

**-30072 *parameter subcode* PARAMETER NOT
SUPPORTED ERROR**

Explanation: A particular parameter is not supported by either the application requester or the remote server.

Values for *parameter*

Two byte hexadecimal DDM code point.

Values for *subcode*

Two byte hexadecimal number defined as follows: This subcode is composed of two distinct parts, but may optionally be zero. The high-order byte (when not zero) indicates the site at which the error was detected. This is X'01' if the error was detected by the local DB2; it is X'02' if the error was detected by the remote server. The low order byte is always zero.

- | Common parameters that are not supported include:
- | X'2450' Usually this means that the server does not
- | support the attribute clause on prepare.

System action: The command/SQL statement is

rejected. A disconnect has occurred.

Programmer response: The connection to the server has been broken, and the server has therefore rolled back the unit of work. In this case, the only SQL statement that may be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

SQLSTATE: 58016

-30073 *parameter subcode* **PARAMETER VALUE NOT SUPPORTED ERROR**

Explanation: The specified parameter value is not supported by either the local DB2 or the remote server.

The *parameter*, is a 2-byte hexadecimal DDM code point. See *IBM Distributed Data Management (DDM) Reference Guide* for a definition of the valid code points. Common values for *parameter* include:

X'0035' Usually means that a DB2 server does not support the single-byte coded character set identifier (CCSID) sent by the requester, or a DB2 requester does not support the single-byte CCSID received from a server. See X'119C' for more information.

X'1144' DRDA servers return this code point when a DB2 client specifies a version for a package and the DRDA server does not support versions.

X'119C' If the subcode information contains X'01', the requester does not support the single-byte CCSID that the server wants to use. If the subcode information contains X'02', the server does not support the single-byte CCSID that the requester wants to use.

Determine the single-byte CCSIDs for the requester and server systems. The single-byte CCSID for DB2 subsystems is defined in DSNHDECP. One or both partners might be using an incorrect CCSID, or support might need to be added. See *DB2 Installation Guide* for more information on CCSIDs.

X'147A' DB2 servers can return this code point when a numeric input host variable is not within the range that DB2 supports. See the explanation of SQLCODE -406 for more information.

X'14AC' DB2 servers return this code point when a DRDA client requests an authentication mechanism that is not supported by the DB2 server. See the explanation of DB2 reason code 00D3010E for more information.

X'2110' Usually means that a requester specified the server location name incorrectly. The server responded by indicating that the requester's

specification of the server location name is incorrect, and the length of the location name is longer than that supported by the server. Requester or server changes are needed so the location names are consistent. Location names for DB2 systems are defined in the BSDS DDF record and can also be seen in the DSNL004I console message when DDF is started. See Part 3 of *DB2 Installation Guide* for more information about defining location names.

X'2120' Usually means that the server does not support the use of double quote string delimiters in SQL statements. DB2 COBOL applications can use double quote string delimiters in SQL statements. This requires that the program be precompiled with the SQLDELIM(QUOTESQL) option. If the server product does not support double quote SQL statement string delimiters, then the program must be modified to use single quote SQL string delimiters and be precompiled with the SQLDELIM(APOSTSQL) option.

X'2121' Usually means that there is a semantic error with the string that specifies the character used as a decimal delimiter in SQL statements.

X'213F' Means that the server was processing a bind or rebind command that specified an unsupported value for the DYNAMICRULES bind parameter. If the server is a DB2 Version 3 system, specify DYNAMICRULES(RUN) or omit the DYNAMICRULES parameter.

The 'subcode', which is a 2-byte hexadecimal number, consists of two distinct parts and can optionally be zero. The high-order byte (when not zero) indicates the site at which the error was detected. If the error was detected by the local DB2, it is X'01'. If the error was detected by the remote server, it is X'02'. The low-order byte is always zero.

System action: The command or SQL statement is rejected. A disconnect occurred.

Programmer response: The connection to the server was broken, and the server rolled back the unit of work. The only SQL statement that can be successfully executed is ROLLBACK. However, if the requester detects this error on a COMMIT, then it is unknown whether the unit of work was committed or rolled back at the server.

SQLSTATE: 58017

-30074 **REPLY MESSAGE WITH** *codepoint* *(svrcod)* **NOT SUPPORTED ERROR**

Explanation: A reply message *codepoint* is not recognized or the reply message *SVRCOD* is not recognized. The error does not affect the processing of subsequent DRDA commands and SQL statements

issued by the application program.

Values for *codepoint*

- The *codepoint* is a two-byte hexadecimal value that represents a DDM reply message. *IBM Distributed Data Management (DDM) Reference Guide* defines the valid code points for reply messages.

Values for *SVRCOD*

- The *SVRCOD* is a one-byte hexadecimal value which represents the reply messages severity code. *IBM Distributed Data Management (DDM) Reference Guide* defines the valid *SVRCOD* for reply messages.

System action: Processing continues.

Programmer response: The cause of this error could be a mismatch in source and target manager levels or might be an internal error.

SQLSTATE: 58018

-30080 COMMUNICATION ERROR *code*
(*subcode*)

Explanation: A SNA communications error was detected. *z/OS Communications Server SNA Programmer's LU 6.2 Reference* contains the valid *code* and *subcode* values that can appear in this message.

- *code* is VTAM's primary LU6.2 return code (RCPRI).
- *subcode* takes one of the following forms:
 - rcsec-sense
 - rcsec

The *rcsec* portion of *subcode* is VTAM's secondary LU6.2 return code (RCSEC).

The *sense* portion of *subcode* is VTAM's sense code. See Appendix B, "SNA sense codes," on page 729 for descriptions of sense codes that are often associated with SNA network definition errors.

System action: The statement is not executed. The application was disconnected from the server because of a communication failure. A DSNL500I message containing additional diagnostic information might be issued to the MVS console.

Programmer response: Review the diagnostic information described in *z/OS Communications Server SNA Programmer's LU 6.2 Reference* for the particular LU6.2 return codes. Consult with a communications expert to determine the cause of the communication failure.

SQLSTATE: 08001

**-30081 prot COMMUNICATION ERROR
DETECTED. API=*api*, LOCATION=*loc*,
FUNCTION=*func*, ERROR CODES=*rc1*
*rc2 rc3***

Explanation: A communications error was detected

while communicating with a remote client or server.

prot Identifies the communication protocol that encountered the error. Currently, 'TCP/IP' is the only possible value.

api Identifies the communication application programming interface (API) used by DB2. Currently, 'SOCKETS' is the only possible value.

loc The network location of the partner system.
For TCP/IP partners, this field contains the dotted decimal IP address of the partner.

func The communication function that failed.
For TCP/IP partners, this field identifies name of the socket call that failed.

rc1 The first return code indicator.
For TCP/IP partners, this field contains the
TCP/IP *return code* in decimal format. The
return code values are documented in *z/OS*
UNIX System Services Messages and Codes.

rc2 The second return code indicator.
For TCP/IP partners, this field contains the
TCP/IP *reason code* in decimal format. The
reason code values are documented in *z/OS*
UNIX System Services Messages and Codes.

rc3 The third return code indicator.
For TCP/IP partners, this field contains zero.

System action: The statement is not executed. The application is disconnected from the server.

Programmer response: Consult with a communications expert to determine the cause of the communication failure.

SQLSTATE: 08001

**-30082 CONNECTION FAILED FOR
SECURITY REASON** *reason-code*
(*reason-string*)

Explanation: The attempt to connect to a remote database server was rejected due to invalid or incorrect security information. The cause of the security error is described by the *reason-code* and *reason-string* values.

The possible values for *reason-code* and *reason-string* appear below:

- 1 (PASSWORD EXPIRED) -- the password used to connect to the remote server has expired.
- 2 (PASSWORD INVALID) -- the password used to connect to the remote server does not match the password stored at the remote server.
- 3 (PASSWORD MISSING) -- the remote server rejected the connection request because the request did not include a password.

- 4 (PROTOCOL VIOLATION) -- the remote server rejected the connection request because the request did not contain the proper security information. Error messages or trace records should be produced by the server system to explain the nature of the security violation.
 - 5 (USER-ID MISSING) -- the remote server rejected the connection request because the request did not specify a user-id.
 - 6 (USER-ID INVALID) -- the user-id specified in the connection request is not defined at the remote server system.
 - 7 (USER-ID REVOKED) -- the user-id specified in the connection request has been revoked.
 - 15 (SECURITY FAILURE:secchkcd:svcerrno)—Authentication failed at the remote server system. Refer to the *IBM Distributed Data Management (DDM) Reference Guide* for a detailed discussion of the semantics of the DDM terms SECCHKCD and SVCERRNO.
 - 16 (NEW PASSWORD INVALID) -- the password specified on a change password request did not meet the server's requirements.
 - 17 (UNSUPPORTED FUNCTION) -- the security mechanism specified by the client is invalid for this server. Some typical examples:
 - The client is configured to send an Already Verified userid but the server does not support Already Verified userids. Client or server changes must be made to correct the inconsistency.
 - DB2 for z/OS server acceptance of Already Verified userids over TCP/IP connections is controlled by the TCPALVER value of the DSN TIP5 installation panel (DSN6FAC TCPALVER).
 - DB2 for z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES table.
 - The client is configured to use one of the following security mechanisms but the server does not support the mechanism:
 - Encrypted userid and encrypted security-sensitive data.
 - Encrypted userid, encrypted password, and encrypted security-sensitive data.
- Client changes must be made to correct the inconsistency.
- DB2 for z/OS server acceptance of Already Verified userids over TCP/IP connections is controlled by the TCPALVER value of the DSN TIP5 installation panel (DSN6FAC TCPALVER).
 - DB2 for z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES table.

- The client is configured to use one of the following security mechanisms but the server does not support the mechanism:
 - Encrypted userid and encrypted security-sensitive data.
 - Encrypted userid, encrypted password, and encrypted security-sensitive data.
- Client changes must be made to correct the inconsistency.
- DB2 for z/OS client usage of encryption security mechanism is controlled by the SECURITY_OUT column of the SYSIBM.IPNAMES table.
- The client sent a new password value to a server that does not support the DRDA change password function.
 - The client sent DCE authentication information to a server that does not support DCE.
 - The client is configured to send an Already Verified userid but the server does not support Already Verified userids. Client or server changes must be made to correct the inconsistency.
 - DB2 for z/OS server acceptance of Already Verified userids over TCP/IP connections is controlled by the TCPALVER value of the DSN TIP5 installation panel (DSN6FAC TCPALVER).
 - DB2 for z/OS client usage of Already Verified userids is controlled by the SECURITY_OUT column of the SYSIBM.LUNAMES or SYSIBM.IPNAMES tables.

System action: The attempt to connect to the remote database server fails. If the server system is a DB2 UDB for z/OS server, a DSNL030I message at the server system describes the cause.

Programmer response: DB2 uses the communications database (CDB) to control network security functions. Make the appropriate changes to the CDB to correct the security failure.

SQLSTATE: 08001

-30090 REMOTE OPERATION INVALID FOR APPLICATION EXECUTION ENVIRONMENT

Explanation: An update operation or a dynamic commit or rollback was attempted at a server that was supporting an application that was in a read-only execution environment (IMS or CICS).

System action: The request is rejected.

Programmer response: Do not attempt to update data or issue dynamic commits or rollbacks from IMS or CICS applications that are accessing remote data.

SQLSTATE: 25000

**-30104 ERROR IN BIND OPTION *option* AND
BIND VALUE *value*.**

Explanation: While processing the bind parameters that were passed from the requester site, either the bind option or the bind value is not acceptable to the server database, or the option/value pair is not appropriate.

Programmer response: The BIND or REBIND command failed. Examine the command options and values, determine the error, and resubmit the command.

SQLSTATE: 56095

**-30105 BIND OPTION *option1* IS NOT
ALLOWED WITH BIND OPTION
*option2***

Explanation: While processing the bind parameters that were passed from the requester site, it was found that there is a conflict in bind options that are mutually exclusive.

Programmer response: The BIND or REBIND command failed. Examine the command options, determine the cause of the conflict, and resubmit the command.

SQLSTATE: 56096

**-30106 INVALID INPUT DATA DETECTED
FOR A MULTIPLE ROW INSERT
OPERATION. INSERT PROCESSING IS
TERMINATED**

Explanation: An error was detected with the input data for one row of a multiple row INSERT operation. No further rows will be inserted. For an atomic operation, all inserted rows are rolled back. For a non-atmoic operation, rows inserted successfully before the row containing the invalid input data was encountered are not rolled back.

System action: The statement cannot be processed.

Programmer response: Correct the row containing the invalid input data and submit the multiple-row INSERT statement again for the rows that did not get inserted.

SQLSTATE: 22527

Part 3. DB2 codes

This section contains DB2 abend reason codes and reason codes. In addition, this section contains DB2 instrumentation facility interface reason codes.

Conventions used in DB2 abend reason codes are described in Part 1, "Introduction," on page 1.

This section contains information about the following topics:

- Chapter 5, "X'C1.....' codes," on page 161
- Chapter 6, "X'C2.....' codes," on page 171
- Chapter 7, "X'C3.....' codes," on page 207
- Chapter 8, "X'C5.....' codes," on page 213
- Chapter 9, "X'C6.....' code," on page 217
- Chapter 10, "X'C8.....' codes," on page 219
- Chapter 11, "X'C9.....' codes," on page 221
- Chapter 12, "X'D1.....' codes," on page 255
- Chapter 13, "X'D3.....' codes," on page 297
- Chapter 14, "X'D4.....' codes," on page 443
- Chapter 15, "X'D6.....' codes," on page 451
- Chapter 16, "X'D7.....' codes," on page 453
- Chapter 17, "X'D9.....' codes," on page 463
- Chapter 18, "X'E2.....' codes," on page 481
- Chapter 19, "X'E3.....' codes," on page 493
- Chapter 20, "X'E4.....' codes," on page 509
- Chapter 21, "X'E5.....' codes," on page 561
- Chapter 22, "X'E6.....' IFI abend codes," on page 583
- Chapter 22, "X'E6.....' IFI abend codes," on page 583
- Chapter 24, "X'E7.....' codes," on page 597
- Chapter 25, "X'E8.....' codes," on page 613
- Chapter 26, "X'E9.....' codes," on page 627
- Chapter 27, "X'F1.....' codes," on page 629
- Chapter 28, "X'F3.....' codes," on page 631
- Chapter 29, "X'F7.....' codes," on page 677
- Chapter 30, "X'F9.....' codes," on page 681

Chapter 5. X'C1.....' codes

00C10002

Explanation: The DB2 call attachment facility control block (the CAB) indicated that a thread was present when it should not have been present.

This abend reason code is issued by the following CSECT: DSNACA00

User response: Notify your system programmer.

System programmer response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.

Problem determination: This is probably a call attachment facility error.

00C10003

Explanation: The DB2 call attachment facility received control after a nonstandard entry that did not use the call attachment facility language interface.

This abend reason code is issued by the following CSECT: DSNACA00

User response: Modify or repair your application so that DSNACA00, the main call attachment facility code will receive control only through the language interface.

Problem determination: This is probably a user error.

00C10004

Explanation: The call attachment facility encountered an error retrieving a trace message during processing of a call attachment facility request.

This abend reason code is issued by the following CSECT: DSNACA00

User response: Notify your system programmer.

System programmer response: Collect a DSNTRACE trace stream and request a SYSABEND or SYSUDUMP dump.

Problem determination: This is probably a call attachment facility error.

00C10005

Explanation: The application program passed an ECB address of 0 to the call attachment facility on a CONNECT call. The trace message preceding the abend indicates whether the ECB was a start-up or termination ECB.

This abend reason code is issued by the following CSECT: DSNACA00

User response: Correct the application program that makes the CONNECT call to DSNALI. Ensure that the CONNECT call uses a valid ECB address.

Problem determination: See the Explanation above.

00C10201

Explanation: The application program passed two CONNECT calls to the call attachment facility (CAF) from the same TCB. The first CONNECT could have been either implicit or explicit.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10202

Explanation: The application program passed two OPEN commands to the call attachment facility (CAF) from the same TCB. The first OPEN could have been either implicit or explicit.

This abend reason code is issued by the following CSECT: DSNACA00.

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10203

Explanation: A CLOSE command was issued when there was no active OPEN.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10204

Explanation: A DISCONNECT command was issued when there was no active CONNECT.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10205

Explanation: A TRANSLATE command was issued when the DB2 subsystem was not connected to the call attachment facility (CAF).

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10206

Explanation: One of the following conditions exists:

- The wrong number of parameters were issued.
- The end-of-list bit was off.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10207

Explanation: The application program passed an unrecognized function parameter to the call attachment facility (CAF).

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10208

Explanation: The call attachment facility (CAF) received requests from the same TCB to CONNECT to the DB2 subsystem and to another subsystem.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

Problem determination: See the Explanation above.

00C10209

Explanation: The call attachment facility (CAF) received an explicit call to DSNALI from a DB2 stored procedure. This is not allowed.

This abend reason code is issued by the following CSECT: DSNACA00

User response: You can continue processing with a corrected request.

00C10824

Explanation: The CAB is reset and a new connection may be made.

This abend reason code is issued by the following CSECT: DSNACA70

User response: You can continue processing.

Problem determination: See the Explanation associated with message DSN824I.

00C10831

Explanation: The call attachment facility (CAF) has detected a release level incompatibility between itself and DB2. Either the current CAF or DB2 release levels do not support coexistence, or the SPE level of the lower level release does not meet the compatibility requirements for coexistence between the two releases.

This reason code is issued by the following CSECT: DSNACA70

System action: The connection is not successful.

User response: If you used JCL or a TSO logon procedure to invoke CAF, check to insure the correct DB2 libraries are defined in your JOBLIB and STEPLIB allocations. See your system programmer if you invoke CAF using procedures supplied by your system programmer.

Problem determination: If CAF trace (DSNTRACE) is active, message DSN831E will indicate the release levels of CAF and the DB2 subsystem.

00C12001

Explanation: The DB2 RRSF attachment facility function AUTH SIGNON was invoked by a program that was not APF authorized. This condition can indicate a security violation.

System action: The application is abended.

User response: The AUTH SIGNON function can only be invoked from an APF authorized program. Either modify your program to use the RRSF attachment facility function SIGNON which may be invoked from a non-authorized program, or contact your security administrator to make the changes required to make your program an APF authorized program.

Problem determination: This is a user error.

This abend reason code is issued by the following CSECT: DSNARA00

00C12002

Explanation: An abend has occurred during an attempt to access the caller-provided subsystem name parameter while executing in the PSW key of the caller.

This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12003

Explanation: An abend has occurred during an attempt to access the caller-provided *ribptr* parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12004

Explanation: An abend has occurred during an attempt to access the caller-provided *eibptr* parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12005

Explanation: The DB2 RRSF attachment facility received control after a nonstandard entry that did not use the call attachment facility language interface.

System action: The application is abended.

User response: Modify or repair your application so that DSNACA00, the main call attachment facility code, will receive control only through the language interface.

Problem determination: This is probably a user error.

This abend reason code is issued by the following CSECT: DSNARA00

00C12006

Explanation: An abend has occurred during an attempt to access the caller-provided termination ECB parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12007

Explanation: An abend has occurred during an attempt to access the caller-provided startup ECB parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12008

Explanation: An abend has occurred during an attempt to access the caller-provided correlation parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12009

Explanation: An abend has occurred during an attempt to access the caller-provided accounting token parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12010

Explanation: An abend has occurred during an attempt to access the caller-provided accounting interval parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in

register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12011

Explanation: An abend has occurred during an attempt to access the caller-provided authid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12012

Explanation: An abend has occurred during an attempt to access the caller-provided secondary authid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12013

Explanation: An abend has occurred during an attempt to access the caller-provided ACEE parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12014

Explanation: An abend has occurred during an attempt to access the caller-provided plan name parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12015

Explanation: An abend has occurred during an attempt to access the caller-provided collection parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12016

Explanation: An abend has occurred during an attempt to access the caller-provided reuse parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

This abend reason code is issued by the following CSECT: DSNARA00

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12018

Explanation: An abend has occurred during an attempt to access the caller-provided user-id parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

00C12019

Explanation: An abend has occurred during an attempt to access the caller-provided applname parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register

indicates which parameter caused the error.

00C12020

Explanation: An abend has occurred during an attempt to access the caller-provided ws parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

00C12021

Explanation: An abnormal termination has occurred during an attempt to access the caller-provided xid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abnormally terminated.

User response: Correct the problem and submit your job again.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. Register 15 indicates which parameter caused the error when any abnormal termination occurs.

00C12022

Explanation: An abend has occurred during an attempt to access the caller-provided package list parameter while executing in the PSW key of the caller. This error has probably occurred as a result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12023

Explanation: An abend has occurred during an attempt to access the caller-provided thread token parameter while executing in the PSW key of the caller. This reason code is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs, this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00C12024

Explanation: While executing in the PSW key of the caller, an abend occurred during an attempt to access the accounting-string parameter that was provided by the caller. This is probably the result of a logic error in the requesting program.

System action: The application is abended.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to information that was provided by the caller. When any abend occurs, this register indicates which parameter caused the error.

00C12201

Explanation: The application program invoked IDENTIFY while it was already connected to DB2.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12202

Explanation: The application program invoked the CREATE THREAD function request while there was already a thread created.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12203

Explanation: A TERMINATE THREAD command was issued when there was no active thread.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12204

Explanation: The application issued a function request other than IDENTIFY when no connection with DB2 existed. Only IDENTIFY may be issued when a connection does not exist.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12205

Explanation: The task that invoked the DB2 RRSF attachment facility function SWITCH TO has not yet identified to the DB2 subsystem specified in the request.

System action: The SWITCH TO function is performed.

User response: Use IDENTIFY to connect to a DB2 subsystem before attempting to invoke any other function at the specified subsystem.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12206

Explanation: One of the following conditions exists:

- The wrong number of parameters were issued.
- The end-of-list bit was off.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12207

Explanation: The application program either omitted the function name parameter or passed an unrecognized function parameter to the RRSF.

User response: Modify or repair your application to pass a valid function request to RRSF.

00C12208

Explanation: The application program issued an IDENTIFY function request but omitted the *ribptr* parameter from the parameter list. An *ribptr* parameter is a required parameter on an IDENTIFY request.

System action: The IDENTIFY request is rejected.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12209

Explanation: The application program issued an IDENTIFY function request but omitted the *eibptr* parameter from the parameter list. An *eibptr* parameter is a required parameter on an IDENTIFY request.

System action: The IDENTIFY request is rejected.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12211

Explanation: The application program issued a CREATE THREAD function request and specified an invalid package list entry.

User response: You can continue processing with a corrected request.

00C12212

Explanation: The application program issued a CREATE THREAD function request and did not specify a plan name and also did not specify a collection name. If a plan name is not provided, then a collection name must be supplied.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12214

Explanation: The application program issued a TRANSLATE function request but omitted the *sqlca* parameter from the parameter list. An *sqlca* parameter is a required parameter on a TRANSLATE request.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12217

Explanation: The application program issued a CREATE THREAD function request without having completed SIGNON processing. At least one successful SIGNON must be completed before a CREATE THREAD request can be issued.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12219

Explanation: The application program issued an SQL or IFI function request without completing CREATE THREAD processing. SQL or IFI requests cannot be issued until CREATE THREAD processing is complete.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12220

Explanation: The application program issued a CALL DSNRLI with function SET_ID without completing CREATE THREAD processing. SET_ID requests cannot be issued until CREATE THREAD processing is complete.

User response: You can continue processing with a corrected request.

00C12221

Explanation: The application program issued a CALL DSNRLI with function SET_CLIENT_ID without completing CREATE THREAD processing. SET_CLIENT_ID requests cannot be issued until CREATE THREAD processing is complete. SET_CLIENT_ID request are permitted only after a plan is allocated.

User response: You can continue processing with a corrected request.

00C12822

Explanation: The RRSF received an explicit call to DSNRLI from a DB2 stored procedure. This is not allowed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12823

Explanation: An attempt was made to initiate a stored procedure for a task, but one already exists. This is not allowed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12824

Explanation: The previous connection to DB2 has been terminated. Cleanup processing was performed and the RRSF is now ready to process additional IDENTIFY requests.

User response: You can continue processing, and issue an IDENTIFY request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12825

Explanation: An attempt was made to terminate a stored procedure for a task, but no stored procedure exists. This is not allowed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSNARA00

00C12831

Explanation: The release of the RRSF code is not compatible with the earlier release of the DB2 program.

System action: The connection is not made.

User response: Ensure that the release of the RRSF library is not later than the release of DB2 to which you are attempting to connect.

Problem determination: This problem can be caused by improper DB2 data set allocation in a LOGON procedure or CLIST.

This reason code is issued by the following CSECT: DSNARA70

00C12850

Explanation: DB2 stored procedure DSNACICS issues this abend code when the JCL startup procedure for the stored procedure address space in which DSNACICS runs contains a DSNDUMP DD statement. DSNACICS takes an SVC dump when it generates an error message. At the time of the dump:

- Register 2 contains the address of the message that was being generated.

- | • Register 3 contains the address of the first parameter
| that was passed to DSNACICS.
 - | • Register 4 contains the address of the XPL parameter
| area that was passed to DSNACICX.
- | **System action:** The stored procedure requests an SVC
| dump and terminates.
- | **System programmer response:** If the dump was
| requested to diagnose a problem in user exit
| DSNACICX, use IPCS to examine the contents of the
| dump. If the dump was requested because of a possible
| error in the DB2 stored procedure, refer to Part 3 of
| *DB2 Diagnosis Guide and Reference* for information on
| identifying and reporting the problem.

Chapter 6. X'C2.....' codes

00C20021

Explanation: A member of a DB2 data sharing group was unable to perform a global drain because a physical close failure occurred in a peer DB2 due to an exceptional state or CASTOUT process failure. DSNT501I is sent to the console to report the condition.

System action: A 'resource not available' return code, reason code, and object name are sent back to the requesting function.

This returned reason code is issued by the following CSECT: DSNB1LDA

00C20031

Explanation: An attempt to acquire a page latch in either shared mode or exclusive mode was rejected due to a time-out on the agent's wait time.

System action: A 'resource not available' return code, reason code, and object name are sent back to the requesting function.

System programmer response: A diagnostic dump with reason code 00C2010F should follow 00C20031.

This reason code is issued by the following CSECTs: DSNB1LTX, DSNB1LTS

00C20069 .

Explanation: DB2 is unable to perform the drain function on an object (a table space, an index space, or a partition) because a DB2 member in the data sharing group was in the process of restarting.

System action: If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

Otherwise, a 'resource not available' return code, reason code and object name are sent back to the requesting function. DSNT501I is sent to the console to report the condition.

System programmer response: If DSNB350I or DSNB351I messages were issued, wait for the failed DB2 member to complete its restart processing and then recover the GRECP objects as indicated in the "System Programmer Response" for DSNB350I or DSNB351I.

00C2006A

Explanation: DB2 was unable to perform the drain function on an object (table space, index space, or partition) because the object was held by one or more indoubt threads.

System action: If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

System programmer response: Use the DB2 DISPLAY DB CLAIMERS command to find the indoubt threads. If the threads have been left indoubt because DB2 or a transaction manager was unable to automatically resolve the indoubts, you can use the DB2 RECOVER INDOUBT command to resolve the indoubt thread and remove the indoubt claimer on the object (the DB2 RECOVER INDOUBT command should only be used when automatic resolution does not work).

If DSNB350I or DSNB351I messages were issued, then after you resolve the indoubt threads, recover the GRECP objects as indicated in the "System Programmer Response" for DSNB350I or DSNB351I.

00C200A1

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to release a page latch that is not currently held.

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200A2

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch that is currently held on the requesting page.

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200A3

Explanation: This is a DB2/MVS internal error. The execution unit driving a buffer manager (BM) asynchronous function, which would normally run indefinitely, has been canceled. However, work being done by the execution unit is allowed to complete before the execution unit terminates.

System action: The affected asynchronous function is terminated. If the affected function is the deferred write processor (DSNB1CMS), DB2 is abended with the abend code '00C200D3'.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Start DB2 if it is abended.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200A4

Explanation: This code usually indicates a problem internal to DB2; however, the problem can result from errors in other products. An unexpected reason code was returned by the media manager function when it was invoked to process a database I/O request.

System action: The requesting execution unit is abended.

User response: Notify the system programmer and rerun the application.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The unexpected media manager reason code is saved in register 8.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200A5

Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. DB2 was unable to drain a pageset in preparation for page set cleanup processing. This might be caused by one of the following:

- An IRLM out-of-storage condition
- An internal error in the lock acquisition function

This abend reason code is issued by the following CSECT: DSNB1CFC

System action: The execution unit driving this function proceeds normally. The abend status is recorded in SYS1.LOGREC.

Operator response: Notify the system programmer and print the SYS1.LOGREC.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Restart DB2.

Problem determination: The unexpected reason code returned by the drain function in register 8 might help determine the cause of the problem. If the problem is caused by an unavailable DB2 resource, message DSNT500I might also be issued.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00C200A6

Explanation: This is a DB2/MVS internal error. The execution unit scheduled by the buffer manager (BM) subcomponent of DB2 to drive the page set cleanup function has been canceled.

This abend reason code is issued by the following CSECT: DSNB1CFC

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Refer to similar reason code '00E50013'.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200A8

Explanation: An error code other than timeout, insufficient storage, or an MVS system error was returned by the IRLM LOCK request invoked by DB2 to acquire any of the following locks:

- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool-dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

This is a DB2 or IRLM internal error.

System action: The requesting execution unit abends.

User response: Notify the system programmer and rerun the application.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK

00C200A9

Explanation: A return code greater than 4 was returned by the IRLM UNLOCK request invoked by DB2 to release any of the following locks:

- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock.

This is a DB2 or IRLM error.

System action: The requesting execution unit is abended.

User response: Notify the system programmer and rerun the application.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The unexpected IRLM reason code is saved in register 8. It might help determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following

CSECTs: DSNB1SCR, DSNB1DLK

00C200AA

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to change a page latch type, but the requesting agent already holds this latch type on this page.

This abend reason code is issued by the following CSECT: DSNBCLTH

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200AB

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get another page latch, which would cause the total number of page latches held by the caller to exceed the maximum allowable number of 2.

This abend reason code is issued by the following CSECTs: DSNBLTCH DSNB2LTH

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200AD

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch for a page that belongs to one type of page set (index or data). However, the caller already holds a page latch on another page that belongs to a different type of page set.

This abend reason code is issued by the following CSECT: DSNB2LTH

System action: The requesting application process is abended.

Operator response: Notify the system programmer,

print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200AE

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is trying to get a page latch on a page for which there are latch waiters, but no latch holders.

This abend reason code is issued by the following CSECTs: DSNB1LTS DSNB1LTX

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200AF

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is attempting to update a page under the critical mode without holding an exclusive latch on the page.

This abend reason code is issued by the following CSECT: DSNB1SWS

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B0

Explanation: Typically, this indicates a problem internal to DB2, however the problem can result from errors in other products. The buffer address passed by the buffer manager (BM) invokers does not contain the requested page. The buffer manager detected this error by comparing the information stored in the buffer

control block (BB) with the information passed with the buffer manager by its invokers. The information that is compared is the page set piece block, the page number, and the buffer address.

This abend reason code is issued by the following CSECTs:

DSNB1REL	DSNB1RWI	DSNB1SWS
DSNB1GNV	DSNB5COM	

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200B1

Explanation: This is a DB2 internal error. Either the buffer manager (BM) subcomponent of DB2 is unable to locate the requesting page in the buffer pool or the invoker of the buffer manager is attempting to decrease the buffer use count which is already 0.

This abend reason code is issued by the following CSECTs:

DSNB1REL	DSNB1RWI	DSNB1SWS
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System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B2

Explanation: This is a DB2 internal error. The buffer's write intent count is already 0 and the buffer manager (BM) invoker is attempting to decrease it.

This abend reason code is issued by the following CSECT: DSNB1RWI

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B3

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The page size or the page set piece size passed by the buffer manager invoker is invalid. The page set piece size is expressed by n , where 2 to the power of n is the total number of pages that can be contained within a page set piece. This error was detected during open page set processing.

This abend reason code is issued by the following CSECT: DSNB1OPS.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B4

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The highest page set piece number passed by the buffer manager invoker exceeds the maximum value allowed. The maximum number of data sets that can be defined for a given page set is dependent on the page set piece size. This error was detected during open page set processing.

This abend reason code is issued by the following CSECT: DSNB1OPS

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B5

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. During the open page set processing, the page set options passed by the buffer manager invoker were in conflict with the same page set that was opened earlier. The page set options are the writing protocol (SYSTEM or UW), the recovery option (recoverable or unrecoverable), and the page size.

This abend reason code is issued by the following CSECT: DSNB1OFA

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200B6

Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. The buffer manager (BM) subcomponent of DB2 is unable to reallocate a data set that is required after extending a data set to a new volume. The data set reallocation was requested and the corresponding data set was not opened. This error was detected during open page set piece processing.

This abend reason code is issued by the following CSECT: DSNB1OPP

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200B7

Explanation: Typically, this indicates a problem internal to DB2; however, the problem can result from errors in other products. The buffer manager (BM) subcomponent of DB2 is unable to open a page set required by the requesting function. The linear page set was not formatted contiguously. This error was detected during open page set processing.

This abend reason code is issued by the following CSECT: DSNB1OPS

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200B8

Explanation: This is a DB2 internal error. DB2 is unable to update the SYSLGRNG or SYSLGRNXpage set. The utility returned an unexpected reason code.

This abend reason code is issued by the following CSECT: DSNB1SWS

System action: A 'resource not available' code is returned. This reason code and the table space name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00C200BA

Explanation: This reason code is a DB2 internal error. DB2 has encountered an unexpected error while attempting to access a system page of a page set.

System action: The requesting execution unit is abended. The SVC dump and the SYS1.LOGREC recording are requested.

Operator response: Notify the system programmer, print the SYS1.LOGREC and the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for failure for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200BB

Explanation: This is a DB2 internal error to indicate that an invalid buffer pool ID is specified.

This abend reason code is issued by the following CSECT: DSNBRBPA

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200BC

Explanation: This is a DB2 internal error. The Buffer Manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to release the page which does not belong to the work file database.

This abend reason code is issued by the following CSECT: DSNB1REL

System action: The requesting execution unit is abnormally terminated.

Operator response: Notify the system programmer, and print the SYS1.LOGREC and the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00C200BD

Explanation: This is a DB2 internal error. The caller of the buffer manager (BM) is still holding a page latch on the page which is currently being released by the application.

This abend reason code is issued by the following CSECT: DSNB1REL

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200BE

Explanation: This is a DB2 internal error. The buffer manager (BM) is trying to dequeue a page latch waiter from the wait queue, but there are no waiters.

This abend reason code is issued by the following CSECTs: DSNB1CLT DSNB1ULT

System action: The requesting application process is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200C0

Explanation: DB2 is unable to perform I/O processing for the requesting function. An error code (other than a permanent I/O error) was returned by the media manager during the I/O backend processing.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The unexpected media manager reason code is saved in register 8. It might help determine the cause of the failure.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

This abend reason code is issued by the following CSECTs:

DSNB5COM DSNB5FOR DSNB5RAP DSNB5PCO
DSNB5RDP

00C200C1

Explanation: The page version number in the database page header is outside the valid range of values. This can be caused by one of the following:

- Copying data sets improperly from another DB2 subsystem.
- In a CREATE TABLESPACE statement, specifying a VCAT catalog name that is the same as the name of an object in another DB2 subsystem on the same processor.
- Conditionally starting DB2 to a prior time with an invalid RBA range.
- Incorrect use of the REPAIR utility (modifying the page RBA).
- The page was damaged by a DB2 system error.
- TOD clock values are out of synch between systems in a Parallel Sysplex.

System action: The requesting execution unit is abended. If DSNB1SWS issues the ABEND, then it is preceded by a DSNT500I message indicating which page is in error and a DSNI004I message indicating the page set is put in STOPE mode.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

User response: One of the following:

- If the data set was copied from another DB2 subsystem, run DSN1COPY with the RESET option to set the log RBAs in each page to 0.
- If a table space was created with the wrong VCAT catalog name, drop the object and create it again.
- If DB2 was conditionally started with an invalid RBA range, correct the RBA range and restart DB2 with conditions again.
- If the page was damaged by the REPAIR utility, restore it with the RECOVER utility using the PAGE option.
- If you are running data sharing, check the connectivity of the systems to the sysplex timers. The TOD clock values of all systems in the sysplex should all be within one microsecond. TOD clock values will not drift more than one microsecond apart unless a sysplex timer is malfunctioning.
- Otherwise, inform your system programmer that you suspect an error.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 13, 33.

This abend reason code is issued by the following CSECT: DSNB1SWS.

00C200C2

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to decrease the page's write intent count (WIC), but the invoker has no write intent request outstanding.

This abend reason code is issued by the following CSECT: DSNB1RWI

System action: The BM does not decrease the page's WIC as requested, and the execution unit driving this function is abended. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 13, 19, 33.

00C200C3

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that the BM invoker is attempting to set the page's write intent count (WIC), but the invoker has no read intent request outstanding.

This abend reason code is issued by the following CSECT: DSNB1SWS

System action: The BM does not increase the page's WIC as requested, and the execution unit driving this function is abended. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem

determination," on page 735: 1, 2, 5, 19, 33.

00C200C5

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that its invoker was attempting to decrease the write dependency count (WDC) for a buffer. However, the buffer contains database updates that have not yet been written back to DASD. The buffer manager makes the buffer available for reassignment.

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI

System action: The buffer manager does not decrease the WDC as requested, and the execution unit driving this function proceeds normally. An SVC dump is requested and the abend status is recorded in SYS1.LOGREC.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 13, 19, 33.

00C200C6

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 has discovered that the BM invoker is attempting to release a page that was not held by the invoker or the page has an unbalanced write intent (for example, reset write intent has not yet been issued prior to releasing the page).

This abend reason code is issued by the following CSECTs: DSNB1REL DSNB1RWI

System action: The BM does not release the page as requested, and the execution unit driving this function terminates abnormally. An SVC dump is requested and the abend status is recorded in the SYS1.LOGREC.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 13, 19, 33.

00C200C7

Explanation: An error code, other than timeout, insufficient storage, or MVS system error, was returned by the IRLM LOCK request. The IRLM LOCK request was invoked to acquire an open lock to perform a physical open or close.

This abend reason code is issued by the following CSECT: DSNB1LCK

System action: The requesting execution unit is abended.

User response: Rerun the application.

Operator response: Print the SYS1.LOGREC and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The unexpected IRLM reason code is saved in register 8. It may help determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200C8

Explanation: A return code greater than 4 was returned by the IRLM UNLOCK request invoked to release a open lock after completing a physical open or close.

This abend reason code is issued by the following CSECT: DSNB1ULK

System action: The requesting execution unit is abended.

User response: Rerun the application.

Operator response: Print the SYS1.LOGREC and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The unexpected IRLM reason code is saved in register 8. It may help determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200C9

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a damaged PBG control block while attempting to write a check point log record.

This abend reason code is issued by the following CSECT: DSNB1CHK

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 33.

00C200CB

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a damaged ABG or AB control block while attempting to write a checkpoint.

This abend reason code is issued by the following CSECT: DSNB1CHK

System action: DB2 is abnormally terminated; if processing were to continue, an invalid checkpoint would be created which would damage data on a subsequent DB2 restart.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00C200CC

Explanation: The buffer manager (BM) subcomponent of DB2 discovered a close task has been waiting for prefetch to complete for two checkpoints.

This abend reason code is issued by the following CSECT: DSNB1CHK

System action: An SVC dump is produced and checkpointing continues.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00C200CF

Explanation: DB2 could not acquire enough virtual storage for allocating private buffers for an internal castout process. The castout operation is queued until an existing castout process becomes available.

System action: The requesting execution unit is abended. No dump is produced.

Problem determination: This abend reason code is issued by the following CSECT: DSNB5PCO

00C200D0

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager (BM) I/O termination exit routine. Retry of the prior abend is not allowed by MVS.

This abend reason code is issued by the following CSECT: DSNB5UTX

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The functional recovery routine (FRR) parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00C200D1

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager I/O termination exit routine. An attempt to retry and to continue main line processing

(after completion of processing of this prior abend) resulted in recursion to the I/O termination exit routine’s functional recovery routine (FRR).

This abend reason code is issued by the following CSECT: DSNB5UTX

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

Problem determination: The FRR parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00C200D2

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform I/O processing for the requesting function. A prior abend has occurred in the buffer manager I/O error exit routine during processing of a database I/O error.

This abend reason code is issued by the following CSECT: DSNB5UEX

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The functional recovery routine (FRR) parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00C200D3

Explanation: A prior abend occurred in a 'must complete' processing window of a buffer manager (BM) function.

This abend reason code is issued by the following CSECT: DSNB1RRR

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See the Problem Determination section of the original abend code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200D4

Explanation: A prior abend occurred in an I/O processing window of a buffer manager (BM) function. I/O functional recovery cannot be reliably performed because the tracking data required to do so is incomplete. The required data is probably missing because the functional recovery routine (FRR) that is protecting the abending I/O processing function was bypassed by MVS.

This abend reason code is issued by the following CSECT: DSNB1RRR

System action: DB2 is abended.

Operator response: Notify the system programmer, and print the SYS1.LOGREC and the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See the Problem Determination section of the original abend code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200D5

Explanation: An abend occurred in the I/O termination exit routine while resuming the suspended execution unit. The status of resume was 'indoubt' at the time of the abend.

This abend reason code is issued by the following CSECT: DSNB5UTX

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The functional recovery routine (FRR) parameter list was recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200D6

Explanation: An abend occurred in the I/O termination exit routine while resuming the suspended execution unit. The status of resume was 'indoubt' at the time of the abend.

This abend reason code is issued by the following CSECT: DSNB5UTX

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The functional recovery routine (FRR) parameter list is recorded in the SDWA variable recording area (VRA) when the original abend occurred. Examine the VRA to determine whether the media manager request block (MMRB) is properly passed by the media manager. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200D7

Explanation: A prior abend occurred while resuming a suspended execution unit. The status of resume was 'indoubt' at the time of the abend.

This abend reason code is issued by the following CSECT: DSNB1RRR

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See the Problem Determination section of the original abend code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200D8

Explanation: This is a DB2 internal error. The buffer manager (BM) subcomponent of DB2 discovered that some buffer manager resources are inconsistent.

This abend reason code is issued by the following CSECTs: DSNB5COM DSNB1CMS

System action: DB2 is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00C200E0

Explanation: A table space or index space cannot be accessed because DB2 is unable to create the referenced buffer pool. The referenced buffer pool size was zero, which indicates to DB2 that this buffer pool should not be activated. DB2 message DSNB602I was issued to inform the operator of the error. This reason code and the table space or index space name are recorded in the cursor table (CT) and made available to the user in the SQLCA.

This abend reason code is issued by the following CSECTs: DSNB1OPP DSNB1OPS

System action: An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

System programmer response: Analyze the virtual storage content of the *ssnm*DBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to modify

the affected table space or index to indicate a usable buffer pool. To determine a usable buffer pool, use the DISPLAY BUFFERPOOL command. If necessary, use the ALTER BUFFERPOOL command to activate the failing buffer pool by setting its VPSIZE to a nonzero value.

00C200E1

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required to be accessed by the requesting function. An error was returned by the media manager CONNECT function, which was invoked to open a VSAM data set. DB2 message DSNB204I was issued to inform the operator of the error condition. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1OST

System action: A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

Operator response: Notify the system programmer.

System programmer response: Refer to system message IEC161I and DB2 message DSNB204I for assistance in determining the cause of the error. Correct the situation, and notify the user to invoke the application again.

Problem determination: The unexpected media manager return code is saved in register 8. It may help determine the cause of the failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 10, 12.

00C200E2

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required by the requesting function. An error was returned by the dynamic allocation function that was invoked to allocate a VSAM data set. DB2 message DSNB207I was issued to inform the operator of the error condition. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1OST

System action: A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

User response: Notify the system programmer. Invoke the application again after the system programmer has corrected the error.

System programmer response: The error code returned from the dynamic allocation function was externalized in the DSNB207I message. Refer to the appropriate MVS publication for an explanation of this error code. Correct the situation, and notify the user to invoke the application again.

Problem determination: The unexpected dynamic allocation return code is saved in register 8. It may help determine the cause of the failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 10, 12.

00C200E5

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set that is required by the requesting function. A logical I/O error was detected by the buffer manager I/O functions. The logical I/O error indicates that a requested page (read operation) resides within the error page range of the data set. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1GET

System action: A 'resource not available' code is returned to the user.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

Operator response: Use the -DISPLAY DB command to obtain the error page range. Notify the system programmer.

System programmer response: The error page range can be located from the console sheet or through the -DISPLAY DB command. Correct the error pages with the recovery utility, and notify the user to invoke the application again. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 12.

00C200E6

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set that is required by the requesting function. A permanent I/O error was detected by the media manager during preformat processing. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB5FOR

System action: A 'resource not available' code is returned to the user.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

System programmer response: Recover the entire data set with the recovery utility, and notify the user to invoke the application again. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 12.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

00C200E8

Explanation: The buffer pool (indicated in the SQLCA) cannot be created because of insufficient virtual storage. Message DSNB603I or DSNB605I was issued to inform the operator of the error. This reason code and the buffer pool ID are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

System action: An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

Operator response: Notify the system programmer.

System programmer response: Analyze the virtual storage content of the *ssnm*DBM1 address space to determine further action. If appropriate, use the ALTER TABLESPACE or ALTER INDEX statement to indicate use of a different buffer pool. Otherwise, use ALTER BUFFERPOOL commands to balance virtual storage usage for all buffer pools.

00C200E9

Explanation: A buffer could not be assigned in the buffer pool (indicated in the SQLCA) because all buffers in the buffer pool are in a nondisplaceable state. (Buffers are in a nondisplaceable state when they contain actively referenced pages or updated pages for which writes are pending.)

Message DSNB601I was issued to inform the operator of the error. This reason code and the buffer pool ID are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECTs: DSNB1GWB DSNIBMOC DSNIWKFD

System action: An SQLCODE -904 (resource not available) is returned to the user. The SVC dump and the SYS1.LOGREC recording are not requested.

Operator response: Notify the system programmer.

System programmer response: Reduce concurrent activity by reducing the number of DB2 threads, or, if necessary, increase the size of the failing buffer pool by using the ALTER BUFFERPOOL command.

00C200EA

Explanation: DB2 is unable to perform the drain function on an object (a table space, an index space, or a partition) because the object was held by other claimers and the drain request timed out waiting for the claim count to reach zero.

System action: If the problem was encountered by DB2 when trying to automatically recover a group buffer pool recovery pending (GRECP) object following the failure of a group buffer pool (GBP), then DB2 issues message DSNB350I or DSNB351I to the console with this reason code indicating that the object cannot be automatically recovered.

Otherwise, a 'resource not available' return and reason code are sent back to the requesting function. DB2 message DSNT500I may be sent to the console. The reason code and the object name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in the message.

System programmer response: Take one of these actions:

- Reevaluate the utility timeout factor on installation panel DSNTIPI and increase it, if necessary.
- Find the threads holding the object through the -DISPLAY DB CLAIMERS command on the object. Either terminate those threads or wait until no one holds the object. Then invoke the application again.

If DSNB350I or DSNB351I messages were issued, then after you take one of the actions above, recover the GRECP objects as indicated in the "System Programmer Response" for DSNB350I or DSNB351I.

00C200EB

Explanation: A data sharing group member is not able to perform a global drain request on an object (a table space, an index space, or a partition). One or more peer members in the group hold retained locks on the object. Message DSNT501I is sent to the console to report the condition.

System action: A 'resource not available' return code, reason code, and object name are sent back to the requesting function.

System programmer response: Use the DISPLAY DATABASE command with the LOCKS option to

display the member names owning the retained locks. You must restart those subsystems to remove the 'resource unavailable' condition.

Problem determination: This reason code is issued by the following CSECT: DSNB1DRA

00C200EC

Explanation: A member of a DB2 data sharing group was unable to perform a global drain request on an object (a table space, an index space, or a partition). One or more peer DB2s in the group failed to drain the object because some error occurred. Both the DB2 running the request and the peer DB2 send DB2 message DSNT500I to the console to report the problem.

System action: A 'resource not available' return code, reason code and object name are sent back to the requesting function.

Operator response: Notify the system programmer.

System programmer response: Retrieve the DSNT501I messages from the console and analyze the corresponding reason and error codes.

Problem determination: This reason code is issued by the following CSECT: DSNB1DRA

00C200ED

Explanation: DB2, in a data sharing environment, detected that the requested use of a type 1 index with a SUBPAGES value greater than 1 would have caused the index to become group buffer pool dependent. DB2 does not allow type 1 indexes with a SUBPAGES value greater than 1 to become group buffer pool dependent.

System action: The use of the index is not allowed.

User response: If the index is to be used in group buffer pool dependent mode, then either the index should be converted to a type 2 index or it should be converted to a type 1 index with SUBPAGES 1.

00C200EF

Explanation: DB2 is unable to open a necessary data set. The data set attributes stored in the DB2 catalog are not supported by the version of DFSMS that is currently running.

This reason code and the data set name are recorded in the SQLCA or in messages.

System action: A 'resource not available' code is returned to the user.

System programmer response: This data set cannot be opened unless this DB2 is running with DFSMS Version 1 Release 5 or a subsequent release. The data set must also be associated with an extended addressability data class.

00C200F0

Explanation: DB2 encountered an error on an IXLCACHE request while trying to write a page to the group buffer pool during physical lock (P-lock) negotiation.

System action: The requesting execution unit abends. The error is recorded to SYS1.LOGREC, but the dump is suppressed and the abend is retried in the functional recovery. Another group member, requesting the P-lock that caused the negotiation on this member, receives a resource not available code of 00C20252, and its P-lock request is denied.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB5SCM

00C200F1

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to unallocate a DB2 data set. An error was returned by the dynamic unallocation function that was invoked to unallocate a data set. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1CST

System action: A 'resource not available' code is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The unexpected dynamic unallocation reason code is saved in register 8. It may help determine the cause of the failure. Refer to the appropriate MVS publication for an explanation of the error code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200F2

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to close a DB2 data set. An error was returned by the media manager DISCONNECT function that was invoked to close a data set. This reason code and the data set name are recorded in the cursor table (CT) and in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1CST

System action: A 'resource not available' code is returned to the user. The SVC dump and the SYS1.LOGREC recording are requested.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The unexpected media manager disconnect reason code is saved in register 8 and may help determine the cause of the failure. Locate the corresponding IEC16II message in the operator console sheet, and refer to the appropriate MVS publication for assistance in determining the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 10, 12.

00C200F3

Explanation: DB2 is unable to obtain one of the following locks:

- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

The IRLM LOCK request detected a timeout error.

System action: A 'resource not available' code is returned to the user. This reason code and the data set name are recorded in the cursor table (CT) and are available to the user in the SQLCA or in messages.

User response: Resubmit the failing application.

Problem determination: This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK.

00C200F4

Explanation: DB2 is unable to obtain one of the following locks:

- SYSLGRNG or SYSLGRNX recording lock on a table space
- Group buffer pool dependent conversion lock on a page set or partition
- Group buffer pool start or stop lock
- ALTER BUFFERPOOL lock

The IRLM LOCK request detected an out-of-storage condition.

System action: A 'resource not available' code is returned to the user. This reason code is recorded in the cursor table (CT) and is available to the user in the SQLCA or in messages.

User response: Resubmit the failing application.

Problem determination: This abend reason code is issued by the following CSECTs: DSNB1SCR, DSNB1DLK

00C200F6

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to open a data set that is required to be accessed by the requesting function. The data set has been migrated by DFHSM and the data set must be recalled before being accessed. Since the RECALL(yes) option was selected by the installation, a recall for the migrated data set has been initiated. A recall was not complete after the amount of time specified in the RECALL option had elapsed.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages. The data set name and the reason code indicated are the last migrated data set requested. Other migrated data sets within the table space may exist. For each one that exists, a DSNT500I message containing the data set name and reason code has been sent to the console.

This abend reason code is issued by the following CSECT: DSNB1RST

System action: A 'resource not available' code is returned to the user. A DSNT500I message is sent to the console.

User response: After the data set has been restored, rerun the application program, transaction, or query. If necessary, contact the operator to find out the status of the migrated data set.

00C200F7

Explanation: The page found in the buffer is not the page requested by the buffer manager. The buffer manager detected the error by comparing the page number of the page returned with the requested page number. This error may be caused by one of the following:

- Either the VTOC or VVDS is damaged, causing multiple data sets to occupy the same extents on DASD.
- The page was altered incorrectly by a non-DB2 facility or a DB2 service aid.
- An internal DB2 error damaged the page. The recovery log will be required for problem determination.

This abend reason code is issued by the following CSECT: DSNB1GET

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
7	Address of the page buffer
8	Address of the page set block (PB)

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 12, 28, 29, 30.

00C200F8

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to perform the I/O operation on a data set. A physical I/O error was detected by the buffer manager I/O functions.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECTs: DSNB1GET DSNB5COM

System action: A 'resource not available' code is returned to the user. A DSNB224I message is issued, unless it has already been issued 10 times for the data set.

If the I/O is a write operation, or if the I/O is a read operation performed during restart or rollback, then the error page range of the data set is updated. A DSNU086E message is issued indicating the data set name and its corresponding I/O error page range, unless it has already been issued 10 times for the data set.

User response: Notify the system programmer. Invoke the application after the system programmer has corrected the error.

Operator response: Use the -DISPLAY DB command to obtain the error page range. Notify the system programmer.

System programmer response: The error page range can be located from the console sheet or with the -DISPLAY DB command. Correct the error pages with the recovery utility, and notify the user to invoke the application again. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 10, 12.

Check the MVS console log for an IOS error message indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for that message.

00C200F9

Explanation: DB2 is unable to open a data set that the requesting function must access. The data set was migrated by HSM and must be recalled before being accessed. DB2's attempt to initiate a recall of the migrated data set was unsuccessful.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages. The data set name and the reason code indicated are the last requested migrated data set. Other migrated data sets might exist. For each existing data set, message DSNT500I containing the data set name and reason code was sent to the console.

System action: A 'resource not available' code is returned to the user. A DSNT500I message is sent to the console.

User response: Issue the HSM command (HRECALL) to restore the migrated data set. Rerun your application program, transaction, or query after the data set is restored.

Problem determination: This abend reason code is issued by the following CSECT: DSNB1OST

00C200FA

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. A timeout error was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

00C200FB

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. An out-of-storage condition was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

00C200FC

Explanation: The buffer manager (BM) subcomponent of DB2 is unable to obtain an open lock to perform a physical open or close of a page set. A system error was detected by the IRLM LOCK request. The reason code and the database and page set names are recorded in the cursor table (CT). They are made available to the user in the SQLCA or in messages.

This abend reason code is issued by the following CSECT: DSNB1LCK

System action: A 'resource not available' code is returned to the user.

User response: Resubmit the failing application.

00C200FD

Explanation: The buffer manager is unable to perform the I/O operation on a data set due to an error on page's parity flag detected by the buffer manager's I/O function.

This abend reason code is issued by the following CSECT: DSNB1GET

System action: A 'resource not available' return code is returned to the user. The related reason code 00C200FD, the page number, the page set name, and the data base name in question are recorded in the cursor table (CT) and made available to the user in the SQLCA.

Operator response: Notify the system programmer.

System programmer response: The error page can be found via SQLCA. Correct the error pages with the recovery utility, and notify the user to invoke the application again.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for failure for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 10, 12.

00C200FE

Explanation: DB2 is unable to open a data set that the requesting function must access. The data set was migrated by DFHSM and must be recalled before being accessed. Since the RECALL(no) option was selected by the installation, recall for the migrated data set was not initiated.

This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages. The data set name and the reason code indicated are the last migrated data set requested. Other migrated data sets within the table space might exist. For each existing data set, message DSNT500I containing the data set name and reason code has been sent to the console.

System action: A 'resource not available' code is returned to the user. A DSNT500I message is sent to the console.

User response: Notify the system programmer. After the data set is restored, rerun the application program, transaction, or query.

System programmer response: Issue the DFHSM command (HRECALL) to restore the migrated data set.

Problem determination: This abend reason code is issued by the following CSECT: DSNB1OST

00C200FF

Explanation: An attempted open of a page set failed because DB2 has reached the MVS limit on concurrent open data sets.

This reason code is issued by the following CSECT: DSNB1OST

System action: A 'resource not available' (SQLCODE -904) is returned to the user and the requested open is not performed. This reason code and the data set name are recorded in the cursor table (CT) and made available to the user in the SQLCA. A DSNB207I message is displayed on the operator console. The SVC dump and the SYS1.LOGREC recording are not requested.

Operator response: Notify the system programmer.

System programmer response: Reduce the number of page sets that must be kept open by DB2 by limiting the amount of concurrent activity.

Problem determination: Collect the following diagnostic item from Appendix C, "Problem determination," on page 735: 1.

00C20101

Explanation: The sharing attribute is inconsistent between the header page of a data set and the DBD. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OPP

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: First determine

whether the database is shared, and whether it is owned by this system. This can be achieved by issuing a SELECT on the SYSIBM.SYSDATABASE catalog table, where the database name is the database you are checking, and by examining the ROSHARE column.

If the DB2 catalog indicates that it is a ROSHARE OWNER database, the problem can be corrected by the REPAIR utility or the -STOP DATABASE command. The -STOP DATABASE command will reformat the header page and make it consistent with the DBD.

If the database is ROSHARE READ on this system, then check the definition of the database on the owning system. If, on the owning system, the database is no longer defined as ROSHARE OWNER, then the table space or index should be dropped on the system on which the error was detected, since the database has been altered to nonshared by the owning system. However, if the database is defined as ROSHARE OWNER on the owning system, then issue a -STOP DATABASE with the SPACENAM parameter from the owning system, which will make the header page consistent with the owner's DBD, and force this change to DASD, making it available to other systems.

If it is a nonshared database, then the sharing attribute can only be corrected via the REPAIR utility.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20102

Explanation: A read-only system attempted to access an inconsistent data set. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OPP

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:

- Use the -DISPLAY DATABASE command to insure there is no exceptional state for this table space or index.
- Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20103

Explanation: DB2 is unable to access a data set because its system page is inaccessible. This reason code and the data set name are available to the user in the SQLCA or in messages.

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: Determine why the system page is inaccessible by examining any error messages that appeared on the console at the time of the error, or by issuing a -DISPLAY DATABASE command. Take the appropriate action to correct the situation.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20104

Explanation: DB2 is unable to access a shared data set because it was down leveled by a DSN1COPY job, or a REPAIR utility with REPLACE RESET specified. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OPP

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:

- Use the -DISPLAY DATABASE command to insure there is no exceptional state for this table space or index.
- Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20105

Explanation: The page set creation timestamp is inconsistent between the header page and the DBD. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OPP

System action: A "resource not available" is returned to the user.

User response: Notify the system programmer.

System programmer response: First determine whether the database is shared, and whether it is owned by this system. This can be achieved by issuing a SELECT on the SYSIBM.SYSDATABASE catalog table, where the database name is the database you are checking, and examining the ROSHARE column.

For a data set in a ROSHARE OWNER database, if the failure occurs on a CREATE TABLESPACE or CREATE INDEX, the timestamp mismatch indicates that the table space or index was previously dropped, but DB2 was unable to delete the data set. In this case, the data set must be deleted using AMS DELETE CLUSTER before the CREATE can take place.

For a data set in a ROSHARE OWNER database at any time other than CREATE TABLESPACE or CREATE INDEX, the inconsistent timestamp can be corrected by first stopping the table space or index via the -STOP DATABASE command with the SPACENAM parameter, and then issuing the -START DATABASE command to start it. The -STOP DATABASE command will reformat the header page using the information retrieved from the DBD.

For a data set in a ROSHARE READ database, a timestamp mismatch indicates that the table space or index has been dropped and re-created on the owning system, and must also be dropped and re-created on this system.

For a data set in a nonshared database, the timestamp value in the header page can only be corrected via the REPAIR utility.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20106

Explanation: An update was attempted on a database defined as ROSHARE READ. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECTs: DSNB1SWS DSNB5FOR.

System action: A "resource not available" code is returned to the user.

User response: An update operation is not allowed in this database. Check to insure that the target of the update was correct, and also that the database is defined as ROSHARE READ. If the update should occur, then it should be issued on the system in which the database was defined as ROSHARE OWNER.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1,

00C20107

Explanation: An update was attempted in a ROSHARE OWNER database, but the data set was opened in RO mode. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECTs: DSNB1SWS DSNB5FOR.

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: Issue the -STOP DATABASE command with the SPACENAM parameter to explicitly stop this table space/index space and then issue the -START DATABASE ACCESS(RW) command.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20108

Explanation: An object in a ROSHARE OWNER database cannot be accessed. At least one system with the database defined as ROSHARE READ is still accessing it. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OST

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: Insure that there are no systems on which the database is defined as ROSHARE READ that are still accessing the database. Issue the -STOP DATABASE command with the SPACENAM parameter on the ROSHARE READ systems that are accessing the database.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C20109

Explanation: An object in a ROSHARE READ database cannot be accessed. The system with the database defined as ROSHARE OWNER still has RW access. This reason code and the data set name are made available to the user in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1OST

System action: A "resource not available" code is returned to the user.

User response: Notify the system programmer.

System programmer response: On the system in which the database is defined as ROSHARE OWNER, perform the following tasks:

- Use the -DISPLAY DATABASE command to insure there are no exceptional states for this table space or index.
- Issue the -STOP DATABASE command with the SPACENAM parameter to stop this table space or index.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00C2010A

Explanation: DB2 is attempting to open a shared data set in a ROSHARE READ database, but the system cannot locate the data set. The table space or index might already be dropped from the owning system.

System action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA or in messages.

User response: Notify the system programmer.

System programmer response: Run IDCAMS LISTCAT to verify the existence of this data set. Verify whether the associated table space or index exists in the database defined as ROSHARE OWNER. If not, issue DROP TABLESPACE or INDEX on all systems in which the database is defined as ROSHARE READ.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

This reason code is issued by the following CSECT: DSNB1OST

00C2010B

Explanation: DB2 is attempting to open a shared data set in a database defined for ROSHARE, but the data set cannot be accessed because it is not defined with SHAREOPTIONS(1,3).

System action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA or in messages.

User response: Notify the system programmer.

System programmer response: Ensure that this data set belongs to a shared database, and check the SHAREOPTIONS using IDCAMS LISTCAT. If so, use AMS ALTER SHAREOPTIONS to alter the data set to

SHAREOPTIONS(1,3), and resubmit the failing application.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1.

This reason code is issued by the following CSECT: DSNB1OST

00C2010C

Explanation: DB2 was unable to update the high-used RBA in the VSAM volume data set (VVDS) when it was ready to close a data set. VVDS must be updated to reflect data loaded by a RECOVER, LOAD, or REORG utility job. Message DSNB200I is issued to the console with the VSAM media manager return codes.

This reason code and the data set name are recorded in the cursor table (CT) and made available in the SQLCA or in messages.

This reason code is issued by the following CSECT: DSNB1CST

System action: A ‘resource not available’ code is returned to the user. A DSNB200I message is issued to the console. DB2 continues to close the data set.

User response: Contact the system programmer. Restart or rerun the RECOVER, LOAD, or REORG job after the system programmer corrects the error.

System programmer response: Refer to system messages IEC161I and DB2 message DSNB200A for assistance in determining the cause of the error. Correct the condition, and notify the user to reinvoke the application.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 10, 11.

00C2010D

Explanation: DB2 was unable to open a required data set because an unexpected level ID was encountered.

The reason code and the data set name are made available in the SQLCA or in messages.

System action: A ‘resource unavailable’ code is returned to the user. Message DSNB232I is issued to the console if it was not already issued for the data set. DB2 failed to open the data set.

Operator response: Notify the system programmer.

System programmer response: Refer to message DSNB232I for help in determining the cause of the error. Run the utility REPAIR LEVELID or recover the table space or index, and then tell the user to rerun the application.

Problem determination: This reason code is issued by the following CSECT: DSNB1OPD

00C2010E

Explanation: This is a DB2 internal error. DB2 encountered a problem while trying to add a page to the logical page list (LPL).

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1LPL

00C2010F

Explanation: This dump provides assistance for diagnosing the page latch time-out problem after 00C20031 is returned as the reason code for ‘resource not available’.

System action: The requesting execution unit is abended to take a diagnostic dump then recovered to return an SQLCODE -904 (resource not available) to the user with the 00C20031 reason code. The resource name is also provided.

User response: Contact the system programmer to determine why the resource is unavailable. Print the SYS1.LOGREC and the SVC dump.

This reason code is issued by the following CSECTs: DSNB1LTX, DSNB1LTS.

00C20110

Explanation: DB2 cannot access a table space, index, or partition because the highest formatted page (as recorded by DB2 in the header page) is higher than that derived from the VSAM high-used RBA.

The reason code and the data set name for this error are available in the SQLCA or in messages.

System action: DB2 returns a ‘resource unavailable’ code to the user.

System programmer response: To enable access to the object, take one of the following actions:

- Restore the object to a consistent state with the RECOVER or REBUILD utility, DSN1COPY, or some other means.
- Replace the data using the LOAD REPLACE utility.
- Allow access to the data in its current state. Use the REPAIR LEVELID utility to reset the high-used page number in the header page to be consistent with the VSAM high-used RBA. This may result in inconsistent data.

Problem determination: Determine the high-formatted

page number in the header page by running DSN1PRNT with the FORMAT option, and checking the value of HPGHPREF.

You can also determine the VSAM high-used RBA by running an IDCAMS LISTCAT on the dataset.

00C20111

Explanation: DB2 attempted to access a striped data set with a page size of 8 KB, 16 KB, or 32 KB. The data set is defined with a 4 KB control interval (CI) size. DB2 does not allow this because partial writes cannot always be detected.

System action: SQLCODE -904 is returned. The SQLCA contains a resource-not-available reason code and the data set name.

User response: Convert the control interval size of the associated table space from 4 KB to a control interval size that matches the page size. The REORG TABLESPACE, LOAD REPLACE, or RECOVER utility can be used to convert the control interval size for the table space.

System programmer response: Ensure that the data set is defined with a control interval size that matches its page size.

Problem determination: Run access method services LISTCAT to determine the data set attributes.

00C20112

Explanation: An attempt was made to access a DB2 data set which was defined with incompatible Control Interval (CI) size. A compatible CI size is either 4K or the page size.

System action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA.

User response: Convert the data set attribute 'control interval size' of the associated table space from 4K CI into the one matching the page size. DB2 Utilities REORG table space, LOAD with REPLACE, and RECOVER can be used to convert the table space.

System programmer response: Ensure that the data set is defined with the compatible CI size.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

00C20113

Explanation: DB2 has reached the DB2 limit for concurrent open data sets. OPEN fails when both of the following conditions are true:

- The number of concurrent open datasets exceed the DB2 installation parameter DSMAX.

- The number of concurrent open datasets exceed the DB2 installation parameter 32,768 open datasets.

If running in z/OS Version 1 Release 6 and earlier, no more than 65,041 open datasets are allowed.

System action: SQLCODE -904 is returned to the user and the requested open is not performed. This reason code and the dataset name are recorded in the SQLCA. An SVC dump and SYS1.LOGREC recording are not requested.

Operator response: Notify the system programmer.

System programmer response: Take one of the following actions:

- Reduce the number of data sets that must be kept open by DB2 by limiting the amount of concurrent activity.
- Increase DSMAX, subject to the 65,041 open dataset limit in z/OS Version 1 Release 6 and earlier.

00C20200

Explanation: DB2 was unable to open a required index data set because the index was formatted incorrectly. For example, it may have been formatted as a Type 1 index when the DB2 catalog indicates that it should be Type 2.

The reason code and index data set name are made available in the SQL communication area or in related messages.

System action: A 'resource unavailable' code is returned to the user.

Operator response: Notify the system programmer.

System programmer response: Use the RECOVER utility to restore the index to a consistent state.

Problem determination: This reason code is issued by the following CSECT: DSNB1OPP.

00C20203

Explanation: DB2 cannot connect to a group buffer pool. The group buffer pool is not usable by this release of DB2. This DB2 subsystem is a member of a data sharing group containing DB2 members of different release levels. A later release level of DB2 specified an option for this group buffer pool that is not supported by the previous DB2 releases. The presence of this option makes the group buffer pool inaccessible to the previous DB2 releases.

System action: DB2 takes the following actions:

- Unless already issued, message DSNB301E is sent to the console with this reason code to indicate that a connect failure occurred.
- SQLCODE -904 (resource not available) is returned to the user with this reason code. The resource type and resource name are also returned.

User response: Contact the system programmer.

System programmer response: Do one of the following:

- Issue the `-ALTER GROUPBUFFERPOOL` command from a DB2 that is at the later release level to remove the new option so that previous release levels of DB2 can access the group buffer pool.
- Migrate the previous release levels to the current release.

Problem determination: This reason code is issued by the following CSECT: DSNB1GC0

00C20204

Explanation: DB2 is unable to connect to a group buffer pool because MVS detected a problem on the IXLCONN request.

System action: SQLCODE -904 (resource not available) and the group buffer pool name are returned to the user. Unless already issued for the IXLCONN code, message DSNB301E, which contains this reason code and the IXLCONN code, is issued to the console.

User response: Contact the system programmer.

Problem determination: The reason code returned by the IXLCONN request is given in message DSNB301E.

If the connection problem was caused by insufficient storage in a coupling facility, tell the MVS system administrator to alleviate the storage constraint problem by making additional storage available to the involved coupling facility, or by changing the active MVS CFRM administrative policy to redefine the coupling facility structure to a different coupling facility. Another alternative is to have the database administrator reassign those inter-DB2 sharing page sets to a different DB2 buffer pool.

Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLCONN reason code.

This abend reason code is issued by the following CSECT: DSNB1GC1

00C20205

Explanation: DB2 is unable to access a group buffer pool because of a damage assessment pending (DAP) status against the group buffer pool.

System action: The action DB2 takes depends on the situation, as follows:

- If DB2 tries to read a page from the group buffer pool and finds that the group buffer pool is in DAP status, the following actions are taken:
 - SQLCODE -904 (resource not available) is returned to the user with this reason code. The name of the group buffer pool is also returned.

- If DB2 tries to read a page from the group buffer pool for rollback, backout, or restart and finds that the group buffer pool is in DAP status, the following actions are taken:
 - The page is added to the logical page list (LPL) for the page set.
 - Message DSNB250E is issued to the console with this reason code.
- If DB2 tries to write a page to the group buffer pool and finds that the group buffer pool is in DAP status, the following actions are taken:
 - The page is added to the logical page list (LPL) for the page set.
 - Message DSNB250E is issued to the console with this reason code.
- If DB2 detects DAP status when it tries to connect the group buffer pool, or if DB2 detects a group buffer pool version ID mismatch after a successful connection, the following actions are taken:
 - The damage assessment process is triggered for this group buffer pool.
 - SQLCODE -904 (resource not available) is returned to the user with this reason code. The name of the group buffer pool is also returned.
 - Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

User response: Contact the system programmer.

System programmer response: Message DSNB304I is issued when the group buffer pool is entered into DAP state and message DSNB305I is issued when the DAP status is cleared. During the damage assessment process, DB2 must determine which page sets or partitions might have had changed pages in the failed coupling facility structure and thus need to be recovered. Each page set/partition fitting this criteria is entered into 'group buffer pool REBUILD pending (GRECP)' status. A page set/partition in GRECP status remains unavailable for read or update until it is recovered.

Problem determination: This reason code is issued by the following CSECT: DSNB1GC0

00C20206

Explanation: An attempt was made to access a page which is currently in the logical page list (LPL). LPL pages are unavailable until recovery on the affected page set completes.

System action: SQLCODE -904 (resource not available) is returned to the user with this reason code. The resource name is also given.

User response: Contact the system programmer.

System programmer response: For those page sets in the LPL, use the RECOVER utility or the `-START DATABASE` command.

Problem determination: This reason code is issued by the following CSECTs: DSNB1LPL DSNB1GET DSNB1SWS

00C20207

Explanation: DB2 is unable to connect to a group buffer pool because of a DB2 system error during connect processing. This is an internal DB2 problem.

System action: A SYS1.LOGREC entry is produced and an SVC dump is requested for the original abend which caused this condition. After doing resource and latch recovery, DB2 retries the abend if retry is allowed. SQLCODE -904 (resource not available) is returned to the user with this reason code and the group buffer pool name. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1GC1

00C20208

Explanation: The user attempted to access a group-buffer-pool-dependent page set or partition. However, the DB2 member was unable to connect to the group buffer pool because there was not enough hardware system area (HSA) storage in which to allocate the local cache vector (LCV).

System action: DB2 disconnects from the group buffer pool and issues message DSNB301E with this reason code, if it has not yet been issued. DSNB301E is usually preceded by a DSNB306I message.

SQLCODE -904 is returned to the user with this reason code.

User response: Contact the system programmer.

System programmer response: Refer to message DSNB306I.

Problem determination:

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1,

This reason code is issued by the following CSECT: DSNB1GC1

00C20210

Explanation: An attempt was made to access a page set or partition which is currently in group buffer pool recovery pending (GRECP) status.

System action: SQLCODE -904 (resource not available) is returned with this reason code. The resource name is also given. GRECP page sets or partitions remain

unavailable until recovery against the affected page set or partition is complete.

User response: Contact the system programmer to determine when the resource will be available for use.

System programmer response: Use the START DATABASE command with the ACCESS RW option to recover the page set or partition and remove the GRECP status. In extreme or unusual circumstances, you can also remove GRECP status as follows:

- RECOVER, either to currency, or to a prior point in time
- REPAIR SET with NORCVRPEND
- LOAD REPLACE
- START DATABASE with ACCESS FORCE (Not recommended. Specifying this option can result in inconsistent data.)

Problem determination: This reason code is issued by the following CSECT: DSNB1OPP

00C20211

Explanation: DB2 is unable to access a group buffer pool because the group buffer pool is rebuilding, and the attempt to access the group buffer pool timed out waiting for the rebuild to complete.

System action: 'Resource not available' return and reason codes are sent back to the requesting function.

User response: Resubmit the request.

System programmer response: Use the DB2 DISPLAY GROUPBUFFERPOOL command or the MVS D XCFSTR command to monitor the status of the rebuild. Also, monitor the status messages that the DB2 members issue as the rebuild progresses (refer to messages DSNB331I, DSNB332I, and DSNB338I). If the rebuild is not progressing satisfactorily, you can use the MVS command SETXCF,STOP,REBUILD to stop the rebuild.

00C20220

Explanation: While DB2 was accessing a group buffer pool, MVS detected an environmental error during an IXLCACHE request from DB2.

System action: The requesting execution unit abends.

Problem determination: The IXLCACHE reason code saved in register 8 can help determine the cause of the error. Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLCACHE reason code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

DSNB5BPL DSNB5GGP DSNB5PCO DSNB5SCM
DSNB5SCO

00C20221

Explanation: While accessing a group buffer pool, DB2 received an unexpected error from MVS, which detected an invalid parameter on an IXLCACHE request from DB2. This code usually indicates a DB2 internal problem. However, the problem can result from errors in other products.

System action: The requesting execution unit abends.

Problem determination: The IXLCACHE reason code saved in register 8 can help determine the cause of the error. Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLCACHE reason code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

DSNB5BPL DSNB5GGP DSNB5PCO DSNB5SCM
DSNB5SCO

00C20222

Explanation: While accessing a page in a buffer pool, DB2 received an unexpected error from MVS, which detected an invalid parameter on an IXLVECTR request from DB2. This code usually indicates a DB2 internal problem. However, the problem can result from errors in other products.

System action: The requesting execution unit abends.

Problem determination: See the IXLVECTR return code in register 8 to help determine the cause of the error. Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLVECTR reason code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

DSNB1LTS DSNB1LTX DSNB1RSS

00C20223

Explanation: DB2 encountered an error while invoking the IXLCACHE macro.

System action: The requesting execution unit abends. DB2 terminates abnormally causing MVS to reset the castout locks.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB5PCO

00C20224

Explanation: DB2 received an unexpected return and reason code from the MVS IXLFCOMP macro for a group buffer pool.

System action: DB2 abends the agent and requests a dump. If the group buffer pool is in duplex mode, then DB2 may stop duplexing for the group buffer pool in response to this error.

System programmer response: If the group buffer pool was duplexed and is entered back into simplex mode as a result of this error, and duplexing is not automatically reestablished, then use the MVS SETXCF command to enter the group buffer pool back into duplex mode if duplexing is desired. If DUPLEX(ENABLED) is specified in the active CFRM policy for the group buffer pool, then the system attempts to automatically reestablish duplexing for the structure.

Problem determination: See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLREBLD reason code.

Refer to Section 3 of *DB2 Diagnosis Guide and Reference* for more information on identifying and reporting the problem.

00C20230

Explanation: DB2 could not establish duplexing for a group buffer pool because a coupling facility with CFLEVEL = 5 functionality was not available in which to allocate the secondary group buffer pool.

System action: The group buffer pool is entered back into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System programmer response: Upgrade the coupling facilities to CFLEVEL = 5 or above. Or change the PREFLIST for the group buffer pool to name only coupling facilities that have CFLEVEL = 5 functionality.

00C20231

Explanation: DB2 could not establish duplexing for a group buffer pool because the primary structure instance of that group buffer pool is allocated in a coupling facility that does not have CFLEVEL = 5 functionality.

System action: The group buffer pool is entered back

into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System programmer response: Upgrade the coupling facilities to CFLEVER = 5 or above. Or change the PREFLIST for the group buffer pool to name only coupling facilities that have CFLEVER = 5 functionality.

00C20232

Explanation: DB2 could not establish duplexing for a group buffer pool because the group buffer pool is defined with GBPCACHE(NO). DB2 does not allow GBPCACHE(NO) group buffer pools to be duplexed.

System action: The group buffer pool is entered back into simplex mode. Message DSNB741I is issued indicating the reason code as the reason why the process to establish duplexing failed.

System programmer response: If duplexing is desired for the group buffer pool, issue the DB2 ALTER GROUPBUFFERPOOL command to specify GBPCACHE(YES) before trying to initiate duplexing.

00C20233

Explanation: DB2 detected a version id mismatch for the secondary group buffer pool when connecting to a duplexing group buffer pool. The version id mismatch indicates that the process to establish duplexing completed prematurely (for example due to a system failure), and thus the secondary group buffer pool is not in synch with the primary.

System action: DB2 stops duplexing for the group buffer pool. The group buffer pool is entered back into simplex mode. Message DSNB743I is issued indicating the reason code as the reason why the process to establish duplexing was stopped. If DUPLEX(AUTO) is specified for the group buffer pool in the active CFRM policy, then duplexing is automatically reinitiated.

System programmer response: If duplexing is desired for the group buffer pool and duplexing is not automatically reinitiated, then use the MVS SETXCF command to initiate duplexing for the group buffer pool.

00C20251

Explanation: DB2 is unable to obtain a physical lock (P-lock) because of an out-of-storage condition detected by IRLM.

System action: SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Operator response: Notify the system programmer.

System programmer response: IRLM exhausted the

amount of virtual storage available to it to represent locks. Refer to code 00C90092 for methods to reduce the storage needed by IRLM.

Problem determination: This reason code is issued by the following CSECT: DSNB1PER

00C20252

Explanation: DB2 is unable to obtain a physical lock (P-lock). Another DB2 holds the P-lock in an incompatible state, but is unable to downgrade because it does not have access to the corresponding group buffer pool.

System action: SQLCODE -904 (resource not available) is returned to the user. The other DB2 produces additional diagnostic information in the form of messages, trace records, SYS1.LOGREC entries, and/or an SVC dump. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem determination: This reason code is issued by the following CSECT: DSNB1PER

00C20254

Explanation: DB2 is unable to acquire or upgrade a physical lock (P-lock) because of an incompatible retained lock held by one or more other DB2 subsystems in the DB2 data sharing group. Retained locks are locks that persist across DB2 abnormal terminations.

System action: SQLCODE -904 is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

System programmer response: Use the -DISPLAY DATABASE command to display the DB2 member names owning the retained locks. You must restart those subsystems to remove the 'resource unavailable' condition. To show the status of the DBMS and IRLM subsystems, you can use the following command:

```
F irImlproc,STATUS,ALLD
```

00C20255

Explanation: DB2 is unable to obtain a physical lock (P-lock). This is a DB2 internal error.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. The other DB2 produces additional diagnostic information in the form of messages, trace records, SYS1.LOGREC entries and/or an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT:
DSNB1PER

00C20256

Explanation: DB2 is unable to obtain a physical lock (P-lock). This is a DB2 internal error.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. The other DB2 produces SYS1.LOGREC entries, and, depending on the type of abend, might also produce an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT:
DSNB1PER

00C20257

Explanation: DB2 is unable to obtain a physical lock (P-lock) because of an 'out of record list storage' condition that IRLM detected. The record list is that part of the coupling facility lock structure that IRLM uses to record 'modify locks' (those locks that would be retained in case of a failure).

System action: SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

System programmer response: Allocate a larger coupling facility lock structure by using the MVS SETXCF,REBUILD command. Make sure that the active MVS CFRM policy specifies a larger structure size for the IRLM coupling facility lock structure before you initiate the rebuild. You can use the MVS SETXCF,STOP,POLICY and SETXCF,START,POLICY commands to change the active MVS CFRM policy. If lock size is not already at the current POLICY maximum size, you can increase lock size with the SETXCF START, ALTER, STRNAME=*lock_structure*, SIZE=*new_size* command.

00C20258

Explanation: DB2 is not able to obtain a physical lock (P-lock) until a peer member restarts. Another DB2 holds the P-lock in an incompatible state but cannot downgrade until it completes its restart.

System action: SQLCODE -904 (resource not available) is returned to the user. This reason code and the resource name are made available to the user in the SQLCA.

User response: Resubmit the failing application. The P-lock becomes available after the peer member

completes its restart processing.

Problem determination: This reason code is issued by the following CSECT: DSNB1PER

00C20259

Explanation: This is a DB2 internal error. This reason code and the group buffer pool name are recorded in the cursor table (CT) and made available to the user in the SQLCA or in messages.

System action: A 'resource not available' code is returned to the user. Abend status is recorded in SYS1.LOGREC.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECT: DSNB1SCR

00C2025A

Explanation: DB2 encountered an unexpected error from IRLM while trying to acquire a global lock for MBA (multiple buffer pool) object.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested. Collect messages DSNT376I, DSNT500I, and DSNT501I for further diagnosis.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1BSD, DSNB1GIO, DSNB1PM2, DSNB1PMT

00C2025B

Explanation: DB2 encountered an unexpected error while trying to read from the shared communications area (SCA) for MBA (multiple buffer pool) object.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNB1BSD, DSNB1GIO, DSNB1PMT

00C2025C

Explanation: DB2 encountered an unexpected error while trying to write to the shared communications area (SCA) for MBA (multiple buffer pool) object.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1BSD, DSNB1GIO, DSNB1PM2, DSNB1PMT

00C20260

Explanation: This is a DB2 internal error. Castout was unsuccessful because DB2 lost connectivity to the group buffer pool.

System action: A 'resource not available' code is returned to the user.

User response: Notify the system programmer.

System programmer response: Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB5PCO

00C20261

Explanation: This is a DB2 internal error. Castout was unsuccessful due to a group buffer pool structure failure.

System action: A 'resource not available' code is returned to the user.

User response: Notify the system programmer.

System programmer response: Establish this DB2's connectivity to the group buffer pool before allowing operations that reference this group buffer pool.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB5PCO

00C20262

Explanation: This is a DB2 internal error. Castout was unsuccessful due to errors in writing a page to DASD.

System action: A 'resource not available' code is returned to the user.

User response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECT: DSNB5PCO

00C20263

Explanation: This is a DB2 internal error. Castout was unsuccessful due to an unexpected error.

System action: A 'resource not available' code is returned to the user. An SVC dump and the SYS1.LOGREC recording were requested.

User response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECT: DSNB5PCO

00C20264

Explanation: DB2 is unable to acquire or upgrade a physical lock (P-lock) because at least one other DB2 subsystem in the data sharing group is holding an incompatible retained lock. The amount of time this DB2 can wait for a locked resource was exceeded. This reason code is only issued if the RETLWAIT installation parameter in DSN6SPRM is set to 'YES'. If RETLWAIT is set to 'NO' (this is the default), then any IRLM lock that conflicts with a retained lock will not wait, but instead will be immediately rejected (see reason code 00C20254).

System action: An SQLCODE -904, -911, -913 or -923 is issued, and message DSNT501I is issued. Also, message DSNT378I is issued.

System programmer response: Refer to the 'System Programmer Response' in message DSNT378I.

Problem determination: This reason code is issued by the following CSECT: DSNB1PER

00C20267

Explanation: DB2 is unable to recover GRECP status for a table space or index because one or more sharing group members could not perform a global drain request on the object.

System action: A DB2 message of DSNB350 or DSNB351 is issued.

User response: Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

System programmer response: Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

00C20268

Explanation: DB2 is unable to recover GRECP status for a table space or index because one or more sharing group members could not perform a global drain request on the object. One or more peer DB2s in the group failed to drain the object because some error occurred.

System action: A DB2 message of DSNB350 or DSNB351 is issued.

User response: Issue a START DB command to explicitly recover the page set from GRECP/LPL status.

System programmer response: Refer to the 'System Programmer Response' in message DSNB350 or DSNB351.

00C20269

Explanation: An application or utility is attempting to access DB2 data, but this is not allowed because DB2 was started in System Recover Pending mode. When DB2 is started in System Recover Pending mode, nothing other than the Restore System utility is allowed to access DB2 data.

System action: The application fails with a "resource unavailable" condition.

System programmer response: The application cannot be run while DB2 is in System Recover Pending mode.

00C202A1

Explanation: DB2 encountered an unexpected error while trying to read from or write to the shared communications area (SCA).

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GBS

00C202A2

Explanation: MVS returned an unexpected error from an IXLDISC request to disconnect a group buffer pool.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested. The IXLDISC reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump.

System programmer response: Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLDISC reason code.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GDI

00C202A3

Explanation: MVS returned an unexpected error from an IXLFORCE request to deallocate a group buffer pool.

System action: A SYS1.LOGREC entry is written and an SVC dump is requested. The IXLFORCE reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump.

System programmer response: Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLFORCE reason code.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GDI

00C202A4

Explanation: MVS detected an error on an IXLCONN request from DB2.

System action: A SYS1.LOGREC entry is written and an SVC dump is requested. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console. The IXLCONN reason code is saved in register 8 for SYS1.LOGREC recording and the SVC dump. This reason code and the group buffer pool name are returned to the user in the SQLCA.

System programmer response: Refer to *MVS/ESA Programming: Sysplex Services Reference* for the MVS IXLCONN reason code.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference*

for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GC1

00C202A5

Explanation: The cache coupling facility structure attributes passed back by MVS on an IXLCONN request were incorrect.

System action: A SYS1.LOGREC entry is written. The newly-connected group buffer pool is disconnected. If this is a non-rebuild connect then message DSNB301E, which contains this reason code, is issued to the console (unless it has already been issued). In the message this reason code and the group buffer pool name are returned to the user in the SQLCA. If this is a rebuild connect, then message DSNB330E, which contains this reason code, is issued to the console and this reason code is used to stop the rebuild.

Problem determination: Check the SYS1.LOGREC variable recording area (VRA) for the following information:

- VRARRK30 - Error mask, set as follows:
 - If bit X'40' is set, DB2 specified a structure disposition of KEEP, but the structure was not allocated this way.
 - If bit X'20' is set, the data element size was not allocated as DB2 requested. VRARRK31 contains the requested data element size, and VRARRK32 contains the allocated data element size.
 - If bit X'10' is set, the allocated vector was not long enough to cover the corresponding buffer pool. VRARRK31 contains the requested vector length, and VRARRK32 contains the allocated vector length.

This abend reason code is issued by the following CSECT: DSNB1GC1

00C202A6

Explanation: This is a DB2 internal error. Unless already issued, message DSNB301E, which contains this reason code, is issued to the console.

System action: A SYS1.LOGREC entry is written and an SVC dump is requested. The newly-connected group buffer pool is disconnected. This reason code and the group buffer pool name are returned to the user in the SQLCA.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1GC1

00C202A7

Explanation: While processing an ALTER GROUPBUFFERPOOL command request, DB2 encountered an unexpected return code from the MVS IXCQUERY service.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written. An SVC dump is requested if it appears to be a DB2 problem (return code 8 from IXCQUERY). Command processing is terminated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1AGB

00C202AA

Explanation: An error occurred in IRLM on a physical lock (P-lock) or change request from DB2. This a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. SQLCODE -904 is issued. This reason code and the resource name are returned in the SQLCA.

System programmer response: Examine SYS1.LOGREC for a previous error related to IRLM.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPL (mapped by DXRRPLPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2

- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PER

00C202AB

Explanation: The IRLM UNLOCK request returned an error code when DB2 attempted to release a physical lock (P-lock). This is a DB2 internal error.

System action: The requesting execution unit abends. The SVC dump and SYS1.LOGREC recording are requested.

User response: Resubmit the failing application.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPL (mapped by DXRRLPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PER

00C202AC

Explanation: There was an error during physical lock (P-lock) negotiation. This is a DB2 internal error.

System action: An SVC dump and SYS1.LOGREC recording are requested. A 'resource unavailable' condition is returned to the P-lock requester that caused the conflict and the subsequent negotiation.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPL (mapped by DXRRLPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

00C202AD

Explanation: DB2 could not start even one castout process. A probable cause is that no virtual storage is available to acquire private buffers for the castout process.

System action: The requesting execution unit abends and DB2 terminates abnormally.

System programmer response: Restart DB2 after increasing the REGION parameter value on the *ssnmDBM1* startup procedure to get more virtual storage.

Problem determination: This abend reason code is issued by the following CSECT: DSNB5PCO

00C202AE

Explanation: IRLM returned an invalid cached state on a physical lock (P-lock) request from DB2. This is an internal error.

System action: SQLCODE -904 is issued. A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: Examine SYS1.LOGREC for a preceding error related to IRLM.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPL (mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PLK

00C202AF

Explanation: There was an incompatible physical lock (P-lock) held. This is a DB2 internal error.

System action: An SVC dump and SYS1.LOGREC recording are requested. A 'resource unavailable' condition is returned to the P-lock requester that caused the conflict and the subsequent negotiation.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPL

(mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

00C202B0

Explanation: This is a DB2 internal error.

System action: An SVC dump and SYS1.LOGREC recording are requested. A 'resource unavailable' condition is returned to the physical lock (P-lock) requester that caused the conflict and the subsequent negotiation.

User response: Resubmit the failing application.

System programmer response: Request the SYS1.LOGREC and the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, and VRARRK33.

VRARRK33 records information from the RLPL (mapped by DXRRLPPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

This abend reason code is issued by the following CSECT: DSNB1PPP

00C202B1

Explanation: An error occurred during physical (P-lock) negotiation. This is a DB2 internal error.

System action: An SQLCODE -904 is issued. A record is written to SYS1.LOGREC and an SVC dump is requested. This reason code and the resource name are returned in the SQLCA.

System programmer response: Examine

SYS1.LOGREC for a previous error related to IRLM.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields in the VRA for this code are: VRARRK13, VRARRK14, VRARRK15, VRARRK30, and VRARRK33.

The information recorded with VRARRK30 is mapped as follows:

- IRLM return code (4 bytes)
- IRLM reason code (4 bytes)
- IRLM function code (1 byte)
- Lock state (1 byte)
- Flags from RLPLFLG1 (1 byte)
- Flags from RLPLFLG4 (1 byte)
- Returned cached state (1 byte)
- Unused (1 byte)
- P-lock exit reason code (2 bytes)

VRARRK33 records information from the RLPL (mapped by DXRRPLPL) and is mapped as follows:

- RLPHSTAT (1 byte): Current held state of the P-lock by this DB2
- RLPCCSTA (1 byte): New cached state of the P-lock for this DB2
- RLPRSTAT (1 byte): Requested state of the P-lock by the other DB2 that is in conflict with the state held by this DB2
- Unused (1 byte)
- RLPWUID (8 bytes): Owning work unit

Thisabend reason code is issued by the following CSECT: DSNB1PER

00C202B2

Explanation: DB2 could not obtain a page set or partition physical lock (P-lock).

System action: A 'resource unavailable' condition is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

System programmer response: This problem might be caused by having multiple DB2 release levels in the DB2 data sharing group.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Thisabend reason code is issued by the following CSECTs: DSNB1PPP, DSNB1PPG.

00C202B3

Explanation: This is a DB2 internal error. The execution unit encountered an error while doing damage assessment for a group buffer pool.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECTs: DSNB1DAO

00C202B4

Explanation: This is a DB2 internal error. The execution unit received an error return code while doing damage assessment for a group buffer pool.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECTs: DSNB1CPX, DSNB1GC0, DSNB1GC1

00C202B5

Explanation: This is a DB2 internal error. The execution unit received an error return code while doing damage assessment for a group buffer pool.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECTs: DSNB1GC0, DSNB1GC1

00C202B6

Explanation: This is a DB2 internal error. The execution unit received an error return code while trying to translate the DB2 member name to a member ID.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECTs: DSNB1DA2

00C202B7

Explanation: This is a DB2 internal error. An unexpected error occurred during recovery processing from a group buffer pool link failure.

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This abend reason code is issued by the following CSECT: DSNB1LNK

00C202C0

Explanation: DB2 timed out waiting for the use count on a group buffer pool to reach zero during rebuild quiesce processing for the group buffer pool. This is a DB2 internal problem.

System action: The DB2 system agent that is processing the rebuild abends and takes a dump. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

00C202C1

Explanation: DB2 encountered a problem trying to connect to the new group buffer pool coupling facility structure while trying to rebuild the group buffer pool.

System action: A dump may or may not be taken depending on the nature of the error. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

Problem determination: Check the console log for previous error messages (for example, DSNB330E or DSNB306I) to determine why DB2 could not connect to the new group buffer pool structure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1RBC

00C202C2

Explanation: DB2 received an unexpected return and reason code from the MVS IXLREBLD macro during rebuild processing for a group buffer pool.

System action: The DB2 system agent that is processing the rebuild abends and takes a dump. The rebuild is stopped. Message DSNB340I will be issued indicating that the IXLREBLD request failed and message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

Problem determination: See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLREBLD reason code.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

00C202C3

Explanation: DB2 received an unexpected return and reason code from the MVS IXLEERSP macro during rebuild processing for a group buffer pool.

System action: The DB2 system agent that is processing the rebuild abends and takes a dump. The rebuild is stopped. Message DSNB340I is issued indicating that the IXLEERSP request failed and message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

Problem determination: See *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the MVS IXLEERSP reason code.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

00C202C4

Explanation: DB2 detected that the number of changed pages in the new structure is greater than the number of changed pages in the original structure at the time that the rebuild of the group buffer pool was about to be completed.

System action: DB2 abends and takes a dump. The rebuild is stopped. Message DSNB335I is issued indicating this reason code as the reason why the rebuild stopped.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB1xxx

00C202C5

Explanation: During a cold start of a member of a data sharing group, DB2 performed a query for retained locks in order to determine whether a group buffer pool needed to be forced off, but the query failed.

System action: DB2 abends and takes a dump. The DB2 subsystem is abnormally terminated.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C202D0

Explanation: DB2 is unable to respond to an event that was reported by MVS. This is a DB2 internal error.

System action: DB2 terminates abnormally.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump. Restart DB2.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECT: DSNB5REE

00C202D1

Explanation: This is a DB2 internal error. DB2 encountered an unrecoverable error while trying to add a page to the logical page list (LPL).

System action: The DB2 subsystem is abnormally terminated.

Operator response: Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNB1LPL

00C202D2

Explanation: An attempt was made to cold-start a member of a data sharing group, but another member had an active connection to a group buffer pool.

System action: The DB2 subsystem is abnormally terminated.

Operator response: Make sure that all other members of the group have been shut down, and restart the failing member.

00C20300

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, or drain a page set or partition, but the page set was not logically opened.

This reason code is issued by the following CSECTs: DSNB1CLM DSNIOPNP DSNISGSC DSNITFFS DSNIWPS C DSNQUA

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20301

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, or drain a logical partition, but the page set is not a type 2 nonpartitioned page set.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs:

DSNB1LCM DSNB1LDN DSNB1CPP DSNBWFOR
DSNBLCM DSNBDRN DSNBDDRN

00C20302

Explanation: This is a DB2 internal error. A page set was not logically opened by the execution unit that was attempting to do one of the following:

- Logical close a page set
- Physical close a page set or partition

This reason code is issued by the following CSECT: DSNB1DDN

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20303

Explanation: This is a DB2 internal error. A page set is not in-use, but an execution unit was attempting to do one of the following:

- Logical close a page set
- Physical close a page set or partition

This reason code is issued by the following CSECT: DSNB1CPS

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20304

Explanation: This is a DB2 internal error. During force write processing, the buffer manager detected that the write claim class count is not zero or there are pending updates on the page set or partition.

This reason code is issued by the following CSECT: DSNB1WFO

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20305

Explanation: This is a DB2 internal error. The execution unit attempted to access, claim, drain, open, or close a partition or piece, but the partition or piece number is invalid.

This reason code is issued by the following CSECTs: DSNB1ABP, DSNB1CLM, DSNB1CPP, DSNB1DCM, DSNB1DDN, DSNB1DRA, DSNB1GET, DSNB1SWS, DSNICLDR, DSNICLOS, DSNICLTO, DSNICMTC, DSNICMT2, DSNIDALC, DSNIERST, DSNIWPSC, DSNIOPNP, DSNIIRCLS, DSNISGSC, DSNITFFS, DSNPXTN0, DSNUQUIA, DSNXISB2

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C20306

Explanation: This is a DB2 internal error.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs: DSNB1GET, DSNB1LTS, DSNB1LTX, DSNB1SWS

00C20307

Explanation: This is a DB2 internal error.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer, print SYS1.LOGREC, and request an SVC dump.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECT: DSNBLTCH

Chapter 7. X'C3.....' codes

For information about the CICS transaction abend/dump code DSNCRCT, refer to *DB2 Messages*.

00C30001

Explanation: The CICS attachment facility terminated because of errors that cannot be corrected. The attachment facility task-related user exit detected one of the following conditions:

- The life of task block (LOT) is invalid.
- The LOT and connection control table (CCT) element were disconnected before the end of a unit of recovery
- The previous application program support (APS) call failed and a commit call is being attempted

These symptoms might be caused by an overlay of the LOT and/or the CCT.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates.

Operator response: Notify the system programmer.

System programmer response: Analyze the dumps and system console messages for storage violations.

Problem determination: One or more control blocks do not pass validity checks. The most probable cause is that they were overlaid by some user application. A CICS dump (DSNCR) and a subtask dump (system abend X'04E' with abend reason code 00C30001) were requested. Register 9 in the CICS transaction dump contains the address of the LOT.

If the LOT is valid, CLOTCCTE contains the CCT element address, and CCCTLOT contains the LOT address. Use these pointers (CLOTCCTE and CCCTLOT) to verify the validity of the LOT and the CCT element. Both control blocks should contain seven character eye catchers (DSNCLLOT and DSNCCCCT or DSN2LOT and DSN2CCT). If they are in error, check the application program for possible storage violations.

00C30002

Explanation: The CICS attachment facility was not able to start.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates.

Operator response: Notify the system programmer.

Problem determination: A subtask dump (system abend X'04E' with abend reason code 00C30002) is requested unless FRBRC2 equals 00F30013 or 00F30058. Within the dump, register 7 contains the address of the resource control table load module. In this load module, location CRCTCCTA contains the address of the connection control table (CCT) in subpool 99. The CCT contains the FRB control block for the IDENTIFY to DB2. The FRB control block begins at CCCTFRB within the CCT. You can also locate the FRB with the CCT control block by scanning the CCT for the FRB character string eye catcher. The FRB contains two fields, FRBRC1 and FRBRC2, which contain the return code and reason code from the IDENTIFY to the DB2 subsystem.

00C30003

Explanation: The CICS attachment facility could not complete a recover indoubt call because of the return and reason codes from DB2.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates. The unit of recovery (UR) is not resolved and remains indoubt.

Operator response: Notify the system programmer.

Problem determination: The return code from the recover indoubt process does not allow the CICS attachment facility to complete the unit of recovery (UR). If the UR included in the error is valid, an attempt should be made to resolve the UR manually, using the DB2 -RECOVER command.

A subtask dump (system abend X'04E' with abend reason code 00C30003) is requested. Register 7 contains the address of the resource control table. Location CRCTCCTA in load module DSNCRCTx or DSN2CTxx contains the address of the connection control table (CCT) in subpool 99.

The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates problems specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity.

Examine the MVS console for DB2 messages that might indicate any related errors. If an SVC dump was also taken, print it as well as the SYS1.LOGREC to obtain further diagnostic information. The CICS SYSTEM LOG might help to determine the final disposition of the indoubt unit of work.

Register 6 in the subtask abend dump plus X'20' contains the address of a 16-byte area that contains the network id (NID). The last 8 bytes of the NID contain the store clock value that was passed to DB2 by CICS to identify the logical unit of work (LUW). This value can be used to correlate the DB2 unit of recovery with the CICS logical unit of work.

00C30004

Explanation: A thread subtask failed because of a validity check failure of a transaction-related life of task block (LOT).

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

System action: The CICS attachment facility continues operation; however, the one subtask is abended and a subtask dump (system abend X'04E' with abend reason code 00C30004) is requested.

Because the LOT contains an ECB on which the CICS application is waiting and this error indicates the LOT was overlaid, the effect on the CICS application is unpredictable.

Operator response: Notify the system programmer.

Problem determination: The most probable cause is that the LOT was overlaid by some user application. In the subtask abend dump, register 7 contains the address of the resource control table (RCT).

CRCTCCTA in the RCT contains the address of the CCT, and CCCTLN in the CCT contains its length. Register 9 contains the CCT element that was assigned to the application in error.

This CCT element address can be validated by ensuring that it lies within the CCT. If the CCT address is valid, CCCTLOT contains the address of the LOT in error. To determine the source of the error, analyze the subtask dump and check the CICS master terminal for any storage violation messages.

00C30005

Explanation: The CICS attachment facility could not complete a commit or abort call for a transaction because of return codes from the application program support call.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

System action: The CICS attachment facility continues operation, but the one subtask abends with a subtask

dump (system abend X'04E' with abend reason code 00C30005). The CICS transaction that is associated with the abend is also abended with a CICS transaction dump

Operator response: Notify the system programmer.

Problem determination: The return code from the commit or abort does not allow the CICS attachment facility to complete the transaction's unit of recovery. Register 7 in the subtask dump contains the address of the resource control table (RCT).

Location CRCTCCTA in the RCT load module contains the address of the connection control table (CCT) in subpool 99. CCCTCSUB in the CCT contains the address of the subtask work area (CSUB or C2UB).

The subtask work area contains the FRB control block, which you can locate by scanning DSNCSUB or DSN2SUB for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates trouble specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity.

Refer to the reason code in Part 3, "DB2 codes," on page 159 and prepare a search argument, using the reason code as the appropriate keyword. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it and the SYS1.LOGREC to obtain further diagnostic information.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C30006

Explanation: The CICS attachment facility failed because of return codes from the MVS ATTACH macro while attempting to start a thread subtask.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates.

Operator response: Notify the system programmer.

Problem determination: A subtask dump (system abend X'04E' with abend reason code 00C30006) is requested. To determine why the ATTACH failed, use the MVS dump, MVS system trace, SYS1.LOGREC, and MVS console listing. Refer to the appropriate MVS publication to interpret the meaning of return codes from the MVS ATTACH macro.

00C30007

Explanation: The start of the CICS attachment facility failed because of return codes while attempting to establish a shutdown listen exit with DB2.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates.

Operator response: Notify the system programmer.

Problem determination: The return code from the establish exit process does not allow the CICS attachment facility to start. A subtask dump (system abend X'04E' with abend reason code 00C30007) is requested. Register 7 contains the address of the resource control table (RCT).

Location CRCTCCTA in the RCT load module (DSNCRCTx or DSN2CTxx) contains the address of the connection control table (CCT) in subpool 99. The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates trouble specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity.

Refer to the reason code in Part 3, "DB2 codes," on page 159. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it as well as the SYS1.LOGREC to obtain further diagnostic information.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C30008

Explanation: The start of the CICS attachment facility failed while attempting to establish an ESTAE recovery exit. because of reasons indicated by the return codes.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: An X'04E' abend subtask dump is taken, and the CICS attachment facility remains partially initialized.

Operator response: Notify the system programmer, and issue the DSNCL STOP FORCE command.

Problem determination: The return code from the ESTAE macro does not allow the CICS attachment facility to start. A subtask dump (system abend X'04E' with abend reason code 00C30008) is requested. To determine why the ESTAE failed, use the MVS dump, MVS system trace, SYS1.LOGREC, and MVS console listing. The MVS trace contains the return code from

the ESTAE macro. Refer to the appropriate MVS publication for the meaning of return codes from the MVS ESTAE macro.

00C30009

Explanation: The CICS attachment facility failed because of the return code and reason code from DB2 for the SHOW INDOUBT units of recovery process.

This abend reason code is issued by the following CSECTs: DSNCMSUB DSN2MSUB

System action: The CICS attachment facility terminates, and a subtask dump is requested.

Operator response: Notify the system programmer.

Problem determination: The return code from the SHOW INDOUBT process does not allow the CICS attachment facility to continue. A subtask dump (system abend X'04E' with abend reason code 00C30009) is requested. Register 7 contains the address of the resource control table (RCT).

Location CRCTCCTA in the RCT load module (DSNCRCTx or DSN2CTxx) contains the address of the connection control table (CCT) in subpool 99. The CCT contains the FRB control block, which can be located by scanning the CCT for the FRB character string eye catcher. FRBRC1 and FRBRC2 contain the return code and reason code from DB2.

A nonzero return code indicates trouble specified by the reason code. Higher return codes (4, 8, and 12) indicate higher severity. Analyze the subtask dump.

Refer to the reason code in Part 3, "DB2 codes," on page 159. If the reason code is not listed, it is an internal code that is useful only as a keyword.

If an SVC dump was also taken, print it and the SYS1.LOGREC to obtain further diagnostic information.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C30010

Explanation: An IDENTIFY call to DB2 from a CICS attachment facility connection subtask failed, indicating that DB2 is no longer active.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

System action: A subtask dump is requested for the failing task thread, and the automatic STOP of the CICS attachment facility is initiated.

Operator response: Notify the system programmer.

Problem determination: Some other error, which is the source of the failure, probably occurred prior to this action. Use the subtask dump, SYS1.LOGREC, MVS console listing, and any SVC dumps that might have

been requested if DB2 failed.

00C30011

Explanation: The CICS attachment facility detected that a resource control table (RCT) entry was corrupted or overlaid since the CICS attachment facility was last started.

This abend reason code is issued by the following CSECTs: DSNCEXT3 DSN2EXT3

System action: The CICS attachment facility abends CICS task with a CICS transaction abend.

Operator response: Notify the system programmer.

System programmer response: Stop and then restart the CICS attachment facility to refresh the RCT.

Problem determination: Analyze the CICS dumps to determine which CICS trans-id and corresponding RCT entries were affected. The CICS transaction dump contains the RCT storage at the time of the failure. Location CRCTAUWD in the affected RCT entry was altered since the CICS attachment facility was last started. This might be caused by an application program modifying storage it does not own (a CICS storage violation).

00C30020

Explanation: A previous error occurred during create thread processing which put the transaction in a must-abort state. The only request allowed in this state is a SYNCPOINT ROLLBACK.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2EXT1

System action: The transaction is placed in a must-abort state and remains in that state until the transaction terminates or issues a SYNCPOINT ROLLBACK. Any SQL statement issued by a transaction while in a must-abort state receive an SQLCODE -906. SYNCPOINT requests without the ROLLBACK option cause an ASP7 abend.

User response: If the create thread error was anticipated, and the transaction can correct the situation that caused the create thread error, the transaction might issue a SYNCPOINT ROLLBACK and continue processing.

System programmer response: If it is undesirable for a transactions to continue after create thread errors, reassemble the resource control table (RCT) and change the PCTEROP parameter to AEY9, or remove it completely and take the default.

Problem determination: Unless PCTEROP=N906, this error reason code is preceded by a DSNB transaction dump, which provides diagnostic information about the create thread failure. The SQLCA also contains the SQL return code identifying the create thread error.

00C30021

Explanation: The CICS attachment facility detected an application which is using the instrumentation facility interface (IFI) and is link-edited with a back level version of the CICS attachment facility language interface module DSNCLI.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2EXT1

System action: The transaction is abended with a DSNB abend. The life of task block (LOT) contains reason code 00C30021.

User response: Relink-edit the application with the appropriate version of the CICS attachment facility language interface module DSNCLI which corresponds to the current CICS attachment facility maintenance level.

System programmer response: Ensure the appropriate level of the CICS attachment facility language interface module DSNCLI is available to all users. Discard any back level version of DSNCLI.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If the problem continues to occur after link-editing the application again with the proper level of the CICS attachment facility language interface module, validate that the correct DSNCLI is being used.

The eye catcher in DSNCLI should have the proper maintenance level identified. Look at the DSNCLI, which is actually link-edited with the application to ensure the proper level.

00C30100

Explanation: An application attempted to issue an SQL request when the CICS attachment was not operational. This reason code results when the attachment is in STANDBY mode and the RCT STANDBY option is "SQLCODE".

System action: The SQL request is not executed.

User response: Wait until the CICS attachment facility is started. Then resubmit the transactions that failed.

Operator response: Restart the CICS attachment facility after ensuring that DB2 is active.

System programmer response: Collect any dumps produced by the CICS attachment facility or DB2, the MVS system console log, and any record of -STOP DB2 commands that might have been issued. Determine if the termination of the CICS attachment facility was the result of a DB2 stop command or abnormal termination of DB2.

Problem determination: The CICS attachment facility

was in standby mode. This occurs if DB2 stops and the RCT STANDBY option is "SQLCODE". Locate all the CICS attachment facility dumps and all DB2 termination dumps. Follow the problem determination procedures documented for the error conditions that caused the dumps to be produced.

or if DB2 abnormally terminated. If the stop command with the force option was not issued, locate all the CICS attachment facility abnormal termination dumps and all DB2 abnormal termination dumps. Follow the problem determination procedures documented for the error conditions that caused the dumps to be produced.

00C30200

Explanation: An application attempted to issue an SQL request but no thread resource was available for that request. This reason code results when the CICS-DB2 attachment DB2ENTRY definition for the transaction is disabled.

System action: The SQL request is not executed.

User response: Retry the transaction after the DB2ENTRY has been reenabled.

System programmer response: Enable the transaction's DB2ENTRY or set the DISABLEDACT to POOL to allow transactions in that entry to run.

00C30805

Explanation: The caller's connection with DB2 terminated because the CICS attachment facility is terminating in stop force mode. This reason code indicates that the CICS attachment facility is terminating because stop force was initiated. Stop force was probably initiated by the DSNF STOP FORCE command, the STOP DB2 MODE(FORCE) command, DB2 abnormally terminating, or the CICS attachment facility abnormally terminating. If a command was not used to cause stop force processing, abnormal termination dumps are produced by either DB2 if it is abnormally terminating, or by the CICS attachment facility if it is abnormally terminating.

This abend reason code is issued by the following CSECTs: DSNCEXT1 DSN2CEXT1

System action: All current requests are returned with an indication that the CICS attachment facility is terminating.

User response: Wait until the CICS attachment facility is restarted; then resubmit the transactions that failed.

Operator response: Restart the CICS attachment facility after ensuring that DB2 is active.

System programmer response: Collect any dumps produced by the CICS attachment facility or DB2, the MVS system console log, and any record of DSNF STOP commands that might have been issued. Determine if the termination of the CICS attachment facility was the result of a STOP command or abend.

Problem determination: The CICS attachment facility was forced into termination. This occurs if the DSNF STOP FORCE command is issued, if the CICS attachment facility detected an unexpected condition, if the DB2 STOP MODE(FORCE) command was issued,

Chapter 8. X'C5.....' codes

For these codes, the standard documentation to be collected is a SYSUDUMP and a printout of the DSNTRACE data set. The standard SPUFI documentation is a SYSUDUMP and a printout of the ISPF log for this session. A SYSUDUMP data set must be allocated in advance to collect your dump. A DSNTRACE data set must be allocated in advance to collect your DSN trace stream unless you are running in the background, in which case the SYSTSPRT data set contains the DSNTRACE output. ISPF normally runs with an active log data set. ISPF suppresses dumps unless it is invoked with the TEST parameter. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

In the TSO attachment facility, the user can control whether or not message IDs are displayed. To see them, type PROFILE MSGID. To suppress them, type PROFILE NOMSGID.

The following abends can occur in the TSO attachment facility.

00C50001

Explanation: This is probably a DB2 subsystem error. DSNESM30 has detected an illegal value in the YTYPE portion of the SQLTYPE field of the SQLDA.

This abend reason code is issued by the following CSECT: DSNESM30

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes" for information about obtaining dumps and displaying message IDs.

Problem determination: An illegal value was detected in the SQLTYPE field of the SQLDA. This may have been caused by this field being overlaid in error. To determine the source of the error, analyze the SQLDA in the storage dump.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50002

Explanation: This is probably a DB2 subsystem error. DSNESM32 has detected an illegal value in the YTYPE portion of the SQLTYPE field of the SQLDA. This suggests that an illegal value was in the SQLTYPE field of the SQLDA.

This abend reason code is issued by the following CSECT: DSNESM32

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes" for information about obtaining dumps and displaying message IDs.

Problem determination: An illegal value was detected in the YTYPE of the SQLDA. This may have been caused by this field being overlaid in error. Analyze the SQLDA in the storage dump to determine the source of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50003

Explanation: This could be either a user or a system error. SPUFI was unable to obtain the required storage via GETMAIN.

This abend reason code is issued by the following CSECTs: DSNESM10, DSNESM20

System action: SPUFI task abends. User returns to ISPF main menu.

User response: If the problem persists, notify the system programmer. You may have to specify a larger machine size at logon time.

System programmer response: If the problem persists, the standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes" for information about obtaining dumps and displaying message IDs.

Problem determination: Register 2 contains the amount of storage that was requested. Message DSN392E, in the ISPF log data set, gives the name of the module that issued this abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50005

Explanation: This could be either a user or a system error. The DYNALLOC SVC returned an unexpected return code when attempting to allocate a data set.

This abend reason code is issued by the following CSECT: DSNESM55

System action: The contents of the field are written to the ISPF log.

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes," on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Message DSNE381E, in the ISPF log data set, gives the return code and reason code values returned from the dynamic allocation request. Refer to the appropriate MVS publication to determine the source of the error and analyze these values.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50007

Explanation: This is probably an error in the SPUFI code. The field describing the record format of the output data set is not valid.

This abend reason code is issued by the following CSECT: DSNESM55

System action: The contents of the field are written to the ISPF log.

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes," on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Message DSNE383A, in the ISPF log data set, gives the record format of the output data set that was determined to be in error. The output data set record format must be one of the following: F, FB, FBA, V, VB, or VBA.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50008

Explanation: This could be either a user or a system error. The DYNALLOC SVC returned an unexpected return code when attempting to deallocate a data set.

This abend reason code is issued by the following CSECT: DSNESM55

System action: The contents of the field are written to the ISPF log

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes," on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Message DSNE384E, in the ISPF log data set, gives the return code and reason code values returned from the dynamic allocation request. Analyze these values to determine the source of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50009

Explanation: This is probably caused by an error in the SPUFI code. The SQLCODE translation service (module DSNTIAR) has returned an unexpected return code.

This abend reason code is issued by the following CSECT: DSNESM40

System action: The contents of the field have been written to the ISPF log.

User response: If the problem persists, notify the system programmer.

System programmer response: The standard SPUFI documentation should be collected. Refer to Chapter 8, "X'C5.....' codes," on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Message DSNE387A, in the ISPF log data set, gives the return code value returned from DSNTIAR. The meanings of these return codes are:

- | | |
|----|--|
| 4 | More data was available than could fit into the message area provided. |
| 8 | The LRECL was not within the limits: $72 \geq \text{LRECL} \leq 240$ |
| 12 | The message area was not large enough.
Message length ≥ 240 |
| 16 | Error in message routine (IKJEFF02). |

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 21.

00C50100

Explanation: This is probably caused by an error in the DSN command processor code. Module DSNECP66 (in the DSN command processor) called module DSNTIAR to format an error message to explain an unexpected SQL return code received by DCLGEN. DSNTIAR failed.

This abend reason code is issued by the following CSECT: DSNECP66

User response: If the problem persists, notify the system programmer.

System programmer response: The standard documentation should be collected, including a DSN trace stream. Refer to Chapter 8, “X’C5.....’ codes,” on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Message DSNE004E in the output gives the return code value returned from DSNTIAR. For an explanation of these return codes, see abend reason code ‘00C50009’.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 4, 20.

00C50101

Explanation: The user has entered the ABEND subcommand of the DSN command processor. This causes a X’04E’ abend and a dump to be requested. In order to retain the dump, you must have previously allocated a SYSUDUMP or SYSADUMP data set. The ABEND subcommand can be useful for debugging.

This abend reason code is issued by the following CSECT: DSNECP19

System action: A X’04E’ abend results, and a dump is requested.

System programmer response: The standard documentation may be needed. Refer to Chapter 8, “X’C5.....’ codes,” on page 213 for information about obtaining dumps and displaying message IDs.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 4, 20.

00C50102

Explanation: An error probably occurred in DB2 while it attempted to process an IDENTIFY request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP12

System action: Immediately after writing this message, DSN abends with an abend code of X’04E’

and an abend reason code of ‘00C50102’.

User response: If the problem persists, notify the system programmer.

System programmer response: See the Problem Determination section of this message.

Problem determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 4, 20.

00C50103

Explanation: An error probably occurred in DB2 while it attempted to process an ESTABLISH EXIT request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP12

System action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50103’.

User response: If the problem persists, notify the system programmer.

System programmer response: See the Problem Determination section of this message.

Problem determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 4, 20.

00C50104

Explanation: An error probably occurred in DB2 while it attempted to process a CREATE THREAD request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP13

System action: Immediately after writing this message, DSN abends with an abend code of X’04E’ and an abend reason code of ‘00C50104’.

User response: If the problem persists, notify the system programmer.

System programmer response: See the Problem Determination section of this message.

Problem determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 20.

00C50108

Explanation: An error probably occurred in DB2 while it attempted to process a BIND, REBIND, or FREE request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP30

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50108'.

User response: If the problem persists, notify the system programmer.

System programmer response: See the Problem Determination section of this message.

Problem determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 20.

00C50109

Explanation: An error probably occurred in DB2 while it attempted to process a TERMINATE request from the DSN command processor. DSN received an unexpected return code (FRBRC1 or FRBRC2) from DB2.

This abend reason code is issued by the following CSECT: DSNECP18

System action: Immediately after writing this message, DSN abends with an abend code of X'04E' and an abend reason code of '00C50109'.

User response: If the problem persists, notify the system programmer.

System programmer response: See the Problem

Determination section of this message.

Problem determination: Rerun the job with DSN tracing turned on. You may need a SYSUDUMP from the TSO address space. You probably need a DB2 dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 20.

00C50110

Explanation: This is a DSN command processor error. It occurs when the DSN STAX routine (DSNEBP01) is entered and the DSN control blocks cannot be located; the AEPLUSR field did not contain the CIB address.

This code is issued by the following CSECT: DSNECP01

Severity: 4

System action: The DSN command processor abended.

User response: If you allocated a SYSUDUMP or SYSABEND dump data set, collect the dump. Otherwise, allocate SYSUDUMP and DSNTRACE data sets, turn on DSN tracing, and try to recreate the error. Save these data sets.

00C50111

Explanation: Your application program made an instrumentation facility component application program interface (instrumentation facility interface) call to DB2 language interface module DSNELI, but your application program was not running under the DSN command processor. You must run all application programs using DSNELI under DSN. To do this, first issue the DSN command, then start your application using the RUN subcommand of the DSN command processor, and finally, when the application completes, stop DSN with an END subcommand.

This reason code is issued by the following CSECT: DSNELI

System action: Control returns to the application. Your application can continue processing. Further attempts at instrumentation facility interface (IFI) calls will continue to produce this return and reason code.

User response: Rerun your application under the DSN command processor.

Operator response: Notify your system programmer.

System programmer response: Modify the job to invoke DSN. Initiate the application program using the RUN subcommand of the DSN command processor.

Chapter 9. X'C6.....' code

00C60001

Explanation: DB2 received return code X'20' when issuing a WTO request to display a DB2 console message. MVS sets this return code when there are no message buffers for either Multiple Console Support (MCS) or JES3, or when there is a JES3 WTO staging area excess. The WTO request is terminated. The current DB2 console message and all subsequent DB2 informational console messages are ignored until the MVS problem is corrected.

At the time of the abend, general register zero contains the return code from WTO request.

This abend reason code is issued by the following CSECT: DSNFWTO

System action: A record is written to SYS1.LOGREC. A retry is requested and execution continues. DB2 resumes issuing console messages when the condition is corrected.

Chapter 10. X'C8.....' codes

Abends in the precompiler are not intercepted via ESTAE, so standard system abends might occur. The SYNAD exit is not used, so I/O errors cause S001 or S002 abends. S04E abends are generated for precompiler internal errors. Following is a list of reason codes.

00C8901x

Explanation: An internal precompiler/parser consistency check failed. An S04E abend is generated. The error type and reason code are found in register 15 of the dump.

In the reason code, *x* is one of the following:

- 1 Parser received a token code of 0 from a lexical scan. A lexical scan refers to a scan of words rather than syntax.
- 2 Error in storage suballocation control blocks. The error might occur when a DB2 SQL statement limitation is exceeded. The SQL statement might be referencing, creating, or declaring more columns than the DB2 defined maximum number allowed for an SQL statement. Another possibility is that too many host variables are being referenced in the SQL statement.
- 3 Error in storage suballocation request. This error might occur because of storage constraints when building the DBRM entry for the SQL statement or because the SQL statement exceeds the DB2 maximum statement length.
- 4 Error in pointer structures.
- 5 Host variable information in the precompiler/parser dictionary or in the DBRM is not consistent with host variable information for an SQL statement. The error might occur when the precompiler misinterprets an illegal host variable declaration.
- 6 Unexpected value for parser option.
- 7 Internal limit exceeded. A fully qualified name exceeds the maximum length of 255 characters.
- 8 Internal conversion error. An error occurred when converting a timestamp version-id.
- 9 Internal stack storage exhausted.
- | A Language Environment required, but not available.
- |

System programmer response: Obtain the SVC dump and a copy of the application program source. If the abend reason code is 00C89015, obtain a copy of the DBRM being bound (IEBCOPY).

00C89041

Explanation: More storage is needed, but could not be obtained during the precompiler execution. An S04E abend occurs. The error type and reason code are found in register 15 of the dump.

This reason code is issued by the following CSECT: DSNHCCORE

System programmer response: The storage required for the current statement could not be acquired or exceeds the maximum (64KB) for a single request. If the region is full, determine if the region can be expanded. If it cannot be expanded, the SQL statement is too large to be processed.

Chapter 11. X'C9.....' codes

00C90026

Explanation: This message is used internally to pass back the condition to RDS and Utilities. This message is an internal reason code. No response is necessary.

00C90060

Explanation: On a READS request, the return area supplied was not large enough to hold one log record. No log record is returned, but the position is held in the log.

System action: The requested operation (decompression) is not performed.

User response: Increase the size of the return area.

Problem determination: The system returns the size of the return area that is required in field IFCABSRQ of the IFCA return area.

00C90063

Explanation: On a READS request for IFCID 306, log records are returned, but data is not decompressed as requested.

Problem determination: See the reason code in field QW0306DG to determine why decompression was not performed. For example, if you receive 00C90064, it means that the decompression dictionary changed since the log record was written.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting problems.

00C90064

Explanation: The decompression dictionary changed since the log record was written. The log record is returned with compressed data.

System action: The requested operation (decompression) is not performed.

User response: Specify a valid WQALLRBA value and reissue the request.

Problem determination: The specified RBA/LRSN value might be too old.

00C9006D

Explanation: This code is used internally between components. Look for prior abends and messages on the console to determine the cause of the problem.

User response: You need to save one or more of the

following items so that you can determine the location of the problem:

- The system dump
- The LOGREC dataset
- The console log
- The job output

If you cannot determine the cause of the problem by using these resources, consult the system programmer.

System programmer response: Locate the cause of the problem using the system dump, the LOGREC dataset, the console log, or the job output. If you cannot determine the cause of the problem using these resources, contact an IBM service representative.

00C9007D

Explanation: The compression dictionary for the table space or partition cannot be stored in the table space or partition. Therefore, the LOAD or REORG utility cannot complete successfully.

This abend reason code is issued by the following CSECTs: DSNIZLDL, DSNIDLOD

System action: The table space or partition is implicitly stopped by DB2. Messages DSNT501I and DSNIO04I are displayed to inform the operator that the dictionary and the object for which the dictionary is defined are unavailable. An SQLCODE -904 is returned to the SQL end user.

Operator response: Notify the system programmer.

System programmer response: Correct the problem and resubmit the LOAD or REORG job. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C9007E

Explanation: The compression dictionary for the table space or partition was not successfully retrieved. Therefore, the data request failed.

This abend reason code is issued by the following CSECTs: DSNIRFNX, DSNIRLPG, DSNICUMR, DSNIMSMS, DSNINXPT, DSNIRIDC, DSNIRNXT, DSNIRSET, DSNISRID, DSNISFS, DSNISFX, DSNISRTI, DSNICUMW, DSNILREP, DSNIMS1W, DSNIRELF, DSNIRELS, DSNIREDR, DSNIENSR

System action: The table space or partition is implicitly stopped by DB2. Messages DSNT501I and DSNIO04I are displayed to inform the operator that the dictionary and the object for which the dictionary is

defined are unavailable. An SQLCODE -904 is returned to the SQL end user.

Operator response: Notify the system programmer.

System programmer response: Correct the problem and inform the user to resubmit the request. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C9007F

Explanation: The compression dictionary for the table space or partition is invalid. Therefore, the table space or partition cannot be opened.

This abend reason code is issued by the following CSECT: DSNIZLDR

System action: The table space or partition is implicitly stopped by DB2. Messages DSNT501I and DSNI004I are displayed to inform the operator that the dictionary and the object for which the dictionary is defined are unavailable. An SQLCODE -904 is returned to the SQL end user.

Operator response: Notify the system programmer.

System programmer response: Recover and start the table space or partition and tell the user to resubmit the request.

00C90080

Explanation: An attempt was made to allocate a resource for update operations. However, the resource was already started for read-only access.

This reason code is issued by the following CSECTs:

DSNIDBCA DSNIDBCI DSNIDBCN DSNIDBCP
DSNIDBET

System action: The allocation process is not allowed.

User response: Determine when the resource is started for read/write access, and rerun the job.

Operator response: If this reason code appears in message DSNT501I, determine whether the named resource should be started for read-only access.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9 or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2*

Diagnosis Guide and Reference for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90081

Explanation: An attempt was made to allocate a resource that is stopped for all access.

This reason code is issued by the following CSECTs:

DSNIDBCA DSNIDBCI DSNIDBCJ DSNIDBCN
DSNIDBCO DSNIDBCP DSNIDBCQ DSNISTDB
DSNISTPS

System action: The allocation process is not allowed.

User response: Determine when the resource is no longer stopped, and rerun the job.

Operator response: If this reason code appears in message DSNT500I or DSNT501I, determine whether the resource should be stopped.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT500I or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," or to the description of the DSNT500I or DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90082

Explanation: An attempt was made to allocate a resource that is already allocated to a DB2 utility function.

This reason code is issued by the following CSECTs:

DSNIDBCJ DSNIDBCO DSNIDBCQ

System action: The allocation process is not allowed.

User response: Determine when the resource is available and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued,

and/or message DSNT501I is issued. The resource allocated to the DB2 utility function might be either in use by a utility or reserved for a utility. If the resource is reserved for a utility, but not currently in use, the -DISPLAY UTILITY command will indicate that no utilities are operating on that object. To access a resource that is reserved for a utility, use the -TERM UTILITY command. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32, 72.

00C90083

Explanation: An attempt was made to allocate a resource for update operations. However, the resource is already allocated to a DB2 utility function that allows other users to have read-only access.

This reason code is issued by the following CSECTs:

DSNIDBCJ	DSNIDBCO	DSNIDBCQ
----------	----------	----------

System action: DB2 determines whether there is a utility function that would prohibit allocation of the resource. If it finds an indication of a such a utility, the allocation of the resource is not allowed.

User response: Determine when the resource is no longer restricted by a utility and is started for read/write access, and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT501I is issued.

The resource allocated to the DB2 utility function might be either in use by a utility or reserved for a utility. If the resource is reserved for a utility, but not currently in use, the -DISPLAY UTILITY command will indicate that no utilities are operating on that object. The -DISPLAY DATABASE command shows which restrictive states DB2 assigned to the resource in question. Utilities set a restrictive state (for example, UTRO) on the resource that they are processing, and then remove this state when the utility successfully completes. Therefore, if the -DISPLAY DATABASE command is issued after the successful completion of the utility, the restrictive state set by the utility is not displayed. To access a resource that is reserved for a utility, use the -TERM UTILITY command. For more

information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32, 72.

00C90084

Explanation: The temporary file with the page size shown in NAME is not available. An error was detected either during the opening of the page set or during the formatting of the header and the space map pages of the page set.

This reason code is issued by the following CSECTs: DSNIWKFL, DSNITFFS

System action: DB2 startup/restart continues if this reason code appears in a DSNT500I message issued during the startup process.

If the reason code appears in a DSNT500I message issued during the -START DATABASE command, the request fails. In either case, the temporary file function does not allocate any temporary file on the page set.

User response: Delete and redefine the temporary data set(s) in question, and then issue the -START DATABASE command to start the temporary file.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 4, 5, 10, 32.

00C90085

Explanation: The limit of 253 extends for a temporary file has been reached.

One of the following could be the reason.

- Large number of concurrent transactions requiring use of temporary files.
- Small primary/secondary quantity defined for table space(s) in temporary file database.
- Inadequate space allocated to temporary file database.

This reason code is issued by the following CSECT:
DSNIWCUB

System action: The request to extend temporary file is not allowed.

User response: To resolve the above situation, do one of the following:

- Reduce the number of concurrent transactions.
- Increase primary/secondary quantity defined for the table space(s) in the temporary file database.
- Increase space allocated to temporary file database.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 17, 32, 52.

00C90086

Explanation: An attempt was made to allocate a resource that is started for DB2 utility access only.

This reason code is issued by the following CSECTs:

DSNIDBCA DSNIDBCI DSNIDBCN DSNIDBCP

System action: The allocation process is not allowed.

User response: Determine when the resource is available for use, and rerun the job.

Operator response: If this reason code appears in message DSNT501I, determine whether the resource should be started for utility access only.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable

recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90087

Explanation: A page that is marked as 'broken' has been read. The database, table space or index space, and the page number are identified in NAME.

This reason code is issued by the following CSECT:
DSNIADBR

System action: The data manager function that detected this condition returns a 'resource not available' condition to its invoker. Access to the page is not permitted until it is repaired.

User response: If the TYPE is '00000300', examine the name to determine if the page is in an index space or a table space. Use the REPAIR utility to fix the broken page.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90088

Explanation: The resource identified by NAME in message DSNT501I is involved in a deadlock condition.

System action: The requested operation is not performed.

User response: Rerun the application.

System programmer response: If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

Problem determination: The requested operation is

not performed. An SQLCODE -911, -913, or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

If statistics trace class 3 is active, IFCID 172 contains diagnostic information. For a discussion of the effects of locking, see Part 5 (Volume 2) of *DB2 Administration Guide*. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 18, 32, 36, 38.

00C90089

Explanation: The environmental descriptor manager (EDM) function of the data manager subcomponent did not have enough storage in its pool or data space to support the retrieval of object with ID 'object id' (DBD ID, SKCT plan name or SKPT package name). The object can be either a database descriptor (DBD), a skeleton cursor table (SKCT) or a skeleton package table (SKPT).

This reason code is issued by the following CSECTs:

DSNGEDLC DSNGEDST DSNGEELC DSNGEFSP
DSNGESLC DSNGEPLC

System action: The requested operation is not performed.

User response: Invoke the application again. If, after several attempts, there is still not enough space, the following actions can be taken to reduce EDM storage requirements:

- Reduce the number of concurrent users using DB2.
- Try reducing the number of SQL statements in the plan or package and rebind.
- Try to simplify the database design—for example, reduce the number of partitions in the database.

To increase the EDM pool size definition, on the UPDATE install panels:

- If EDM storage shortage is a recurring problem, change the installation parameters that affect the size of the EDM pool—that is, increase the number of concurrent users and the number of currently active databases, then restart DB2.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work

area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32.

00C9008A

Explanation: The database procedure installation exit identified by NAME could not be loaded for execution.

This reason code is issued by the following CSECTs: DSNIREDR, DSNIENSR

System action: The requested operation is not performed.

User response: Determine the reason the installation exit could not be loaded, correct the problem, and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32.

00C9008B

Explanation: An attempt was made to create a database, but no DBIDs are available; that is, the system limit has been reached.

This reason code is issued by the following CSECT: DSNGDCID

System action: The create is not allowed.

User response: DROP all unused databases, and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable

recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on the identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C9008C

Explanation: An attempt was made to allocate or bind to a partitioned table space for which no partitioning key was defined.

System action: The bind or allocation process is not allowed.

User response: Define the partitioning key or partitioning index for the partitioned table space, and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 15, 17, 32, 33, 35.

00C9008D

Explanation: An attempt was made to bind to a table space that had an incomplete clustering definition.

This reason code is issued by the following CSECTs: DSNISPSC, DSNIPSEI

System action: The bind process is not allowed.

User response: Complete the clustering definition for the table space, and rerun the job.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are:

VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 15, 17, 32, 33, 35.

00C9008E

Explanation: A lock request for the resource identified by NAME could not be granted, and the request waited for a period longer than the maximum specified by the installation.

This reason code is issued by the following CSECT: DSNILMCL

System action: The data manager function that detected this condition returns 'resource not available' to its invoker.

Message DSNT378I might also be issued.

Problem determination: The requested operation is not performed. An SQLCODE -904, -911, -913, or -923 is issued, and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*. If a time-out occurs, see also the "System Programmer Response" in message DSNT376I for problem determination.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 18, 32, 36, 38.

00C9008F

Explanation: The database descriptor's size (DBD) has reached the limit of 25% of the EDM Pool size.

This reason code is issued by the following CSECT: DSNNGDCPD

System action: The request to create/alter a database object is not allowed.

User response: Create the database object in a different database or drop unused database objects from the database. If you drop an object that is an index or a table space, the space becomes available in the DBD as soon as the drop is committed. If you drop an object that is a table, the space in the DBD is made available only after all of the following:

- The DROP is committed.

- The DB2 REORG is run on the table space and there is no point in time recover after the REORG.
- MODIFY is run to delete all image copies of data that contains rows of the dropped table, that is, copies that were taken before the REORG. Note that MODIFY will reclaim space in the DBD only if there are SYSCOPY rows to delete.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32.

00C90090

Explanation: An attempt to lock a required resource failed.

System action: The operation is not performed.

User response: Wait for all jobs which hold a lock on the resource in an incompatible lock state to complete before reissuing the failing statement.

Problem determination: The requested operation is not performed.

If the resource type is table space, table, or index, then issue the -DISPLAY DATABASE command with the LOCKS option to get a list of jobs which currently hold locks on the required resource.

If the resource type is a package, then wait for BIND activity on that package to complete before reissuing the failing request.

If the problem persists after jobs which hold incompatible locks complete, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32, 33.

00C90091

Explanation: The table space or index space could not be started, because there is an outstanding indoubt UR that must be resolved before the start is allowed.

This reason code is issued by the following CSECT: DSNILSTS

System action: The START operation is not performed.

Problem determination: Message DSNI002I is issued. See the description of that message for additional information.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32, 33.

00C90092

Explanation: DB2 received an out-of-storage indication from IRLM resulting from a lock, unlock, or lock change request.

This reason code is issued by the following CSECT: DSNILMCL

System action: A record is written to SYS1.LOGREC only when an abend is issued. No dump is requested.

Operator response: Notify the system programmer.

System programmer response: IRLM has exhausted the amount of virtual storage available to it to represent locks. Insufficient virtual storage remains to satisfy this request. Refer to Part 5 (Volume 2) of *DB2 Administration Guide* for the IRLM procedure to determine the amount of storage space available.

The current mix of transactions caused all available storage to be used. You can find the number of locks held by a particular transaction by either using the DB2 performance trace facility or by performing IRLM tracing. Refer to Part 5 (Volume 2) of *DB2 Administration Guide* for information about the DB2 performance trace facility.

Determine what transactions were running and the number of locks they held. You might want to schedule some of these transactions at a different time.

You can reduce the total number of page or row locks that applications concurrently hold by changing the locking protocol on one or more table spaces. Use one of the following:

- ALTER TABLESPACE...LOCKSIZE ANY

- ALTER TABLESPACE...LOCKSIZE TABLESPACE
- LOCK TABLE statements

If application logic permits, reduce the number of page or row locks concurrently held for SELECT statements by re-binding application plans with isolation level of cursor stability instead of repeatable read or read stability. Refer to Chapter 4 of *DB2 SQL Reference* for further information on SELECT.

You can reduce the total number of LOB locks that applications concurrently hold by changing the locking protocol on one or more LOB table space. Use one of the following:

- ALTER TABLESPACE...LOCKSIZE TABLESPACE
- LOCK TABLE statement

Problem determination: One or more of the following might be issued:

- An SQLCODE -904 or -923
- Message DSNT501I
- An abend

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 18, 32, 35, 36.

00C90093

Explanation: An error occurred in IRLM.

This reason code is issued by the following CSECT: DSNILMCL

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Examine SYS1.LOGREC for a preceding error related to IRLM.

Problem determination: One or more of the following might be issued:

- An SQLCODE -904 or -923
- Message DSNT501I
- An abend

SYS1.LOGREC contains the same diagnostic information in the variable recording area (VRA) as shown for abend reason code '00C90101'. The first four bytes of CTSIWHY contain the return code from the IRLM function. The fifth byte of CTSIWHY contains the request code, as follows:

X'02' Lock

X'03' Unlock

X'04' Change

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 18, 32, 35, 36.

00C90094

Explanation: A data set is in a state that is different from what DB2 expects. Possible causes are:

- A data set was deleted and redefined without DB2's knowledge.
- A previous DB2 failure involving the data set might have occurred.

This reason code is issued by the following CSECT: DSNIBMCL

System action: The requested action is not performed. If the invoker of this module (DSNIBMCL) abends, a record is written to SYS1.LOGREC, and the invoker probably initiates a dump. If the invoker does not abend, no record is written to SYS1.LOGREC, and no dump is requested. If this occurs, an SQL return code is issued, and/or message DSNT500I is issued. If the invoker of DSNIBMCL is not a utility, the data set is placed in a stopped status.

User response: If the code was received while processing a user table, DB2 determined that the data set is empty. A DROP TABLESPACE statement followed by a CREATE TABLESPACE statement and a CREATE TABLE statement defines the dropped table to DB2. Use the IDCAMS LISTCAT for the failing DB2 dataset. Check the HI-USED-RBA for this dataset; if HI-USED-RBA = 0, the dataset is empty. If it was received while processing a DB2 catalog or directory, then recover the object as specified in *DB2 Administration Guide* in the section "Recovering Catalog and Directory Objects".

Operator response: Notify the system programmer.

System programmer response: If you do not have the current level of the data set, you must perform DB2 recovery to return the data set to its expected state. See the Problem Determination section of this message for procedures to determine the name of the data set to be corrected. Use the DISPLAY command to check the status of the data set. If the data set is stopped, use the START command before performing recovery.

Problem determination: For more information, refer

to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

This error is detected at a time when the specific name of the data set involved cannot be determined by DB2. However, the SQL return code or message DSNT500I provides the name of the table space or index space in which the data set resides. When the table or index space consists of a single data set, this is specific. Otherwise, the system programmer must find the particular data set within the table or index space.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 10, 32, 33, 35.

00C90095

Explanation: An attempt was made during DB2 restart to access a page in order to apply a log record but DB2 was unable to access the page. This abend reason code appears as the reason code in message DSNIO01I.

This abend reason code is issued by the following CSECTs: DSNIBMOC, DSNIMPD

System action: The restart of the named table space, index space, or partition is deferred by the subsystem.

Operator response: Notify the system programmer.

System programmer response: Correct the problem, and then use either the -START DATABASE command or the RECOVER utility to make the table space, index space, or partition available.

Problem determination: Examine previous messages on the console to determine why DB2 could not access the page. One possible reason is that a back-level pack was mounted. That is, the page to which the log record applies was not yet formatted by VSAM. DB2 does not extend data sets during restart.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 13, 32, 33.

00C90096

Explanation: The page, row or LOB lock on the page or subpage identified by NAME in message DSNT500I or DSNT501I caused the total number of page, row or LOB locks concurrently held to reach the installation maximum number of page, row or LOB locks (NUMLKUS) allowed for a single agent in the system.

This reason code is issued by the following CSECT: DSNILMCL

System action: The operation that encountered this condition is not executed. If a utility job encountered this condition, the utility is stopped. Otherwise, any database updates for the statement that was executing are backed out. Any database reads for the statement that was executing are not executed. The position of the cursor is unpredictable.

User response: Rerun the application after correcting the cause of this resource unavailable condition.

Programmer response: Reduce the total number of page, row or LOB locks that the application concurrently holds by changing the locking protocol on one or more of the table spaces to table space level locking. To do this, use the ALTER ... LOCKSIZE TABLESPACE or LOCK TABLE statements.

Review the application to see if a different choice of SQL statements can be used to perform the same operation with less concurrent access to multiple tables with page, row or LOB locking.

If application logic permits, reduce the number of page, row or LOB locks concurrently held for SELECT statements by rebinding the application plan with isolation level of cursor stability instead of repeatable read or read stability, or add more frequent commits.

System programmer response: If the application should be able to run with the current page, row or LOB locking protocol and SQL statements, increase the NUMLKUS value for the installation to allow a higher limit of page, row or LOB locks to be concurrently held by a single application. If a utility job encountered this resource unavailable condition, the NUMLKUS value must be increased to accommodate the utility, because utilities are programmed to use the minimum number of page, row or LOB locks possible. Refer to Part 5 (Volume 2) of *DB2 Administration Guide* for further information about choosing the value for NUMLKUS.

Operator response: If a utility job encountered this resource unavailable condition, terminate the utility and restart it after the cause of the resource unavailable condition has been corrected.

Problem determination: An SQLCODE -904 and message DSNT500I or DSNT501I are issued. For more information refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or message DSNT500I or DSNT501I in *DB2 Messages*.

SYS1.LOGREC contains information in the variable

recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90097

Explanation: An attempt was made to allocate to a table space for update operations. However, the table space was marked as 'image copy' required, and updates are not allowed. This condition occurs as a result of any of the following:

- Running a REORG LOG NO or LOAD LOG NO utility on the table space without running a copy that specifies FULL YES.
- Execution of a RECOVER utility which specifies the TORBA or TOCOPY options, without following it with the required COPY utility.
- Execution of a -TERM UTILITY command on a COPY utility that failed during the copy phase or was active in the copy phase. Until the COPY utility completes, SQL updates are not allowed because the integrity of the data would be compromised.
- Execution of a MODIFY utility after all back up copies of the table space or data set were deleted from the SYSCOPY catalog table.

This reason code is issued by the following CSECTs:

DSNIDBCJ DSNIDBCO DSNIDBCQ

System action: The allocation process is not allowed.

User response: Run the COPY utility. However, if the table space is to be used for read-only access, or if recoverability of the data is not required, instead of taking a full image copy you can run the REPAIR utility and request that the image copy required condition be removed.

Problem determination: The requested operation is not performed. An SQLCODE -904 and/or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," on page 9 or to the description of the DSNT501I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32.

00C90098

Explanation: An attempt was made to increase read-only or write-access counts of the utility in process beyond the maximum (255) allowed.

This abend reason code is issued by the following CSECT: DSNIDBMF.

User response: Use the -DISPLAY UTILITY command to determine how many utility jobs are currently active. If a number of utility jobs are active but not in the stopped state, notify the system programmer. If the utility jobs are running, resubmit your job after they complete.

System programmer response: Determine why active utilities are in the stopped state. Use the -TERM UTILITY command to terminate utilities and reduce the UIP (utility in process) counts. If no active utilities are indicated, then use the -DISPLAY DATABASE command to show which table spaces or partitions are in a UTRO or UTRW state.

Problem determination: Message DSNT500I is issued. For more information, refer to the explanation of message DSNT500I.

00C90099

Explanation: An attempt was made to load data into a partition, but the partition is full. Based on the High Key value specified in the Index for each partition, utilities instructed Data Manager to load a record into the proper partition. This required Data Manager to build a new page with a page number one higher than the last page in the partition. However, this new page is in the next partition.

This abend reason code is issued by the following CSECT: DSNILPG

System action: The requested action is not performed.

User response: Redefine the High Key values in the Index and retry the load.

If you receive this code during a reorganization, query the catalog to check the PCTFREE and FREEPAGE values. You might be able to decrease the amount of free space to allow the REORG utility to complete successfully.

Operator response: Notify the system programmer.

System programmer response: Use the -TERM UTILITY command to terminate the load utility and reduce the UIP (utility in process) counts.

Problem determination: For more information, refer to the explanation of message DSNT500I in the Service Controller Messages section of this book.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 32, 37.

00C9009A

Explanation: An attempt was made to create a system database which, according to the DBID space map, has already been created. However, the catalog shows the database was not created. This discrepancy between the catalog and the space map for DBIDs may be due to an unsuccessful migration.

This abend reason code is issued by the following CSECT: DSNNGDCID

System action: Database is not created.

Operator response: Notify the system programmer.

System programmer response: Drop the database, then create it (using DROP and CREATE commands). If this fails to resolve the error, follow the steps in problem determination.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued, and/or message DSNT500I is issued. For more information, refer to the SQL return code in Part 2, “SQL return codes,” on page 9, or to the description of the DSNT500I message in *DB2 Messages*.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32, 38, 39.

00C9009B

Explanation: An attempt was made to load data into a linear table space, but the table space is full. A linear table space can contain a maximum of 64GB of data.

This abend reason code is issued by the following CSECT: DSNILPG

System action: The requested action is not performed.

User response: Use the -TERM UTILITY command to terminate the LOAD utility. Use ALTER TABLE SPACE to reduce the amount of free space within a page (PCTFREE) and the number of free pages within the table space (FREEPAGE). Then retry the load. If it is a resume load job, reorganize the table space before rerunning the load.

Problem determination: For more information, refer to the explanation of message DSNT500I in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 32, 37.

00C9009C

Explanation: An attempt was made to insert data into a partitioned table space or index space, but the partition is full. For table space partition, the data to be inserted is based on the high-key value specified in the cluster index. If it is an index space partition, the index entry to be inserted is also based on the high-key value associated with the index.

This abend reason code is issued by the following CSECTs: DSNISMPI, DSNISMXP

System action: A 'resource not available' code is returned to the end user and the requested action is not performed. The SVC dump and the SYS1.LOGREC recording are not requested.

User response: Notify the system programmer to redefine the partitions and rerun the job.

System programmer response: Refer to Part 2 (Volume 1) of *DB2 Administration Guide* to redefine a partition. The partition that must be redefined is identified in the DSNT501I message.

If you suspect an error in DB2 refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For more information, refer to the explanation of message DSNT501I in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 37.

00C9009D

Explanation: An attempt was made to insert data into a linear table space or index space, but the table space or index space is full. A linear table space or index space can contain a maximum of 64GB of data.

This abend reason code is issued by the following CSECTs:

DSNISGPI	DSNISMPI	DSNISMXP
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System action: A 'resource not available' code is returned to the end user and the requested action is not performed. The SVC dump and the SYS1.LOGREC recording are not requested.

User response: Notify the system programmer to reclaim some free space in the associated table space or index space and rerun the job.

System programmer response: The table space or index space name is identified in the DSNT501I

message. If it is a table space, run the DB2 REORG utility to attempt to reclaim additional free space. If it is an index space, drop and recreate the index with a fewer number of SUBPAGES. If free space cannot be reclaimed, notify the database administrator to redistribute the data into different table spaces or index spaces.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For more information, refer to the explanation of message DSNT501I in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 37.

00C9009E

Explanation: The object depends on new facilities of the release and is therefore unavailable for processing. For data-sharing systems, the object will be available on a new release in a data-sharing group. For non-data-sharing systems, the object will be available after re-migration if release fall back has occurred.

This abend reason code is issued by the following CSECTs: DSNICUBC, DSNIPSEI

System action: The operation is not allowed. The data manager function that detected this condition returns 'resource not available' to its invoker.

Operator response: Notify the system programmer.

System programmer response: In order to perform the operation on the object:

- For non-data sharing systems a re-migration is required.
- For data sharing systems, insure that the operation is performed on a member at the correct level of DB2.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00C9009F

Explanation: A table has been referenced that has a primary key or unique key but no index exists to enforce its uniqueness. The reference is usually to a parent table when attempting to verify the referential constraint of an insert or update operation to a dependent table.

This abend reason code is issued by the following CSECTs:

DSNIALLC DSNICUBC DSNIKESR DSNIRELI

System action: The use of the table is not allowed.

User response: Create a unique index on the referenced table to enforce the primary key or unique key.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

00C900A0

Explanation: An attempt was made to allocate or access a table space or index that is in the rebuild pending status (PSRBD) or an index in pageset rebuild pending status (PSRBD).

System action: The use of the object is not allowed.

User response: Determine when the resource is available for use and rerun the job.

Operator response: Determine whether the RECOVER utility should be run to complete recovering the object.

Problem determination: The requested operation is not performed because the table space or index might be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I and/or message DSNIO05I is issued. For more information, refer to Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00C900A1

Explanation: An attempt was made to allocate a table space or index that is in group recovery pending state.

System action: The use of the object is not allowed.

User response: Run the RECOVER utility, LOAD utility or START DATABASE command to recover the object.

Operator response: Determine whether the RECOVER utility or START DATABASE command should be run

to complete recovery of the object.

Problem determination: The requested operation is not performed because the table space or index might be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I is issued. For more information, refer to Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5.

00C900A3

Explanation: An attempt was made to allocate a table space, index space, or a related index space while the table space or index space was in check pending status.

System action: The operation is not allowed.

Operator response: Notify the system programmer.

System programmer response: The check pending status needs to be resolved before the operation will be allowed.

If the object is a table space with referential relationships, then run the CHECK DATA utility to check for referential integrity violations.

If the object is a base table space with LOB columns, then run the CHECK DATA utility to validate the auxiliary columns.

If the object is a LOB table space, then run the CHECK LOB utility to validate the structure of the LOB table space.

If the object is an index space, then run the CHECK INDEX utility to verify that the index keys are consistent with the data in the table space or table space partition.

For more information, see Part 2 (Volume 1) of *DB2 Administration Guide*.

Problem determination: The requested operation is not performed. An SQLCODE -904 or -923 is issued. For more information, refer to Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

00C900A4

Explanation: An attempt was made to allocate a segment for a table in a segmented table space, but there are no free segments. A segmented table space can contain a maximum of 64GB of data. A segment will be allocated under one of the following conditions:

- When a table is ready to be created in a segmented table space with the CREATE TABLE statement.
- When a record is inserted/loaded into a segmented table and free space is not available from existing segments.

Thisabend reason code is issued by the following CSECTs: DSNISEGF, DSNISGNS

System action: A 'resource not available' code is returned to the end user and the requested action is not performed.

User response: Notify the system programmer to reclaim some free space in the associated segmented table space and rerun the job.

System programmer response: An SQLCODE -904 is issued, and/or message DSNT501I is issued. The segmented table space name is identified in SQLCA and/or in the DSNT501I message. If the requested function is the CREATE TABLE statement, create the table in a different segmented table space. Otherwise, run the DB2 REORG utility to attempt to reclaim additional free space. If no free space can be reclaimed, then notify the database administrator to redistribute the data into different table spaces.

Problem determination: For more information, refer to the explanation of message DSNT501I in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 37.

00C900A5

Explanation: The temporary file(s) is full or the maximum number of extensions for a VSAM data set(s) has been exceeded for all temporary files or the volume(s) has no space available in which to extend.

This reason code is issued by the following CSECT: DSNIXWKF

System action: The reason code appears in a DSNT501I message, and the requested operation is not performed.

User response: If the reason code appears in a DSNT501I message, issue -DISPLAY THREAD to determine the total number of concurrent users. If there were a large number of users using temporary file(s), resubmit the job when concurrent users are low. IDCAMS LISTCAT may be used to determine the VSAM data set(s) space allocations.

- If there was no space available on a volume(s), then clear space from the volume(s) or add more volumes to the STOGROUP or redefine the VSAM data set to concatenate more volumes.
- If the maximum number of extensions has been exceeded for the VSAM data set(s), then ALTER or delete and redefine the temporary data set(s) with a larger size.
- If all the temporary files are full, then create or define more temporary files.

Issue the -START DATABASE command to start the temporary file.

Problem determination: The requested operation is not performed. An SQLCODE -904 or message DSNT501I is issued, and/or message DSNT501I is issued. For more information, refer to SQLCODE -904 in SQL Return Codes, Part 2, "SQL return codes," on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 32, 10, and definitions of temporary file(s) involved in the error.

00C900A6

Explanation: Access to the catalog was requested but denied because the catalog was not migrated to the current release level. The object in the catalog is available after the catalog is migrated.

Thisabend reason code is issued by the following CSECT: DSNICUBC

System action: The operation is not allowed. The data manager function that detected this condition returns 'resource not available' to its invoker.

Operator response: Notify the system programmer.

System programmer response: To perform the operation on the object, you must migrate the catalog to the current release. To do this, run DSNTIJTC. Refer to Part 2 of *DB2 Installation Guide* for information about this job.

Problem determination: The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued. For more information refer to the SQL Return Code section or to the description of the DSNT501I message in *DB2 Messages*.

00C900A7

Explanation: At allocation of a bound plan or a bound package, a lock inconsistency is detected. A DB2 internal bind error is probably responsible for this condition. The plan or the package cannot be allocated.

This reason code is issued by the following CSECT: DSNIALLC

System action: The plan or the package is not allocated. A DSNT501I message is issued and an SQLCODE -923 is returned to the application.

System programmer response: Re-bind the plan or the package.

Problem determination: If the problem persists after the plan or the package is rebound, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32, 33.

00C900A8

Explanation: The table space, index, or partition could not be started because of a failure to acquire the lock. Activity on the table space, index, or partition must quiesce before the START DB ACCESS(FORCE) command can acquire the necessary lock.

Theabend reason code is issued by the following CSECT: DSNISTFO

System action: The START operation is not performed.

User response: Wait for all activity on the table space, index, or partition to complete before reissuing the START command.

Problem determination: The requested operation is not performed. Message DSN1002I is issued. For more information, refer to the description of this message in *DB2 Messages*. If the problem persists after all activity on the table space, index, or partition completes, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32, 33

00C900A9

Explanation: An attempt was made to allocate a resource that is deferred.

System action: The allocation process is not allowed.

User response: Determine the reason for which the resource was deferred and take the appropriate action to correct the problem. Such actions include issuing the START DATABASE command or running the RECOVER, REBUILD INDEX, or LOAD REPLACE utility.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. You might also receive message DSNT500I or DSNT501I. For more information, refer to the SQL return code or to the description of the DSNT500I or DSNT501I message. SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in

| Appendix C, “Problem determination,” on page 735: 1,
| 3, 5, 32, 33

00C900AA

Explanation: The table space or index space could not be stopped because it is indoubt.

The abend reason code is issued by the following CSECTs: DSNILSTS DSNIPDBA

System action: The STOP operation is not performed.

User response: Resolve the indoubt unit of recovery (UR) using the RECOVER INDOUBT command.

Problem determination: Message DSNI003I is issued. For more information, refer to the description of this message. If the problem persists after all indoubts with locks on the table space/index space are resolved, gather diagnostic information to pursue the problem.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5, 32,

00C900AB

Explanation: An attempt was made to access a resource that is in the restart pending state.

System action: The use of the resource is not allowed.

System programmer response: Use the DISPLAY THREAD TYPE(POSTPONED) to determine the status of the resource.

Use the RECOVER POSTPONED command if recover has not already been started.

Problem determination: The requested operation is not performed because the table space might be in an inconsistent state. An SQLCODE -904 is issued.

00C900AC

Explanation: The DB2 subsystem currently serves as a remote site tracker system. Users cannot have write access for tracker systems, and a tracker DB2 will not allow the use of any SQL statement that requires write access.

System action: DB2 cannot process the operation.

System programmer response: None.

Problem determination: A tracker DB2 does not allow the use of any SQL statement that requires write access, such as DDL, GRANT/REVOKE, INSERT, DELETE, or

UPDATE. DB2 issues SQL code -904 in conjunction with this message. You can also find more information in the description for message DSNT501I, which DB2 issues along with this reason code.

Additionally, a tracker DB2 does not allow the START DATABASE command to perform LPL/GREC recovery. If you attempt a START DATABASE command on a tracker DB2, DB2 will issue message DSNI005I with this reason code.

00C900AD

Explanation: An attempt was made to access a resource that is in the REORG pending state.

System action: The use of the resource is not allowed.

System programmer response: Use the REORG utility with SHRLEVEL(NONE) PART n1:n2 to resolve the REORG pending state. The following methods can be used to resolve the REORG pending state:

- REORG SHRLEVEL(NONE) PART (m:n)
- LOAD REPLACE tablespace
- DROP tablespace

Problem determination: The requested operation is not performed because the table space might be in an inconsistent state. A SQLCODE -904 is issued.

00C900AE

Explanation: An attempt was made to allocate or access an index that is in the rebuild pending status.

This abend reason code is issued by the following CSECTs:

DSNIDBCJ DSNIDBCO DSNIDBCQ

System action: The use of the object is not allowed.

User response: Determine when the resource is available for use and rerun the job.

Operator response: Determine whether the REBUILD utility should be run to complete recovering the object.

Problem determination: The requested operation is not performed because the index may be in an inconsistent state. An SQLCODE -904 and/or message DSNT501I and/or message DSNI005I is issued. For more information, refer to Part 2, “SQL return codes,” on page 9, or to the description of the DSNT501I message in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5.

00C900BA

Explanation: A request for a drain lock for the resource identified by NAME in messages DSNT500I and DSNT501I could not be granted. The request waited for a period longer than the maximum specified by the installation.

This reason code is issued by the following CSECT: DSNILMCL

System action: The requested action is not performed. The Data Manager function that detected this condition returns 'resource not available' to its caller.

User response: Wait for all jobs that hold a drain lock on the resource in an incompatible state to complete before reissuing the failing statement. To display drain locks, issue a DISPLAY DB LOCKS command. In order to avoid a potential deadlock, the application should either commit or roll back to the previous COMMIT.

System programmer response: See SQLCODE -913 or -911 and/or message DSNT501I, which accompany this abend reason code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32, 35.

00C900BC

Explanation: The statement depleted the record identifier (RID) storage available.

This abend reason code is issued by the following CSECT: DSNIREFS

System action: The requested action is not performed.

Operator response: Notify the system programmer.

System programmer response: Restructure the SQL statement so that fewer RIDs are needed. The best way to do this is to split the statement into two or more SQL statements equivalent to the original statement. Also, in some cases, increasing the virtual storage might eliminate the times when storage is depleted.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SQL return code -904 and/or message DSNT500I is issued. For more information, refer to the explanation of message DSNT500I.

00C900BE

Explanation: DB2 is unable to acquire a lock on a resource because a DB2 subsystem in the DB2 data sharing group holds an incompatible retained lock on that resource. Retained locks are locks that persist across DB2 abnormal terminations. After a successful restart of a DB2 member, retained locks can continue to exist for that member until all postponed abort threads have been processed.

System action: The requested action is not performed. SQLCODE -904 is issued. A 'resource not available' code is returned to the user. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK13, VRARRK14, and VRARRK15.

This reason code is issued by the following CSECT: DSNILMCL

00C900BF

Explanation: DB2 is unable to obtain a lock because IRLM detected an 'out of record list' storage condition. The record list is that part of the coupling facility lock structure that contains the 'modify locks' (those locks that would be retained in case of a failure).

This reason code is issued by the following CSECT: DSNILMCL

System action: SQLCODE -904 is returned to the user with this reason code. This reason code and the resource name are returned in the cursor table (CT) and made available to the user in the SQLCA. If it is active, an IFCID 0021 trace record is written and might contain additional diagnostic information.

System programmer response: If this becomes a prevalent problem, you will need to redistribute the coupling facility lock structure storage resource to make more room for the record list. You can do this in one of two ways:

- issue a rebuild, or
- dynamically change the lock structure size

See Chapter 6 of *DB2 Data Sharing: Planning and Administration* for more details about these options.

00C900C0

Explanation: A request for an internal lock could not be granted. The request waited for a longer period than is allowed.

This reason code is issued by the following CSECT: DSNILMCL

System action: The request action is not performed. A

'resource not available' reason code is returned to the caller.

User response: If the user is a DB2 utility, rerun or restart the utility. If it is a DB2 command, reissue the command. DB2 applications should either commit or roll back to the previous commit, then retry from the commit point.

System programmer response: See SQLCODE -911 or -913 and/or message DSNT500I, which accompany this reason code. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00C900C1

Explanation: An attempt was made to allocate an index that has one or more logical partitions in a rebuild pending state.

System action: Use of the object is not allowed.

User response: Determine when the resource is available for use and rerun the job.

Operator response: Determine when the REBUILD utility should be run to complete recovering the object. Only the logical partitions marked as rebuild pending need to be recovered.

Problem determination: The requested operation is not performed because the index might be in an inconsistent state. An SQLCODE -904 or message DSNT501I is issued. For more information, refer to the SQL return code in Part 2, "SQL return codes," or to the description of the DSNT501I.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 32, 72.

00C900C4

Explanation: An attempt was made to insert values into a table that has a ROWID column with the *generated by default* attribute but no index exists to enforce its uniqueness.

System action: The use of the table is not allowed.

System programmer response: Create a unique single column index for the ROWID column.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT501I messages in *DB2 Messages*.

00C900C5

Explanation: An attempt was made to access a table space that is in the auxiliary check pending state (ACHKP).

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response: Use the CHECK DATA utility to identify the invalid LOBs. Use the SQL UPDATE statement to replace the invalid LOBs or the SQL DELETE statement to remove the rows with the invalid LOBs. After rectifying all invalid LOBs, run CHECK DATA again to clear the ACHKP state from the table space.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00C900C6

| **Explanation:** DB2 detected an uncommitted read or write claim on an index being altered in the same commit scope. When you use the PIECESIZE or COPY clause with the ALTER INDEX statement, then you need to have the read or write claim committed BEFORE you complete the operation.

| PIECESIZE does not allow an uncommitted write or read claim on the index.

| COPY, set to YES or NO, does not allow an uncommitted write on the index.

| Commit or rollback all changes to the index before using ALTER INDEX with one of these clauses.

| **System action:** The ALTER INDEX statement is not allowed.

| **System programmer response:** The requested operation is not performed and SQLCODE -904 is issued. For more information, refer to the SQL code in "Section 2. SQL Return Codes". Commit or rollback changes to the index and retry the ALTER INDEX statement.

| **Problem determination:** The requested operation is not performed and SQLCODE -904 is issued. For more information, refer to the SQL return code in "Section 2. SQL Return Codes."

00C900C7

Explanation: The requested function was either:

- not supported by the current release or maintenance level of DB2, or
- deactivated by a modified the system parameters.

In the former case, the NAME field of the accompanying message indicates the required level of maintenance. In the latter case, the NAME field indicates the deactivating system parameter.

System action: The requested action is not performed.

User response: Inform the system administrator.

System programmer response: To permit the use of the function, take the appropriate actions according to the situation. Apply the indicated maintenance, migrate to the indicated release of DB2, or use an alternate setting for the indicated system parameter.

00C900C8

Explanation: Access to the index is disallowed within the same commit scope as an ALTER TABLE statement that alters the key column in the index. If the ALTER TABLE statement failed, then commit the changes to the index and retry the ALTER TABLE statement. If an INSERT, DELETE, UPDATE, or SELECT statement failed, then commit the ALTER and retry the statement.

System action: The operation is not allowed.

User response: Commit and then retry the operation.

00C900C9

Explanation: After being expanded to process triggers, a row has grown too large to fit into a 32K page of a workfile.

System action: DB2 does not perform the requested operation.

Programmer response: Drop and recreate triggers to use less LOB columns as transition variables, or eliminate the use of the ROWID column as a transition variable. For a table with LOB columns or a ROWID column whose row size is very close to 32K, it may not be possible to use transition tables with triggers.

Problem determination: DB2 does not perform the requested operation. DB2 issues SQL code -904, and may also issue message DSNT500I or DSNT501I. For more information, refer to Part 2, "SQL return codes," on page 9, or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following terms listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 37.

00C900CB

Explanation: Resource is unavailable because the resource is in a refresh pending state.

System action: The use of the resource is not allowed.

Problem determination: DB2 does not perform the requested operation because the table space or index space might be in an inconsistent state. DB2 issues SQL code -904. For more information, refer to the SQL return code, or to the description of the DSNT501I message.

00C900CC

Explanation: DB2 does not accept the NOBACKOUT request during the rollback of a non-global transaction while the backout of catalog changes is in progress.

System action: DB2 rejects the NOBACKOUT request.

Problem determination: DB2 does not perform the requested operation because the backout in progress must be complete before the NOBACKOUT request can succeed. Wait for the backout to complete, then reissue the request.

00C900CD

Explanation: DB2 does not accept the NOBACKOUT request during the rollback of a non-global transaction. At least one of the objects of the transaction is shared by another transaction.

This reason code is issued by the following CSECT: DSNILABR

System action: DB2 rejects the NOBACKOUT request.

Problem determination: DB2 does not perform the requested operation because at least one object involved in the operation is also updated by other active transactions in DB2. Wait for the other transactions to finish, then reissue the request.

00C900CE

Explanation: Resource is unavailable because the resource is in a state that is incompatible with this version of DB2.

System action: DB2 does not allow the use of the resource.

Problem determination: DB2 does not perform the requested operation because the table space or index space might be in an inconsistent state. DB2 issues SQL code -904. For more information, refer to the SQL return code or to the description of the DSNT501I message.

00C900CF

Explanation: DB2 was unable to open the specified object because it is one of the following types:

1. A Type 1 index
2. An index with a data set password
3. A table space with a data set password
4. An ROSHARE database

The reason code and object name are in the SQL communication area or in related messages.

System action: Use of the object is not allowed.

User response: Use the ALTER INDEX, ALTER TABLESPACE, or ALTER DATABASE command to put the object into a supported state. DROP can also be used if the object is no longer needed.

Problem determination: The requested operation is not performed. A resource unavailable code is returned to the user.

00C900D0

Explanation: An attempt was made to access a value in a column with one of the LOB data types (BLOB, CLOB, DBCLOB), but the value of the column is no longer valid.

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response: Use the CHECK LOB utility to identify the invalid LOBs. Use update to replace or delete the invalid LOBs.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00C900D1

Explanation: The amount of space allowed for processing LOB values by a user has been exceeded. The amount of space allowed per user is indicated by panel DSNTIP7.

This reason code is issued by the following CSECTs: DSNOTCSO

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00C900D2

Explanation: The amount of space allowed for processing LOB locators for a system has been exceeded. The amount of space allowed for a system is indicated by panel DSNTIP7.

This reason code is issued by the following CSECTs: DSNOTCSO

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00C900D3

Explanation: No more space in the data space is available for processing LOB values.

This reason code is issued by the following CSECTs: DSNOTCSO

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued.

For more information, refer to the Part 2, “SQL return codes,” on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00C90101

Explanation: The data manager detected an internal error within DB2. This error may indicate inconsistent data or an error in internal DB2 control structures or code.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

Possible causes of this error include:

- Improper migration or fall back procedures,
- DB2 directory and DB2 Catalog restored to different points in time,
- Table space restored improperly,
- An internal DB2 failure.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If this abend occurred while processing data in one or more pages, message DSNI014I is issued to identify each page involved. In general, the data in these pages is fine. However, if problems are reported that repeatedly involve the same pages or if the same pages are reported by other abends, you may want to analyze the set of pages specified.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI014I is index.
- The page type indicated in message DSNI014I is data.
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the

abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 5 in Appendix C, “Problem determination,” on page 735 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 31, 32, 33, 40, 41.

If the abend reason code was issued by a CSECT with name DSNGxxxx, where 'xxxx' is any value, make a copy of DSND01.DBD01, DSND01.SCT02, and DSND01.DSNSCT02 on tape with DSN1COPY. This might be a large copy.

00C90102

Explanation: An inconsistent page was detected. This has been caused by a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNIBROK

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

In addition, the following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the page set block (PB)
3	Address of the log record, if any
8	Address of the buffer block (BB)
9	Address of the page buffer

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 6, 13, 32.

00C90103

Explanation: Bad data was returned from either the edit or the validation exit.

This abend reason code is issued by the following CSECTs: DSNIREDR, DSNIENSR

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYS1.LOGREC contains the same diagnostic information in the variable recording area (VRA) as in abend reason code '00C90101'. Refer to the table accompanying that abend reason code for details.

The '00C90103' abend reason code was issued because one of the checks described in the following list failed:

- Save first and last byte of the input record. On return from exit, see if either group has been modified. If so, abend.
- Check length of edited data. If greater than maximum allowed for this row, or less than one, abend.
- Store a special character in the first byte past the end of the output area (place for edit procedure to put edited or (original unedited) row), to make sure the exit doesn't overrun this area. On return, check if it is still the same special character. If not, abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

00C90105

Explanation: An inconsistent page was detected. This has been caused by a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNIBROK

System action: A record is written to SYS1.LOGREC, an SVC dump is requested, and the page will be scheduled for automatic recovery. If automatic recovery is successful, message DSNB215I is issued. If automatic recovery fails, message DSNI012I is issued, and an abend '04E' with reason code 00C90102 will occur.

Note: If the resource required for automatic recovery is in use, automatic recovery will be delayed until the resource is available.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9. Exceptions to the table definitions of the VRA fields are:

- VRARRK5 is the name of the module that called the check page routine that detected the error in the page.
- VRARRK6 identifies the error in the page.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the page set block (PB)
3	Address of the log record, if any
8	Address of the buffer block (BB)
9	Address of the page buffer

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 6, 13, 32.

00C90106

Explanation: The entry is not found for a table space that is being set for deferred restart. An error in DB2 logic is probably responsible for this condition.

This abend reason code is issued by the following CSECT: DSNIIIMP

System action: A record is written to SYS1.LOGREC, an SVC dump is requested, and the DB2 restart is terminated.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 32, 33.

00C90107

Explanation: At commit phase 1, a nonzero write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abend reason code is issued by the following CSECT: DSNICMT2

System action: A record is written to SYS1.LOGREC, an SVC dump is requested. The thread is aborted.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 31, 32, 33.

00C90108

Explanation: At commit phase 2, a nonzero read intent count or write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abend reason code is issued by the following CSECT: DSNICMT2

System action: A record is written to SYS1.LOGREC, and a SVC dump is requested. The thread is committed and the application is allowed to continue without notification of the error.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 31, 32, 33.

00C90109

Explanation: At deallocate, a nonzero read intent count or write intent count was detected. An error in DB2 logic is probably responsible for this condition.

This abend reason code is issued by the following CSECT: DSNIDALC

System action: A record is written to SYS1.LOGREC, and a SVC dump is requested. The thread is deallocated normally.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 31, 32, 33.

00C9010E

Explanation: The number of held CUBs in a table space less than zero. This error is a DB2 internal error.

System action: The requesting execution unit terminates abnormally.

Operator response: Notify the system programmer, print the SYS1.LOGREC, and request the SVC dump.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on

identifying and reporting the problem.

Problem determination: This reason code is issued by the following CSECTs: DSNICMTC, DSNITCUS, DSNIWCUB, DSNIW RCC, DSNXECLC, DSNXECWC, DSNXP DST, DSNXP RE2, DSNXP RE3, DSNXSPKY.

00C90110

Explanation: The data manager detected an inconsistent data condition. This may be caused by an inconsistency in either the DB2 catalog or the DB2 directory. In this case, the OBD for the requested OBID cannot be located in the database descriptor (DBD). The DBD in storage may be inconsistent. Specifically, the OBDDMAP(OBID) array element should contain an offset into the DBD where the OBD should be located. However, in this case the OBD expected was not at the indicated offset.

To prevent further damage and possible loss of data, the inconsistency must be corrected before any further SQL access is attempted to this database.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine which databases were being used when the error occurred. Prevent further SQL access to the databases. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The DBD in use at the time of the abend is inconsistent in storage and may be inconsistent on DASD. Since the nature and extent of the damage done to the DBD is not immediately known, an analysis of the entire DBD must be done.

The inconsistency may be due to:

- Incomplete recovery of DB2 catalog and/or DB2 directory.
- Invalid restore of DB2 catalog and/or DB2 directory to a prior point in time.
- A conditional restart which bypassed recovery of either the DSNDB01.DBD01 page set or the DSNDB06.SYSDBASE page set.
- A DB2 internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 69, 70, 71, 72.

00C90111

Explanation: The data manager detected an inconsistent data condition. In this case, the OBD for the requested OBID does not exist. This may be caused by an inconsistency in either the DB2 catalog or the DB2 directory. Specifically, the OBDDMAP(OBID) entry is zero rather than an offset to an OBD within the DBD.

To prevent further damage and possible loss of data, the inconsistency must be corrected before any further SQL access is attempted to this database.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine which databases were being used when the error occurred. Prevent further SQL access to the databases. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Since the DB2 directory does not agree with the DB2 catalog, either of these may be inconsistent. Since the nature and extent of the inconsistency between the DB2 catalog the DBD is not immediately known, an analysis of the entire DBD must be done.

The inconsistency may be due to:

- Incomplete recovery of DB2 catalog and/or DB2 directory.
- Invalid restore of DB2 catalog and/or DB2 directory to a prior point in time.
- A conditional restart which bypassed recovery of DSND01.DBD01 or DSND06.SYSDBASE page sets.
- A DB2 internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 69, 70, 71, 72.

00C90112

Explanation: The data manager detected an inconsistent data condition. There may be more than one object with the same OBID in the DB2 Catalog. To prevent further damage and possible loss of data, the inconsistency must be corrected before any further SQL access is attempted to this database.

This abend reason code is issued by the following CSECT: DSNNGDCOB

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine which databases were being used when the error occurred. Prevent further SQL access to the databases. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Since the extent of this inconsistency is not immediately known, an analysis of the entire DBD must be done.

The inconsistency may be due to:

- Incomplete recovery of the DB2 Catalog and/or the DB2 Directory.
- Invalid restore of the DB2 Catalog and/or the DB2 Directory to a prior point in time.
- A conditional restart which bypassed recovery of DSND01.DBD01 or DSND06.SYSDBASE page sets.
- A DB2 internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 69, 70, 71, 72.

00C90124

Explanation: An attempt was made to apply prior-version/release DB2 log records other than checkpoint records.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting problems.

Problem determination: This abend can occur in migration/remigration when some necessary migration/remigration steps are skipped. It indicates that some DB2 activity occurred or was pending after the last complete checkpoint on the prior system. See Part 2 of *DB2 Installation Guide* for a complete list of migration/remigration steps. If this was the cause of the problem, it can be corrected by falling back to the prior version/release long enough to bring DB2 up, then bring it down while conforming to all migration/remigration steps. Pay specific attention to resolving all indoubts and to performing a stop mode quiesce.

00C90202

Explanation: The data manager detected an inconsistent data condition. In this case, one of the pointers in a link does not point to a valid child or parent row (that is, the link is 'broken'). The pointer, the target row, or the page that contains the pointer or target row is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save the output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the data pages. It identifies the database name and table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42.

00C90203

Explanation: The data manager detected an inconsistent data condition. In this case, one of the pointers in a hash chain does not point to a valid row or anchor (that is, the hash chain is 'broken'). The pointer, the target row/anchor, or the page that contains the pointer or target row/anchor is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the data pages. It identifies the database name and the table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42.

00C90205

Explanation: The data manager detected an inconsistent data condition. In this case, a row obtained from an index entry does not point to a valid row in a data page. The error is probably caused by an extra index entry, but it could also result from a table update not being redone when it should have been.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the index page. It identifies the database name, table space name, and index space name. This message is issued for all pages in use at the time of the

abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI014I is index
- The page type indicated in message DSNI014I is data
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 41, 42.

00C90206

Explanation: The data manager detected an inconsistent data condition. In this case, a row that should be pointed to by an index does not have an index entry. The error is probably caused by a missing index entry, but it could also be caused by a table update that was not backed out when it should have been.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the data pages. It identifies the database

name, table space name, and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI014I is index
- The page type indicated in message DSNI014I is data
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Appendix C, "Problem determination," on page 735 Table 5 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 41, 42.

00C90207

Explanation: The data manager detected an inconsistent data condition. In this case, a pointer record does not point to a valid overflow record. The pointer record, the overflow record, or the page that contains the pointer or overflow record is in error.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the data pages. It also identifies the database name and the table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT: qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42.

00C90210

Explanation: The data manager detected an inconsistent data condition. In this case, the subpage directory of an index leaf page indicates that a given search key doesn't belong to any of the subpages. Either this leaf page is the index tree or the nonleaf portion of the index tree lead to this leaf page as the one that should contain the given key.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the index page. It also identifies the database name and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Appendix C, "Problem determination," on page 735 Table 5 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 43.

00C90211

Explanation: The data manager detected an inconsistent data condition. In this case, a row is missing a column that is not nullable and does not allow default values.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the data page. It also identifies the database name and table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42, 62.

00C90212

Explanation: The data manager detected an inconsistent data condition. In this case, there is an empty index leaf page other than the root. (DB2 removes empty pages from the index tree.)

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index leaf page. It also identifies the database name and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

Run the CHECK utility to determine the extent of index inconsistency if:

- The page type indicated in message DSNI014I is index.
- The page type indicated in message DSNI014I is data.
- There is an index defined on a table in the indicated page set.

The LOC keyword in the dump title gives the Load module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Appendix C, "Problem determination," on page 735 Table 5 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 41, 43.

00C90213

Explanation: The data manager detected an inconsistent data condition. In this case, a row has an unexpected OBID stored in its prefix. A possible cause is that the table space was restored (via DSN1COPY or similar tool) improperly. For example, the wrong data set was copied for the given table space.

This abend reason code is issued by the following CSECT: DSNnnnnn

'nnnnn' is the CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA (see the Problem Determination section of this message). 'DSNnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the data page. It also identifies the database name and table space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load module.CSECT: qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42, 62.

00C90214

Explanation: The data manager detected a condition of inconsistent data. The description of the index in the index OBD does not match the attributes of an index page. The problems consists of one of the following conditions:

- IPPNUNI does not equal OBDKNUNI,
- IPPTLTH does not equal OBDKLEN,
- IPPOLTH does not equal OBDLENO, or

- If the page is a leaf page, the segmentation flag or number of subpages conflict (IPPNLPG does not equal OBDINLPG or IPPSEGM conflicts with OBDINLPG).

The index space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given index.

This abend reason code is issued by the following CSECT: DSNnnnnnn

'nnnnn' is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA. 'DSNnnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I will be issued for each index page. It identifies the database, and the index name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33, 42, 44, 62.

00C90215

Explanation: The data manager detected a condition of inconsistent data. The index manager subcomponent has been passed a key with a key length not equal to the key length in pages of the index. The index space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given index.

This abend reason code is issued by the following CSECT: DSNnnnnnn

'nnnnn' is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA. 'DSNnnnnnn' is the full CSECT name given in the dump title.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

A rebuild index or recover index will restore the index to a correct condition.

Problem determination: Message DSNI013I will be issued for each index page. It identifies the database, the index name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

The LOC keyword in the dump title gives the Load-module.CSECT:qualifier of the location where the abend occurred. 'Qualifier' is a unique, 4-digit hexadecimal number that identifies the place within the source module (CSECT) where the abend was issued.

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 31, 32, 33, 42, 44, 62, 63, 64.

00C90216

Explanation: The data manager has detected an inconsistent data condition. Either the length of a record in a table space is longer than the maximum-defined record length as defined in the DB2 directory or a variable-length column has a longer length than the length defined in the DB2 directory.

This abend reason code is issued by the following CSECTs:

DSNIOSET	DSNIRNXT	DSNIRSET	DSNISFWL
DSNISFX	DSNISRID		

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the data page that contains the record that is longer than allowed by its corresponding record definition. This could occur if the DB2 directory was recovered to a previous point, allowing new object creations (with a shorter record length) to be created having record identifiers identical to objects previously created in the table space. Also the table space may have been improperly restored by using DSN1COPY or the wrong data set may have been copied for the given table space.

Refer also to Table 5 in Appendix C, “Problem determination,” on page 735 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 32, 33, 42, 62, 65, 66.

00C90218

Explanation: The data manager detected an inconsistent data condition in a segmented table space. In this case, an unallocated segment was found on a segment chain.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is 'nnnnn' (see the Problem Determination section of this message). The full CSECT name given in the dump title is 'DSNnnnnn'.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the space map page that contains the bad segment entry. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are:

VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 5 in Appendix C, “Problem determination,” on page 735 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 32, 37.

00C90219

Explanation: The data manager detected an inconsistent data condition in a segmented table space. In this case, an allocated segment was found on a wrong segment chain (that is, a segment chain contains a segment that belongs to a different table).

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is 'nnnnn' (see the Problem Determination section of this message). The full CSECT name given in the dump title is 'DSNnnnnn'.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I is issued to identify the space map page that contains the bad segment entry. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 5 in Appendix C, “Problem determination,” on page 735 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 32, 37.

00C9021A

Explanation: The data manager detected an inconsistent data condition in a segmented table space. In this case, a data page contains a record which belongs to a table that has not been allocated for the page.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is 'nnnnn' (see the Problem Determination section of this message). The full CSECT name given in the dump title is 'DSNnnnnn'.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the data page that contains the bad data record. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 32, 37.

00C9021B

Explanation: The data manager detected an inconsistent data condition in a segmented table space. In this case, the space map page indicates a data page that is not empty exists. However, the data page is either not formatted by the data manager or it is beyond the highest VSAM formatted area.

This abend reason code is issued by the following CSECT: DSNnnnnn

The CSECT name identifier given in the dump header and appearing in VRARRK5 of the VRA in the SDWA is 'nnnnn' (see the Problem Determination section of

this message). The full CSECT name given in the dump title is 'DSNnnnnn'.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the inconsistent data page and its covering space map page. The database name and table space name will also be identified.

SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 32, 37.

00C9021C

Explanation: While running a utility, the data manager detected an inconsistent data condition. A row was encountered that is not represented by a record OBD in the database descriptor (DBD). This abend may indicate an internal DB2 error, but most likely occurs due to a user error. Possible user errors may include:

- Data from a DB2 subsystem was copied to another DB2 subsystem incorrectly. This is the most common error.
- DSNDB01.DBD01 was regressed to a time prior to a table being created.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs: DSNIRFNX, DSNISNPG

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The dump is required in the event that the problem is determined to be a DB2 internal error.

User response: Notify the system programmer.

System programmer response: Determine if improper procedures were used to restore the table space or DBD that would lead to the inconsistency.

Problem determination: Message DSN1013I will be issued.

If a DB2 internal error is indicated, collect the following diagnostic items:

- DSN1COPY of the user table space.
- DSN1COPY of DSNDB01.DBD01.

Also collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 31, 32, 33, 37.

00C9021D

Explanation: During a LOAD/REORG utility or termination of a utility, the data manager detected an inconsistent data condition. A space map page was missing from the table space. This abend may indicate an internal DB2 error (caused by the utilities subcomponent passing a bad start position to the data manager), but most likely occurs due to a user error. Possible causes are that the table space data set has been deleted and redefined without DB2’s knowledge, or that the table space was incorrectly restored from an improper DSN1COPY of the table space.

This abend reason code is issued by the following CSECT: DSNIDLOD

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The dump is required in the event that the problem is determined to be a DB2 internal error.

User response: Notify the system programmer.

System programmer response: Determine if the data set was improperly restored or deleted and redefined by the user. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSN1013I will be issued. If the message information describes page 'xx0001'X of the table space, this indicates that the data set was deleted and redefined without DB2’s knowledge.

If a DB2 internal error is indicated, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 10, 12, 31, 32, 33, 37, 43.

00C9021E

Explanation: The data manager detected an inconsistent data condition in a segmented table space. An invalid page was requested. The page number is outside the highest formatted RBA for the page set. Either the segment chain is broken, or the table space has been truncated. A truncated table space could be a possible user error.

This abend reason code is issued by the following CSECTs: DSNISGSC, DSNISNPG

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 3, 32, 37.

00C9021F

Explanation: The data manager detected an inconsistent data condition in a segmented table space. A duplicate first segment block for a table is found during the rebuilding of the first segment block in a segmented table space. The segment chain may be broken.

This abend reason code is issued by the following CSECT: DSNISEGR

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Console output from the system on which the job was run and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
- SVC dump (or system dump), taken to SYS1.DUMPxx data set, as a result of operator initiated dump command or SLIP trap exit.
- SYSPRINT output, including JCL, for the batch job and system messages that were issued
- Definitions of table spaces, tables, and indexes involved in the error
- Listing of the entire table space
- Listing of the DBD, obtained by executing UTILITY DIAGNOSE OBD.

00C90220

Explanation: The data manager detected an inconsistent data condition. In this case, free index page cannot be found in the index space. The problem could be caused by a problem detected by IRLM, such as out-of-storage, or some other problem.

This abend reason code is issued by the following CSECT: DSNISMXF.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the data pages. It identifies the database name, table space name, and index space name. This message is issued for all pages in use at the time of the abend. Within this group of pages, at least one page is involved in the inconsistency. The other pages were present at the time of the abend.

From the console output, determine if resource unavailable message DSNT500I/DSNT501I was given prior to the abend. If there is and the reason code given is 00C90092, 00C90093, or 00C90096, then refer to the description of the appropriate message in this book for more information. Otherwise, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 32, 33. Also collect a DSN1COPY output of the tables and indexes before any recover is performed.

00C90221

Explanation: The data manager detected an inconsistent data condition. In this case, a nonsegmented space map page was read for a table space that had been defined as segmented. This problem could be caused by incorrect use of the DSN1COPY service aid or a DB2 internal problem reading the space map page.

This abend reason code is issued by the following CSECT: DSNISGAU

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from the system on which the job was run for the period of

time spanning the failure. Save this output for use in problem determination.

System programmer response: If you suspect an error in DB2, Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYS1.LOGREC contains information in the variable recording area (VRA) of the system diagnostic work area (SDWA). Significant fields for this abend code are: VRARRK5, VRARRK6, VRARRK7, VRARRK8, and VRARRK9.

Refer also to Table 5 in Appendix C, "Problem determination," on page 735 for further information on DSN1COPY misuse. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 32, 37.

00C90222

Explanation: While starting DB2, the data manager detected a utility in process (UTUT, UTRO or UTRW) state on an object that originated from Version 2 Release 3. This abend might indicate an internal DB2 error, but most likely occurs because of a user error. A possible user error is a result of not terminating all utilities before migrating to this release.

This abend reason code is issued by the following CSECT: DSNIERST

System action: The -START DB2 command fails. A record is written to SYS1.LOGREC and an SVC dump is requested. The dump is required if the problem is determined to be a DB2 internal error.

User response: Notify the system programmer.

System programmer response: Determine if an improper procedure was used to migrate to this release. If the utilities were not terminated before migrating, fall back to Version 2 Release 3 and restart DB2. Use the -TERM UTILITY command to terminate utilities, use the -DISPLAY UTILITY command to make sure no utility job is currently active, stop DB2, and remigrate to this release.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 31, 33.

00C90301

Explanation: The data manager detected an internal error with DB2 during RID LIST processing. The requested RIDMAP pointer can not be found in the specified CUB control block.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

User response: Notify the system programmer.

Operator response: Collect the console output from

the system on which the job was run from the period of time spanning the failure. Save this output for use in problem determination.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 32, 37.

00C90303

Explanation: An attempt to make the database exception table (DBET) consistent failed after an agent failure.

System action: The DB2 subsystem abends, a record is written to SYS1.LOGREC, and an SVC dump is requested.

Problem determination: This reason code is issued by the following CSECT: DSNIDBPX

Restarting the member rebuilds the local DBET. Analyze SYS1.LOGREC and the dump to determine why the agent failed and why the attempt to make the DBET consistent failed.

00C90304

Explanation: START DATABASE recovery of GRECP cannot proceed because the recover base RBA value in the header page for the object is invalid. The following might have occurred:

- The data set was restored from an earlier release backup that does not have a starting RBA or LRSN in the header page.
- DSN1COPY RESET utility command.

System action: The GRECP recovery for this object is terminated; all other objects being recovered by this START DATABASE command are not affected.

System programmer response: Use the RECOVER utility without the LOGONLY option.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNISREC

00C90D01

Explanation: DB2 detected an inconsistent condition. An entry in the auxiliary index was not found. The error is probably caused by not recovering all table spaces in a table space set to the same point-in-time.

This abend reason code is issued by the following CSECTs: DSNONLLE and DSNOTCSO

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index page. Run CHECK INDEX on the auxiliary index followed by CHECK DATA on the base table space in order to identify the inconsistencies. See DB2 Utility Guide and Reference for information about CHECK INDEX and CHECK DATA.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00C90611

Explanation: The Security Server was unable to process this row level, Multilevel Security (MLS) request.

System action: The requested operation is not performed.

System programmer response: Refer to the z/OS *Security Server RACF Security Administrator's Guide* for an explanation of the SAF/RACF return/reason codes in the resource name, and for corrective action advice.

00C90614

Explanation: DB2 attempted to load a DBD during DB2 startup in deferred mode.

System action: Startup continues, and the DBD is not loaded.

System programmer response: After the DB2 startup, completes, the DBD can be loaded or recovered.

Chapter 12. X'D1.....' codes

For X'D1' codes, DB2 provides the following diagnostic information in the SYS1.LOGREC variable recording area (VRA) of the SDWA for many of the reason codes:

MODID

Name of module issuing the abend

LEVEL

Change level

COMPONENT

Subcomponent ID

REGISTERS

General purpose registers (GPRs) 0 through 15 at time of abend

00D10010

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issues this reason code. The RANGE parameter on the OPEN request specifies the address of a 12-byte area containing the log relative byte address (RBA) range to be processed by subsequent GET requests. However, the RBA specified in the second six bytes of the RANGE parameter (which indicates the end of the log RBA) is less than or equal to the RBA specified in the first six bytes of the RANGE parameter (which indicates the start of the log RBA).

This reason code is issued by the following CSECT:
DSNJRS01

System action: In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10010 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user application program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Correct the RANGE RBA parameter input, and resubmit the request.

00D10011

Explanation: The DB2 stand-alone log services OPEN and GET processing macro (DSNJSLR) issued this

reason code. During the initial processing of a FUNC=OPEN or FUNC=GET request, storage is obtained to contain the control blocks and other information required to process this request. An MVS GETMAIN failed when attempting to obtain the required storage.

This reason code is issued by the following CSECTs:

DSNJRS01	DSNJRS03	DSNJRS04
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System action: In response to the DSNJSLR FUNC=OPEN or FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10011 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: In all likelihood, the REGION parameter on the EXEC statement for the user program is too small. Increase the REGION size, and resubmit the user program.

00D10012

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The Job Control Language (JCL) for the user program that uses the DSNJSLR macro must specify either the use of the bootstrap data set (BSDS) or, in the absence of the BSDS, the active or archive data set(s) which is

used in the processing. The FUNC=OPEN request failed because neither BSDS nor any log data set is allocated for the job.

This reason code is issued by the following CSECT: DSNJRS01

System action: In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10012 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Correct the JCL and resubmit the user program.

00D10013

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. A VSAM OPEN error occurred while opening the bootstrap data set (BSDS).

This reason code is issued by the following CSECT: DSNJRS04

System action: In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10013 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the OPEN request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM OPEN error return code is placed in SLRFRG15. The ACB error code (ACBERFLG) is placed in SLRFERCD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS *DFSMS: Macro Instructions for Data Sets* to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and resubmit the FUNC=OPEN request.

00D10014

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The Job Control Language (JCL) associated with the user-written application determines how access to the DB2 log data is achieved. Access can either be through the bootstrap data set (BSDS), or through the explicit inclusion of ddnames in the JCL for the active or archive log data set(s) which are to be examined. If the BSDS method is used, the user must specify a RANGE parameter on the FUNC=OPEN call. This reason code indicates that the user used the BSDS method, but did not specify the range of RBAs to be examined.

This reason code is issued by the following CSECT: DSNJRS01

System action: In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 8 in register 15 and a reason code of 00D10014 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Two choices are available:

1. Continue to use the BSDS method of access. If this choice is made, then the FUNC=OPEN invocation must specify a range of RBAs to be examined by use of the RANGE parameter.
2. Replace the use of the BSDS method of access. This can be done by using explicit archive data set ddnames and/or active log data set ddnames in the JCL used to invoke the user-written application program.

00D10015

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The VSAM OPEN of the bootstrap data set was successful but the record format of the BSDS is invalid.

- | An invalid BSDS is the result of a failure during a prior attempt to run conversion program DSNJCNVB.

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10015 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must, therefore, anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

- | **System programmer response:** The procedure for running program DSNJCNVB includes making a copy of the BSDS prior to conversion. Restore the BSDS to the original pre-conversion copy, and retry the conversion. When the BSDS data set has been successfully converted, rerun the original application program.

00D10016

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. In the job control language (JCL) associated with the user-written application, MxxARCHV and/or MxxACTn DD statements were specified for a DB2 member while MxxBSDS was also specified for the same member. However, the specification of MxxARCHV and MxxACTn DD statements is mutually exclusive with the specification of MxxBSDS DD statement for the same member.

This reason code is issued by the following CSECT: DSNJRS06

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10016 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User response:

Correct the JCL and rerun the job. Specify either the DD statements for the log data sets (MxxARCHV and MxxACTN) or the DD statement for the BSDS (MxxBSDS) for a given member; do not specify both.

For additional details about the stand-alone log services, including a sample of an application program that reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

00D10017

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. The job control language (JCL) associated with the user-written application indicated that the logs from more than one DB2 member were to be read in CI mode. However, CI mode is allowed only when reading the log of a single DB2 system.

This reason code is issued by the following CSECT: DSNJRS06

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10017 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User response:

Either remove the CI mode from the OPEN request to read log records of more than one member or change the JCL to specify only one system's log to read its log in CI mode.

For additional details about the stand-alone log services, including a sample of an application program that reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

00D10018

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. In the job control language (JCL) associated with the user-written application, more than one DB2 system's logs were identified. However, on the OPEN request an RBA range was specified. When reading logs from more than one DB2 system, you cannot specify an RBA range; you must specify an LRSN range.

This reason code is issued by the following CSECT: DSNJRS06

System action: In response to DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10018 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User response: Correct the range specification on the OPEN request, and rerun the job. If range is specified when reading log records from multiple members, LRSN=YES must also be specified. Also range must be specified if GROUP DD or a MxxBSDS (BSDS) DD is specified in the JCL.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

00D10019

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSLR) issued this reason code. A VSAM OPEN error occurred while opening the bootstrap data set (BSDS). The error was determined to be one which could be corrected by use of an AMS VERIFY, but the VERIFY also failed.

This reason code is issued by the following CSECT: DSNJRS04

System action: In response to the DSNJSLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10019 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the OPEN request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the *z/OS DFSMS: Macro Instructions for Data Sets* to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. take appropriate action, and resubmit the FUNC=OPEN request.

00D10020

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The end of data has been reached (end of the log, end of the user-specified log data set(s), or end of the log RBA range specified by the RANGE parameter).

This reason code is issued by the following CSECTs: DSNJRS02, DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10020 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: This is not an error; rather, this reason code denotes a normal end of data condition. No action is necessary.

00D10021

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A gap in the log RBA range has been encountered when switching log data sets, indicating missing log records.

This condition may or may not be intentional on the part of the user. Normally, a continuous set of log records are supplied as input by the ACTIVEN and ARCHIVE ddnames in the user's JCL. If a log data set was intentionally (or unintentionally) removed, this condition will arise.

This reason code is issued by the following CSECT: DSNJRS02

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10021 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

System programmer response: As mentioned above, this may or may not be an intentional error. Check the user's JCL to ensure that a continuous string of log records has been supplied. If the BSDS method is being used, use the print log map (DSNJU004) utility to examine the RBA ranges as recorded in the BSDS, and note any RBA gaps which may have resulted from the

deletion of an active log data set or an archive log data set.

If it appears that a log error may have occurred, execute the log print utility (DSN1LOGP) to attempt to obtain a detailed report of the log record(s) associated with the failure. If the DSN1LOGP utility fails, refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

00D10022

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A gap in the log RBA range has been encountered when switching log data sets, indicating missing log records, and the log RBA of the next record following the gap is greater than the end RBA of the RBA range specified by the RANGE parameter.

This condition may or may not be intentional on the part of the user. Normally, a continuous set of log records are supplied as input by the ACTIVEN and ARCHIVE ddnames in the user's JCL. If a log data set was intentionally (or unintentionally) removed, this condition will arise.

This reason code is issued by the following CSECTs: DSNJRS03, DSNJRS04

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10022 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: As mentioned above, this may or may not be an intentional error. Check the RBA range specified on the RANGE parameter to determine if the end RBA value was in error. Check the user's JCL to ensure that a continuous string of log records has been supplied. If the BSDS method is being used, use the print log map (DSNJU004) utility to examine the RBA ranges as recorded in the BSDS, and note any RBA gaps which may have resulted from the

deletion of an active log data set or an archive log data set.

If it appears that a log error may have occurred, execute the log print utility (DSN1LOGP) to attempt to obtain a detailed report of the log record(s) associated with the failure. If the DSN1LOGP utility fails, refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

00D10023

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A gap in the log RBA range has been encountered, and a conditional restart record has been found beyond a conditional restart truncation point. This condition exists when a log RBA gap was intentionally forced by the user as part of log truncation during conditional restart.

This reason code is issued by the following CSECT: DSNJRS02

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10023 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The length, address, and RBA of the conditional restart record are placed in fields SLRFRCLL, SLRFFRAD and SLRFRBA, respectively.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Use the print log map (DSNJU004) utility to examine the conditional restart control records and the RBA ranges of log data sets. Note any RBA gaps which may have resulted from the truncation of the log during a conditional restart.

If it appears that a log error may have occurred, execute the log print utility (DSN1LOGP) to attempt to obtain a detailed report of the log record(s) associated with the failure. If the DSN1LOGP utility fails, refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

00D10024

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A log RBA sequence error has occurred. The RBA of the previous log record is greater than the RBA of the current log record.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10024 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). A pointer to the next log record following the gap is placed in SLRFFRAD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: The DD statements in the user's Job Control Language (JCL) must specify the log data sets in ascending log RBA range order. If both ARCHIVE and ACTIVEn DD statements are included, the first archive data set must contain the lowest log RBA value.

Use the print log map (DSNJU004) utility to obtain a listing of the RBA ranges associated with each archive log data set and active log data set. If necessary:

- Adjust the concatenation sequence of the archive data sets in the user's JCL to ensure that the log records are read in ascending RBA sequence.
- Adjust the order of the active log data sets such that the RBA range is arranged in ascending order, starting with the ACTIVE1 ddname, and progressing through the ACTIVEn ddname.

Following the above adjustments, resubmit the user's JCL.

00D10025

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A VSAM error occurred while reading an active log data set.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10025 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM GET error return code is placed in SLRFRG15. The RPL error code (RPLERRCD) is placed in SLRFRERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS *DFSMS: Macro Instructions for Data Sets* to determine the meaning of the VSAM GET error returned in SLRFRG15, and the RPL error code returned in SLRFRERCD. Take appropriate action to correct the error.

00D10026

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing was unable to locate a log data set containing the requested RBA.

This reason code is issued by the following CSECT: DSNJRS04

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10026 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA for which the GET request failed is placed in SLRFRBA.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log

services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: There could be several reasons for this error:

- The RBA range supplied in the RANGE parameter may have exceeded the upper or lower bound of RBAs available on all active log data sets and all archive log data sets. This will normally occur when the user has specified the bootstrap data set (BSDS) method in the JCL.
- The RBA range supplied in the RANGE parameter may have exceeded the upper or lower bound of RBAs available on the active log data sets and/or archive log data sets supplied in the user's JCL. This will occur when the user has supplied log data sets using the ACTIVEN and ARCHIVE ddnames.

To resolve the problem, use the print log map (DSNJU004) utility to obtain a listing of the archive and active log data sets, and their corresponding RBA ranges. Check the user's JCL and the user's RANGE parameter to ensure that they are in harmony with one another. Correct the JCL and RANGE parameters as necessary, and rerun the application.

00D10027

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSRLR) issued this reason code. A VSAM error occurred while reading the bootstrap data set (BSDS).

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSRLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10027 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM GET error return code is placed in SLRFRG15. The RPL error code (RPLERRCD) is placed in SLRFERCD.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSRLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS DFSMS: Macro Instructions for Data Sets to determine the meaning of the VSAM GET error returned in SLRFRG15, and the RPL error code returned in SLRFERCD. Take appropriate action to correct the error.

00D10028

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSRLR) issued this reason code. Both LRSN range and CI mode read were specified on the OPEN request when reading the log of a DB2 system. However, when reading the log in CI mode, range can be specified only in RBA.

This reason code is issued by the following CSECT: DSNJRS06

System action: In response to DSNJSRLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10028 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User response: Correct the range specification on the OPEN request, and rerun the job.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

00D10029

Explanation: The DB2 stand-alone log services OPEN processing macro (DSNJSRLR) issued this reason code. The BSDS data set of a member named in the BSDS data set pointed to by the GROUP DD statement cannot be allocated.

This reason code is issued by the following CSECT: DSNJRS06

System action: In response to DSNJSRLR FUNC=OPEN call, DB2 places a return code of 12 in register 15 and a reason code of 00D10029 in register 0. No abend is issued by the stand-alone log services, and no information is written to SYS1.LOGREC data set.

User response: Make sure the BSDS data set of every member named in the BSDS data set pointed to by the GROUP DD statement is available for allocation. If the missing BSDS data set belongs to a member that is no longer active and its BSDS data set does not exist any more, then do not use GROUP DD to allocate required BSDS and log data sets. To read log records of other active members, specify a MxxBSDS DD statements for each active member. The print log map (DSNJU004) utility can be used to find the name of every member's BSDS data set.

For additional details about the stand-alone log services, including a sample of an application program which reacts to the nonzero return codes and nonzero

reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

00D1002A

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002A in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM OPEN error return code is placed in SLRFRG15. The ACB error code (ACBERFLG) is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS DFSMS: *Macro Instructions for Data Sets* to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and then resubmit the application job.

00D1002B

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The error was determined to be one which could be corrected; however, a system error occurred while executing an MVS TESTCB macro to determine whether the active log data set which had just been opened was a VSAM ESDS data set or a VSAM LDS data set.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002B in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS DFSMS: *Macro Instructions for Data Sets* to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and resubmit the application job.

If the SLRFERCD field contains X'1001' (decimal 4097), then the error is the result of an inconsistency between the TESTCB parmlist generated in DSNJRS03 and the level of MVS under which the application program was executed. Contact IBM for assistance if SLRFERCD reflects this value.

00D1002C

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The error was determined to be one which could be corrected by use of an access method services VERIFY, but the access method services VERIFY failed.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002C in register 0. No abend is issued by the stand-alone log services

CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS DFSMS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action, and resubmit the application job.

00D1002D

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an active log data set which was previously not opened. A VSAM OPEN error occurred while opening the active log data set. The open error was corrected by use of an access method services VERIFY, but a subsequent attempt to reposition the VSAM pointer back to the beginning of the active log data set (via access method services POINT) failed.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D1002D in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The VSAM return code from the original VSAM OPEN error is placed in SLRFRG15. The ACB error code (ACBERFLG) from the ACB used in the original VSAM OPEN operation is placed in SLRFERCD. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the

control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the z/OS DFSMS: Macro Instructions for Data Sets to determine the meaning of the VSAM OPEN error returned in SLRFRG15, and the ACB error code returned in SLRFERCD. Take appropriate action (in most cases, the problem can be solved by use of an AMS VERIFY against the active log data set named in the SLRFDDNM field of the SLRF). Once the problem is solved, resubmit the application job.

00D10030

Explanation: The DB2 stand-alone log services GET and CLOSE processing macro (DSNJSLR) issued this reason code. The stand-alone log services uses a request block to establish communication between itself and the invoking application program. The address to the request block is returned to the application program on a FUNC=OPEN call, and is required for all subsequent stand-alone FUNC=GET and FUNC=CLOSE calls in the RBR parameter. This reason code is returned to the invoking application when the RBR does not address a valid stand-alone request block. Subsequently, the application program's request cannot be processed.

This reason code is issued by the following CSECT: DSNJRS01

System action: In response to the DSNJSLR FUNC=GET or FUNC=CLOSE call, DB2 places a return code of 8 in register 15 and a reason code of 00D10030 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: On a FUNC=OPEN call, the RBR value is returned in register 1. The application program must preserve this value for all subsequent stand-alone FUNC=GET and

FUNC=CLOSE calls. Due to an application program logic error in the program which invokes the stand-alone log services, the RBR value has been compromised. Repair the application program, and resubmit the application job.

00D10031

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in a log data set which was previously not opened. The user's Job Control Language (JCL) has specified that the bootstrap data set (BSDS) be used as the guide to determining which log data sets are required. An attempt to dynamically allocate the appropriate log data set (via MVS SVC 99) failed.

This reason code is issued by the following CSECT: DSNJRS05

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10031 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The SVC 99 error code (S99ERROR) and information code (S99INFO) are placed in the SLRFRFC and SLRFINFO fields, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDNDM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the appropriate MVS publication to determine the meaning of the SVC 99 error code (S99ERROR) returned in SLRFRG15, and SVC 99 information code (S99INFO) returned in SLRFINFO. Take the appropriate action to correct the error, and resubmit the application job.

00D10040

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an archive log data set which was previously not opened. An attempt is made to open the second file on the archive log tape (the first file normally contains the

bootstrap data set, while the second is normally the archive log data set). If this first attempt failed because the archive log data set was not the second file on an archive tape, then the RDJFCB macro is used to change the data set sequence number from the default value of 2 to a value of 1, before the OPEN is attempted again. This reason code is generated when an error was returned from the RDJFCB macro.

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10040 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RDJFCB error code is placed in SLRFRG15. The ddname of the data set on which the activity occurred is placed in SLRFDNDM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Refer to the *DFSMS/MVS: Using Advanced Services*, SC26-4921 to determine the meaning of the RDJFCB error code returned in SLRFRG15. Take the appropriate action to correct the error, and resubmit the application job.

00D10044

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The GET processing has requested an RBA in an archive log data set which was previously not opened. The attempt to open the archive log data set failed.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10044 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The ddname of the data set on which the activity occurred is placed in SLRFDNDM.

The stand-alone log services program is under the

control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

System programmer response: Determine the cause of the QSAM OPEN error, take the appropriate action to correct the error, and resubmit the application job.

00D10048

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. A QSAM GET error occurred while reading an archive log data set.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 12 in register 15 and a reason code of 00D10048 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Determine the cause of the QSAM GET error, take the appropriate action to correct the error, and resubmit the application job.

00D10050

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The bootstrap data set (BSDS) was erroneously specified as one of the ARCHIVE data sets in the user's Job Control Language (JCL). Consequently, the GET request failed.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 8 in register 15 and a reason code of 00D10050 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the requested log record control interval is placed in SLRFRBA.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Examine the user's JCL, and remove the occurrence of the BSDS data set as one of the concatenated ARCHIVE data sets. Resubmit the application job.

00D10061

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The log record control interval (CI) requested by the application program was read successfully from an active log data set or an archive log data set. However, the physical record length returned from reading the CI is not the expected length. The GET function will complete, but will issue this reason code as a warning.

The length of a log CI in an active log data set is expected to be 4089 bytes. The length of a log CI in an archive log data set is expected to be 4096 bytes.

This reason code is issued by the following CSECT: DSNJRS03

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10061 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. The GET function will complete, but will issue this reason code as a warning.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The length and address of the CI are placed in fields SLRFRCLL and SLRFFRAD, respectively. The RBA associated with the CI is placed in SLRFRBA. The

'ddname' of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: The RDF/CIDF control information in the CI has been compromised. If the SLRFRCLL field indicates a value greater than expected, then the data within the CI can still be used by the application program. If the SLRFRCLL field indicates a value less than expected, then the data within the CI in all likelihood can still be used, but with caution (additional error checking routines may be required by the user program).

00D10062

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The requested record was found to be a middle spanned record segment, but a preceding first record segment does not exist. The GET function will complete, but will issue this reason code as a warning.

This reason code is issued by the following CSECT: DSNJRS02

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10062 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. The GET function will complete, but will issue this reason code as a warning.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The length and address of the requested record are placed in fields SLRFRCLL and SLRFFRAD, respectively. The RBA associated with the log record segment is placed in SLRFRBA. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero

reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Several possibilities exist for the cause of this condition:

- The Recovery Log Manager component of DB2 did not originally construct the LRH properly.
- The log record header (LRH) for the log record segment was damaged after it was written by the DB2 subsystem.
- The application program continued to process after receipt of a 00D10021 reason code (gap in the log).

If the error was caused by the application program, modifications to the application program may be required.

If the error is a suspected DB2 problem, run the log print (DSN1LOGP) utility, specifying a range of RBAs which would encompass the problem RBA. Determine if the LRH of the log record segment is truly in error by looking at the record segments directly preceding and after the record segment in question.

00D10063

Explanation: The DB2 stand-alone log services GET processing macro (DSNJSLR) issued this reason code. The requested record was found to be a last spanned record segment, but a preceding first record segment does not exist. The GET function will complete, but will issue this reason code as a warning.

This reason code is issued by the following CSECT: DSNJRS02

System action: In response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10063 in register 0. No abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. The GET function will complete, but will issue this reason code as a warning.

Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The length and address of the requested record are placed in fields SLRFRCLL and SLRFFRAD, respectively. The RBA associated with the log record segment is placed in SLRFRBA. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

The stand-alone log services program is under the control of a user-written program that uses the DSNJSLR macro. The user program must therefore anticipate and react to a nonzero return code and a nonzero reason code, possibly by terminating the execution of the user program.

For additional details about the stand-alone log services, including a sample of an application program which reacts to nonzero return codes and nonzero

reason codes, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

System programmer response: Several possibilities exist for the cause of this condition:

- The Recovery Log Manager component of DB2 did not originally construct the log record header (LRH) properly.
- The LRH for the log record segment was damaged after it was written by the DB2 subsystem.
- The application program continued to process after receipt of a 00D10021 reason code (gap in the log).

If the error was caused by the application program, modifications to the application program may be required.

If the error is a suspected DB2 problem, run the log print (DSN1LOGP) utility, specifying a range of RBAs which would encompass the problem RBA. Determine if the LRH of the log record segment is truly in error by looking at the record segments directly preceding and after the record segment in question.

00D10101

Explanation: The ENDRBA value specified in the control statement was either greater or less than any known RBA, but cold start was not specified for the conditional restart.

This abend reason code is issued by the following CSECT: DSNJW306

System action: DB2 startup is terminated.

Operator response: Notify the system programmer.

System programmer response: Run the change log inventory (DSNJU003) utility with a CRESTART control statement that has an RBA value known to the system in the BSDS, or that has the ENDRBA and STARTRBA specifying the same RBA (cold start).

Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for more information.

00D10102

Explanation: A request to disable data sharing failed.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect an SVC dump, and contact the system programmer.

System programmer response: Obtain the SVC dump for the return code. To disable data sharing, you must run the disable data sharing job (DSNTIJGF) and then restart DB2. For more information, see Chapter 2 of *DB2 Data Sharing: Planning and Administration*.

Problem determination: General register 2 contains a return code. Explanation of the return code is as follows:

- 2 A request to disable data sharing is in the BSDS, but a conditional restart record is not present. You must use job DSNTIJGF for the correct conditional restart control record.
- 4 A request to disable data sharing is recorded in the BSDS, but the conditional restart record is not correct. You cannot request a normal conditional restart with a disable request. You must use job DSNTIJGF.
- 8 Update of the BSDS failed. Data sharing was not disabled. See DB2 code 00D10411 for problem determination. After the BSDS problem is fixed, run DSNTIJGF to disable data sharing, and then restart DB2.
- 10 A delete in the BSDS failed. Data sharing was not disabled. See DB2 code 00D10413 for problem determination. After the BSDS problem is fixed, run DSNTIJGF to disable data sharing, and then restart DB2.

00D10103

Explanation: DB2 failed to open the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D10104

Explanation: DB2 failed to find the data sharing member record in the BSDS during DB2 startup.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: If this is the first startup of a new member joining the data sharing group, run the DSNTIJUZ job created to enable data sharing for this DB2 subsystem, and then restart this DB2 subsystem. Also, check whether the correct BSDS is specified in the DB2 master startup procedure. See message DSN7501A

for additional problem determination.

00D10105

Explanation: DB2 found a mismatch in the shared communications area (SCA) while a new member was attempting to join a data sharing group.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: This indicates that a new member is attempting to join the data sharing group. If this a migration from DB2 3.1, then catalog migration must be completed before a new member can join this data sharing group. Wait until catalog migration completes, then restart this DB2 to join the group. Otherwise, group restart is required. Wait until group restart completes, then restart this DB2 to join the group. For more information, see Chapter 2 of *DB2 Data Sharing: Planning and Administration*.

00D10106

Explanation: DB2 failed to update an internal control record in the BSDS for data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 code 00D10411 for problem determination.

00D10107

Explanation: DB2 failed to insert an internal control record in the BSDS for data sharing re-enable.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 code 00D10412 for problem determination.

00D10108

Explanation: DB2 failed to write an internal control record for re-enable in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See message DSN7501A for problem determination.

00D10109

Explanation: DB2 found a shared communications area (SCA) structure during the data sharing re-enable process. This structure should not be built at this time.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Display the existing SCA structures on this MVS system.

Problem determination: If an SCA structure already exists for this DB2 data sharing group, use the MVS command SETXCF to delete this structure, then restart DB2 to complete the re-enable process.

00D1010A

Explanation: DB2 failed to write a record for re-enable in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D1010B

Explanation: DB2 failed to update an internal control record in the BSDS to enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 Code 00D10411 for problem determination.

00D1010C

Explanation: DB2 failed to write an internal control record in the shared communications area (SCA) to enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D1010D

Explanation: DB2 could not find an internal control record for data sharing in the BSDS or the shared communications area (SCA).

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Check to be sure that this DB2 system is supposed to be part of a data sharing group. If this DB2 is in a group, you can restart another DB2 subsystem that is in the same DB2 data sharing group first, and then restart. If no other DB2 subsystems exist in this group, you must recover the BSDS before restarting.

00D1010E

Explanation: DB2 failed to write an internal control record for a data sharing restart in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D1010F

Explanation: DB2 failed an attempt to change the generic LU or location name in the shared communications area (SCA) structure for the data sharing group.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis. All members in the data sharing group must first be stopped, then this DB2 subsystem can be restarted to make this change.

Problem determination:

00D10110

Explanation: DB2 failed to write an internal control record for a generic LU or location name change in the shared communications area (SCA) structure.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: DB2 failed in a write to the SCA structure for a data sharing restart change. Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D10111

Explanation: DB2 failed to find an internal record in the shared communications area (SCA) that is needed to re-enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis. To re-enable data sharing, you must start the surviving DB2 member first before other members can be started. If this is meant to be a re-enable attempt, check whether the surviving member was started first. If this re-enable is already complete, check that this is the correct data sharing group.

Another possibility is that the SCA is damaged. Use the MVS command SETXCF to rebuild the SCA.

00D10112

Explanation: DB2 failed to update an internal control record in the BSDS for a generic LU or location name change.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: DB2 failed in an update to the BSDS for a data sharing generic LU or location name change. See DB2 Code 00D10411 for problem determination.

00D10113

Explanation: DB2 failed to update a data sharing member's information record in the BSDS to enable data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 Code 00D10411 for problem determination.

00D10114

Explanation: DB2 failed to write a data sharing member information record in the shared communications area (SCA) for a restart of data sharing.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

00D10115

Explanation: DB2 failed to update the data sharing record in the BSDS to reset the enable flag.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 code 00D10411 for problem determination.

00D10116

Explanation: DB2 failed to update an internal control record in the BSDS for non-data sharing migration or fallback with DB2.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: See DB2 Code 00D10411 for problem determination.

00D10117

Explanation: DB2 failed to truncate and switch to a new log for data sharing re-enable.

This abend reason code is issued by the following CSECT: DSNJS001

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: Determine why DB2 failed to truncate and switch to a new log. DB2 might be using

the last log. If so, determine why off-load has not occurred. See DB2 messages DSNJ319I and DSNJ320I for problem determination.

00D10150

Explanation: An internal logic error occurred during processing.

System action: The error is recorded in SYS1.LOGREC and an SVC dump is requested. DB2 then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the System Programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. This is likely an error in DB2.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 16.

00D10210

Explanation: An unsuccessful completion of a SET WRITE CURSOR has occurred. An invalid write cursor ID was supplied.

This abend reason code is issued by the following CSECT: DSNJW002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

00D10219

Explanation: DB2 found that the current LRSN is less than the prior LRSN after calculating a delta for the current LRSN.

System action: DB2 terminates.

Operator response: Collect the SYS1.LOGREC and

SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: This indicates that the system time is now less than the time recorded earlier in the DB2 log data set. Check that this DB2 subsystem is using the correct BSDS and log data sets. Also check that the correct system time is being used.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10220

Explanation: An unsuccessful completion of a LOG WRITE has occurred. An invalid write cursor ID was supplied.

This abend reason code is issued by the following CSECT: DSNJW001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

00D10221

Explanation: An unsuccessful completion of a LOG WRITE has occurred. An invalid number of areas was specified.

This abend reason code is issued by the following CSECT: DSNJW001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10222

Explanation: An unsuccessful completion of a LOG WRITE has occurred. The record length specified was greater than 32767.

This abend reason code is issued by the following CSECT: DSNJW001

System action: An execution unit writes a record SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10223

Explanation: There was an attempt to modify a log data set while doing a conditional restart with CSRONLY specified.

This abend reason code is issued by the following CSECTs: DSNJB001, DSNJW001

System action: DB2 startup terminates.

Operator response: Notify the system programmer.

System programmer response: If a complete DB2 startup is desired, remove CSRONLY from the control statement. Restart DB2.

00D10230

Explanation: A CHECK LOG was issued and the log RBA specified in the macro had not been written to DASD at the time.

This abend reason code is issued by the following CSECT: DSNJW004

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10231

Explanation: An unsuccessful completion of a CHECK LOG has occurred. The specified RBA is beyond the end of the log.

This abend reason code is issued by the following CSECT: DSNJW004

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10232

Explanation: A request was made to force an LRSN in non-data sharing mode.

System action: DB2 issues an SVC dump and returns an error to the requesting function.

Operator response: Collect the SYS1.LOGREC and SVC dump and contact the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump for analysis.

Problem determination: The requesting function can be determined from the SVC dump. It has requested a data sharing log manager function in non-data sharing.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10240

Explanation: An unsuccessful completion of a CLOSE LOG FOR WRITE has occurred. An invalid write cursor ID was supplied.

This abend reason code is issued by the following CSECT: DSNJW002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10250

Explanation: An unrecoverable error occurred while updating either the BSDS or the MVS catalog to reflect changes in active log data sets.

This abend reason code is issued by the following CSECT: DSNJW307

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. DB2 then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Correct the error, and restart DB2.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, see abend reason code '00D10252' for a description of the information recorded in the variable recording area (VRA) of the SDWA. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Examine the console log for a DSNJxxxx message preceding this abend to determine whether the error was a BSDS error or an MVS catalog update error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16.

00D10251

Explanation: An unrecoverable error occurred in the log buffer writer.

This abend reason code is issued by the following CSECT: DSNJW008

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. DB2 then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump.

This error is usually caused by a previous error that was recorded on SYS1.LOGREC and produced an SVC dump. The SYS1.LOGREC entries and SVC dump should be examined to determine the primary error that occurred.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, see abend reason code '00D10252' for a description of the information recorded in the variable recording area (VRA) of the SDWA. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16.

00D10252

Explanation: This abend reason code is used to define the format of the information recorded in the variable recording area (VRA) of the SDWA.

This abend reason code is issued by the following CSECT: DSNJW008

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, the following information is contained in the variable recording area (VRA) of the SDWA:

- Reason code '00D10252' stored with key=VRARC.
- The log buffer writer recovery tracking area is stored with key=VRARRP. These fields in the VRA are described by the system mapping macro IHAVRA.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00D10253

Explanation: An application program check occurred in an MVCP instruction that attempted to move a parameter list or other data from the caller's address space to the recovery log manager address space.

This abend reason code is issued by the following CSECTs:

DSNJR001	DSNJW001	DSNJW002
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System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Examine the area from which data was to be moved. It may be in the wrong key, or the address may be the cause of the problem. The failing instruction has a DA opcode and indicates the registers showing address and length to be moved.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10254

Explanation: An application program check occurred in an MVCS instruction that attempted to move data from the recovery log manager address space to the caller's address space.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Examine the area to which data was to be moved. It may be in the wrong key, or the address may be the cause of the problem. The failing instruction has a DB opcode and indicates the registers showing address and length to be moved.

Problem determination: RLM standard diagnostic

information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10255

Explanation: DSNJR008 attempted to resume the waiting execution unit, and a failure occurred leaving the state of the resume indoubt.

This abend reason code is issued by the following CSECTs: DSNJRE08, DSNJW206

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The DB2 subsystem then terminates to avoid leaving the execution unit in a state of indefinite suspension.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, register 6 has the address of the execution block (EB).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10256

Explanation: Recursive abends were detected while trying to reinitialize an archive log read service task.

This abend reason code is issued by the following CSECTs: DSNJR008 DSNJR206 DSNJR208

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The DB2 subsystem then terminates to avoid leaving an execution unit in a state of indefinite suspension.

Operator response: Collect the SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC, the SVC dump, and a listing of the BSDS by running the print log map (DSNJU004) utility. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16, 32.

00D10261

Explanation: While scanning the records and record segments in a log control interval (CI), it was discovered that the forward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJR005), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSRLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10261 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET feedback area (SLRF). The RBA of the record in error is placed in SLRFRBA. The address and length of the CI which contains the errant log record header are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and

SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, “X'D1.....' codes,” on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10262

Explanation: While scanning a log control interval (CI), the offset to the last record or record segment in the CI was found to be incorrect.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.

- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10262 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the beginning of the CI is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10263

Explanation: While scanning a log control interval (CI), the VSAM RDF/CIDF control information was found to be incorrect.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10263 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the beginning of the CI is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.

- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10264

Explanation: While scanning a log control interval (CI), the beginning log RBA of the CI was not the expected RBA.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSRLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10264 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The expected RBA of the beginning of the CI is placed in SLRFRBA. The address

and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10265

Explanation: While scanning the records and record segments in a log control interval (CI), it was discovered the backward record chain was broken. This condition is the result of an incorrect record length in the log record header of some record in the log CI.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record

is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10265 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record in error is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro

(DSNJSLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10266

Explanation: While scanning a log control interval (CI), a unit of recovery ID or LINK RBA in some record was found to be inconsistent with the beginning log RBA of the CI.

This reason code is issued by the following CSECTs:

DSNJOFF1	DSNJR001	DSNJR005	DSNJW009
DSNJW107			

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10266 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the log record with the invalid RBA is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10267

Explanation: While scanning a log control interval (CI), a middle or last spanned record segment was not the first segment contained in the log CI.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJ005 DSNJW009
DSNJW107

System action: This reason code can be issued by an active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJRS01), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSRLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10267 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record segment in error is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.
- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10268

Explanation: While scanning a log control interval (CI), a first or middle spanned record segment was not the last segment contained in the log CI.

This reason code is issued by the following CSECTs:

DSNJOFF1 DSNJRS01 DSNJR005 DSNJW009
DSNJW107

System action: This reason code can be issued by an

active DB2 subsystem as the log buffers are scanned before they are written to the active log, or by the DB2 stand-alone log services GET processing macro (DSNJSRLR) as a CI is retrieved from a user-specified active or archive log data set.

If the reason code is issued by an active DB2 subsystem, then an abend is issued. A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested.

- If the error was detected by DSNJOFF1, then the archiving of the active log data set is terminated and the faulty active log data set is marked 'stopped'.
- If the error was detected by DSNJR005, then message DSNJ012I is issued and the calling agent is terminated.
- If the error was detected by DSNJW009, then message DSNJ012I is issued and the DB2 subsystem is terminated.
- If the error was detected by DSNJW107, then the DB2 subsystem is terminated.

If this reason code is issued as the result of DB2 stand-alone log services GET processing, no abend is issued by the stand-alone log services CSECT (DSNJR001), and no information is written to SYS1.LOGREC data set. Rather, in response to the DSNJSRLR FUNC=GET call, DB2 places a return code of 4 in register 15 and a reason code of 00D10268 in register 0. Information about the results of the GET request is also returned in the stand-alone log GET Feedback Area (SLRF). The RBA of the record segment in error is placed in SLRFRBA. The address and length of the CI are placed in SLRFFRAD and SLRFRCLL, respectively. The ddname of the data set on which the activity occurred is placed in SLRFDDNM.

For additional details about the stand-alone log services, refer to Appendix C (Volume 2) of *DB2 Administration Guide*.

Operator response: If the reason code is issued by an active DB2 subsystem, collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: If the reason code is issued by an active DB2 subsystem, obtain the SYS1.LOGREC and the SVC dump from the operator.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

Problem determination: If the reason code is issued by an active DB2 subsystem:

- RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.
- Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

- Refer to Appendix C (Volume 2) of *DB2 Administration Guide* for failure analysis procedures, with particular emphasis on the use of the DB2 stand-alone log Services.
- Obtain a DSN1LOGP detail report containing the log record(s) associated with the failure.

If the reason code is issued upon return of an invocation of the DB2 stand-alone log services macro (DSNJSRLR), then an additional user-written exit or diagnostic routine may have to be written.

00D10269

Explanation: An unrecoverable error was found in one of the buffers, while moving the current log buffer to the static write buffer ('shadow buffer') in preparation for the physical write to the active log. Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

This abend reason code is issued by the following CSECT: DSNJW107

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The subsystem then terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided under Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

00D10301

Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. An open log read cursor already exists for this execution block (EB). Only one log read cursor per EB is permitted.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Scan the read cursor pool for a cursor with the same EB, or examine through

the DB2 trace for the problem. Trace IDs 040301 and 040302 identify OPEN entries while 040303 and 040304 are for CLOSE.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....' codes,” on page 255. All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5. Register 6 contains the address of the EB.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10302

Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. A valid scope was not specified.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....' codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10303

Explanation: An unsuccessful completion of an OPEN LOG FOR READ has occurred. An invalid log RBA range was specified. HIGHRBA is less than LOWRBA.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....' codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D10304

Explanation: An unknown function was requested in an open of a log read cursor.

System action: DB2 issues a return code of 4 and reason code of 00D10304 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10305

Explanation: A peer log read request was made without a peer log read cursor.

System action: DB2 issues a return code of 4 and reason code of 00D10305 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10306

Explanation: A request to read merged log records failed.

System action: DB2 issues a return code of 4 and reason code of 00D10306 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: The requesting function has put this error code out. Check on this function.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10307

Explanation: A log read open in data sharing failed because the RBA values were not increasing or were overlapping.

System action: DB2 issues a return code of 4 and reason code of 00D10307 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10308

Explanation: A log read open in data sharing failed.

System action: DB2 issues a return code of 4 and reason code of 00D10308 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10309

Explanation: A peer BSDS open request failed.

System action: DB2 issues a return code of 4 and reason code of 00D10309 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D1030A

Explanation: A peer log read request was made in non-data sharing.

System action: DB2 issues a return code of 4 and reason code of 00D1030A to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10310

Explanation: An unsuccessful completion of a SET READ CURSOR RANGE has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....' codes,” on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10311

Explanation: An unsuccessful completion of a SET READ CURSOR RANGE has occurred. An invalid write cursor ID was specified.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....' codes,” on page 255. In addition, all log write cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBWCPHB. The LMB is pointed to by register 5.

Read cursors are in a similar pool at LMBRCPHB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

00D10312

Explanation: An unsuccessful completion of a SET READ CURSOR RANGE has occurred. An invalid log RBA range was specified. HIGHRBA is lower than LOWRBA.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 16.

00D10319

Explanation: Log rollback processing has been canceled by an operator command.

System action: The current log read request terminates and the reason code is returned to the log read requestor.

Operator response: Examine the console for additional messages regarding the canceling of the log rollback process.

00D10322

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with a record matching the specified TYPE was not found.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the

SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10323

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified SCOPE is not found.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10324

Explanation: An unsuccessful completion of a LOG READ has occurred. MODE=DIRECT with record matching the specified CDATE is not found.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic

information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10325

Explanation: An unsuccessful completion of a LOG READ has occurred. The sum of CDATE length value and CDATE offset value is greater than 256.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10326

Explanation: An unsuccessful completion of a LOG READ has occurred. The macro invocation specified that no wait was to occur because of a busy archive log data set (ADSWAIT(NO)). The macro invocation also specified that, rather than returning with a condition code (COND(NO)), an abend should be issued by the recovery log manager (RLM) subcomponent. The RLM determined that the record requested was on an archive log data set that was in use.

This abend reason code is issued by the following CSECT: DSNJR008

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10327

Explanation: An unsuccessful completion of a LOG READ has occurred because of an invalid LOGRBA value. MODE=DIRECT with requested RBA does not match the start of a log record.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

00D10328

Explanation: A LOG READ completed unsuccessfully, because a MODE request sequence was invalid. A read request specifying a sequential MODE (any MODE except DIRECT) must be preceded by an open log for read, a set read cursor range, or a read with the same MODE parameter value. It is invalid to intermix read requests with different sequential mode values.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D10329

Explanation: A LOG READ completed unsuccessfully, because an I/O error occurred while reading the log data set.

Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Examine SYS1.LOGREC and SVC dump information. Also, examine any prior messages with a DSNJ prefix from the log buffer reader.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D1032A

Explanation: An unsuccessful completion of a LOG READ has occurred. BSDS does not map the specified RBA into a log data set. Either the BSDS is in error, or the log data set has been deleted.

Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from BSDS or log failures.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Also, obtain a listing of the BSDS by running the print log map (DSNJU004) utility. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5, 16.

00D1032B

Explanation: A LOG READ completed unsuccessfully because an error occurred while trying to allocate a log data set.

Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

System action: An execution unit writes a record to SYS1.LOGREC and might request an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump, if a dump was produced. Notify the system programmer.

System programmer response: Examine LOGREC and SVC dump information, if a dump was produced. Also, examine any prior messages with a DSNJ prefix from recovery log manager allocation processing.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

This abend reason code is issued by the following CSECT: DSNJR003

00D1032C

Explanation: A LOG READ completed unsuccessfully, because an error occurred while opening or closing a log data set.

Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information about recovery from log failures.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Examine LOGREC and SVC dump information. Also, examine prior messages from recovery log manager open/close processing. These messages have a prefix of DSNJ.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D1032D

Explanation: An unsuccessful completion of a LOG READ has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to the Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, all log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 5, 16.

00D1032E

Explanation: A LOG READ completed unsuccessfully due to an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Examine LOGREC and SVC dump information. LOG READ was passed a bad parameter list. The field which was detected to be in error (RDPLOPT1) is the third byte of the second word traced in the log manager 311 trace entry. The RET field of this trace entry along with the MEPL may be used to determine which module issued the Log Read request. Both pieces of information are useful in isolating the failure.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

Collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 5.

00D1032F

Explanation: A LOG READ completed unsuccessfully because the high range RBA provided was not the RBA of a valid log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10330

Explanation: An unsuccessful completion of a Close Log for read has occurred. The specified log read cursor was not opened by the execution block submitting this request. All input requests must be submitted under the execution block that opened the cursor.

This abend reason code is issued by the following CSECT: DSNJR001

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10331

Explanation: A LOG READ completed unsuccessfully because a LINK RBA did not point to the beginning of a LOG record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10332

Explanation: A log read completed unsuccessfully because a link RBA pointed to a log record with a different URID. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: A record is written to SYS1.LOGREC and an SVC DUMP is requested. The requesting execution unit is abnormally terminated.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: While reading the log backwards using the LRHLINK RBAs, a log record was found that contained a different URID. A link read is normally done when processing a rollback or an abort. This abend is issued to prevent a rollback of the wrong transaction. If this occurs during abort processing, the subsystem is brought down. If the abend reoccurs on the subsequent restart of DB2, a conditional restart is necessary to bypass the invalid log record. Refer to Part 4 (Volume 1) of *DB2 Administration Guide* for information on recovering from a log failure during restart and resolving inconsistencies resulting from conditional restart.

Problem determination: RLM standard diagnostic information is provided in “Recovery Log Manager Reason Codes (X'D1')”. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block

(LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described in the DSNDLMB macro.

00D10333

Explanation: A log read failed because an internal error was detected by the Data Manager while examining the log record during recover and deferred restart.

This abend reason code is issued by the following CSECT: DSNJR103

System action: The execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC and the SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255 (X'D1'). In addition, the following diagnostic information is provided in registers:

Register 0: the Data Mgr ERQUAL that identifies the place within CSECT DSNILGRX where the error was detected
 Register 2, 3: the RBA of the log record that was being read at the time of the error
 Register 7: the address of DSCF selection bLock
 Register 8: the address of *ssnm*DBM1's selection block.

00D10334

Explanation: An unsuccessful completion of a LOG READ occurred because of an invalid LOGRBA value. MODE=SEQUENTIAL DIRECT with the requested RBA does not match the start of a log record.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in “Recovery Log Manager Reason Codes (X'D1')”.

00D10335

Explanation: An unsuccessful completion of a LOG READ occurred because the log was not being read in ascending order for MODE=SEQUENTIAL DIRECT.

This abend reason code is issued by the following CSECT: DSNJR003

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in "Recovery Log Manager Reason Codes (X'D1')".

00D10340

Explanation: An unsuccessful completion of a LOG READ has occurred. This reflects a logic failure internal to the recovery log manager (RLM) subcomponent and is probably caused by a passed parameter list being lost or a previous abend processing a LOG READ request.

This abend reason code is issued by the following CSECT: DSNJR008

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

System programmer response: Examine LOGREC and SVC dump information for prior abends during LOG READ processing. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10341

Explanation: A LOG READ completed unsuccessfully because an error was detected during a Forward READ of the log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The

execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10342

Explanation: A LOG READ completed unsuccessfully because an error was detected during a backward READ of a log record. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10343

Explanation: A LOG READ completed unsuccessfully because an error was detected during a READ of a log record due to an invalid CI offset. This is an internal error.

This abend reason code is issued by the following CSECT: DSNJR103

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, register 6 contains the address of the execution block (EB). All log read cursors reside in a recovery log manager storage pool whose header address is in the log manager block (LMB) at LMBRCPHB. The LMB is pointed to by register 5 and described by DSNDLMB.

00D10345

Explanation: A LOG READ completed unsuccessfully because an error was received from a CATALOG LOCATE request for an archive log data set. The requested archive log data set might have been uncataloged or deleted.

System action: An execution unit might write a record to SYS1.LOGREC and request an SVC dump.

Operator response: Collect the SYS1.LOGREC and SVC dump, if requested. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump, if requested. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255.

This abend reason code is issued by the following CSECT: DSNJR106

00D10347

Explanation: An attempt to notify a peer to force write the log buffer failed.

System action: DB2 issues a return code of 4 and reason code of 00D10347 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10348

Explanation: The maximum retry count was exceeded while attempting to read a log RBA.

System action: The execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

System programmer response: Review the DB2 console for related errors.

Problem determination: This problem might occur if the user has added an archive log to the BSDS with an incorrect RBA range using Change Log Inventory (DSNJU003) or if an active log dataset has been regressed such that the log dataset does not contain the RBA range that is listed in the BSDS.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10349

Explanation: A deadlock occurred attempting to allocate an archive log tape.

System action: DB2 issues a return code of 8 and reason code of 00D10349 to the requesting function.

System programmer response: Review the DB2 console for the terminated function.

Problem determination: The requesting function was terminated. There was another function allocating the same archive log tapes. Rerun the terminated function after the present function no longer has the archive log tapes allocated.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10350

Explanation: A lock or unlock failed in an attempt to allocate an archive log tape.

System action: An execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and then terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output. Notify the system programmer.

System programmer response: This is an internal DB2 error, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10401

Explanation: A BSDS read was requested and the record was not found.

System action: DB2 returns a return code of 4 and reason code of 00D10401 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference*

for information on identifying and reporting the problem.

00D10402

Explanation: A BSDS read was requested and the input area was too small.

System action: DB2 returns a return code of 8 and reason code of 00D10402 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10403

Explanation: A BSDS update was requested and the record was not found.

System action: DB2 returns a return code of 4 and reason code of 00D10403 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10404

Explanation: A BSDS insert was requested and the record already exists.

System action: DB2 returns a return code of 4 and reason code of 00D10404 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10405

Explanation: A BSDS delete was requested and the record does not exist.

System action: DB2 returns a return code of 4 and reason code of 00D10405 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10406

Explanation: The bootstrap data set access service received a request with an invalid function code.

This abend reason code is issued by the following CSECT: DSNJB001

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 16.

00D10410

Explanation: An unsuccessful completion of a READ BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Use the SYS1.LOGREC and SVC dump to determine the cause of the problem.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset X'8' in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 16.

00D10411

Explanation: An unsuccessful completion of a WRITE UPDATE BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset 8 in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16.

00D10412

Explanation: An unsuccessful completion of a WRITE INSERT BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset 8 in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16.

00D10413

Explanation: An unsuccessful completion of a DELETE BSDS RECORD has occurred. An error has been returned from VSAM.

This abend reason code is issued by the following CSECT: DSNJB002

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, the VSAM RPL fields RPLERRCD and RPLERREG are stored in the BSDS request parameter list. The address of the BSDS request parameter list is stored in the BSDS request element (BSDSRQEL) field (located at offset 8 in the bootstrap data set block).

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5, 16.

00D10414

Explanation: DB2 cannot dynamically allocate a copy of the requested bootstrap data set (BSDS).

System action: The system places the BSDS in disabled mode.

User response: Notify the system programmer.

System programmer response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.

Problem determination: This reason code is issued by the following CSECT: DSNJB002

00D10415

Explanation: The bootstrap data set (BSDS) is not a valid BSDS for the data sharing group.

System action: The system places the BSDS in disabled mode.

User response: Notify the system programmer.

System programmer response: Restore the BSDS data set (or data sets) and restart the DB2 subsystem associated with the BSDS.

Problem determination: This abend reason code is issued by the following CSECT: DSNJB002

00D10416

Explanation: A peer BSDS process was requested in non-data sharing.

System action: DB2 issues a return code of 8 and

reason code of 00D10416 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: Peer BSDS requests cannot occur in non-data sharing.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10417

Explanation: A peer BSDS process was requested for a host BSDS.

System action: DB2 issues a return code of 8 and reason code of 00D10417 to the requesting function.

System programmer response: Review the DB2 console for related errors.

Problem determination: Peer BSDS requests cannot be processed for the host BSDS.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10500

Explanation: The recovery log manager's dynamic allocation function has been passed a bad function code (LRB4FUNC in control block LRB4).

This abend reason code is issued by the following CSECT: DSNJDS01

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, trace entry 501 provides the return address to the module that passed the LRB4 with the undefined function code. It also provides the address of the LRB4. This address is also in register 7 at the time of the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00D10501

Explanation: The recovery log manager's common access method services has been passed a bad function code (DSPLFUNC in control block DSPL).

This abend reason code is issued by the following CSECT: DSNJDS05

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. The address of the DSPL is provided in register 3, and the invalid function in register 4.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00D10700

Explanation: An error completion code was returned by SETLOCK OBTAIN.

This abend reason code is issued by the following CSECT: DSNJMO02

System action: An execution unit writes a record to SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, "X'D1.....' codes," on page 255. In addition, register 0 contains the return code from SETLOCK OBTAIN.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00D10701

Explanation: An error completion code was returned by SETLOCK RELEASE.

This abend reason code is issued by the following CSECT: DSNJMO02

System action: An execution unit writes a record to

SYS1.LOGREC and requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and SVC dump. Determine the cause of the problem from the diagnostic information in the Problem Determination section of this message.

Problem determination: RLM standard diagnostic information is provided in Chapter 12, “X'D1.....’ codes,” on page 255. In addition, register 0 contains the return code from SETLOCK RELEASE.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 5.

00D10800

Explanation: The log manager command processor (DSNJC001) was entered with an invalid Tokenized Command Segment (TCS).

This reason code is issued by the following CSECT: DSNJC001

System action: A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

Operator response: Collect the SYS1.LOGREC and SVC dump, and notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump from the operator. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RLM standard diagnostic information is provided under Chapter 12, “X'D1.....’ codes,” on page 255.

General register 1 contains the address of the TCS as passed to log manager. The character string 'TCS' should appear at the address provided in R1, plus 4. The address of the GCPC Pool Header Block (PHB) is provided in general register 2. The value X'0036' should appear at the address provided in R2. If these two items are not present, then the DSNJC001 CSECT was invoked in error by an execution unit.

00D10901

Explanation: DB2 failed to locate a data sharing member in the SCA.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output.

Problem determination: Review the DB2 system console for possible DSN7xxxx messages that could relate to this problem.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10902

Explanation: A dynamic allocation of a peer's BSDS failed.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output of peer and host.

Problem determination: Review the DB2 system console for possible errors relating the peer's BSDS on both the host and peer DB2 system.

See the DB2 system console for messages DSNJ103I and DSNJ700I that are issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10903

Explanation: An open of a peer BSDS failed.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output. Notify the system programmer.

Problem determination: Review the DB2 system console for messages DSNJ100I and DSNJ700I that are issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10904

Explanation: There was a VSAM MRKBFR error for a peer BSDS.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output.

Problem determination: The VSAM MRKBFR error is placed in LRB1XRC.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10905

Explanation: There is a mismatch between the two BSDS timestamps of a peer.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Problem determination: There is a mismatch between the two BSDS system timestamps of a peer, the BSDS change log inventory (DSNJU003) timestamps of a peer, or both. The peer log environment might have changed. This must be resolved at the peer DB2 subsystem by determining which BSDS is in error and recovering that BSDS.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10906

Explanation: The change log inventory (DSNJU003) timestamp does not match the system timestamp in the peer BSDS.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Problem determination: A change log inventory (DSNJU003) job was executed against the peer BSDS after the last peer DB2 subsystem restart. The peer log environment might have changed. Restart the peer DB2 subsystem to reset this condition.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10907

Explanation: DB2 could not locate a peer's active log data set in the peer's BSDS.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials including SYS1.LOGREC, an SVC dump, and console output.

Problem determination: Run a print log map (DSNJU004) job against the peer's BSDS to compare BSDS active log entries with the existing peer's log data sets. There is probably a mismatch between them.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10908

Explanation: An open of a peer's active log failed.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, an SVC dump, and console output of peer and host.

Problem determination: Review the DB2 system console for possible errors relating the peer's active log on both the host and peer DB2 system.

The VSAM CONNECT return code is in LRB1XRC if an SVC dump was taken.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10909

Explanation: There was no active BSDS found for the peer DB2 subsystem.

System action: If this was an unconditional request, an execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output of peer and host.

Problem determination: Review the DB2 system console for possible errors relating the peer's BSDSs on both the host and peer DB2 system.

See the DB2 system console for message DSNJ700I that is issued with this DB2 condition code.

The peer BSDSs have been placed in inactive mode. There might have been an error against this peer's BSDSs and a recovery is needed.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on

identifying and reporting the problem.

00D10910

Explanation: A BLDVRP/DLVRP macro failed for the BSDS buffer.

System action: An execution unit writes a record to SYS1.LOGREC, requests an SVC dump, and then terminates.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output.

Problem determination: Review the DB2 system console for possible errors relating to the BSDS.

A BLDVRP/DLVRP macro for a VSAM shared resource pool failed for the BSDS. General register 2 will contain a value of 1 for a BLDVRP macro or a value of 2 for a DLVRP macro. The macro return code is contained in general register 3. See the appropriate VSAM publication for advanced VSAM applications.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D10916

Explanation: DB2 received an error while attempting to read shared communications area (SCA) information from the coupling facility.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested. The subsystem will be terminated with the same reason code.

System programmer response: Correct the problem with the coupling facility, and restart DB2.

Problem determination: Review the DB2 system console for possible DSN7xxxx and DSNJxxxx messages that might relate to this problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D10917

Explanation: DB2 received an error while attempting to write shared communications area (SCA) information to the coupling facility.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested. The subsystem will be terminated with the same reason code.

System programmer response: Correct the problem

with the coupling facility, and restart DB2.

Problem determination: Review the DB2 system console for possible DSN7xxxx and DSNJxxxx messages that might relate to this problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

Chapter 13. X'D3.....' codes

00D30000

Explanation: The operator canceled the allied agent at the requesting location and a dump was requested, or the agent abended with a reason code that indicated a possible communication problem. In either case, the database access agent at this location abended to take a dump to assist in problem determination.

This abend reason code is issued by the following CSECT: DSNLABRT

System action: The agent terminates.

Operator response: Notify the system programmer.

System programmer response: The information collected as a result of this abend is related to information collected at the requesting location. Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Contact the system programmer at the requesting location (the location name can be determined from the dump header) to coordinate further action.

Problem determination: This abend was initiated in order to save diagnostic information that might be useful in problem determination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D30001

Explanation: The DPS RALE was not initialized. The DSNLSPRR was invoked with the DPSB defined as the functional recovery routine (FRR) anchor. The DPSB is created after the DPS RALE is initialized.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30002

Explanation: The distributed data facility (DDF) standard ESTAE and FRR recovery routines detected a bad recovery element. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30003

Explanation: While establishing an ESTAE functional recovery, DB2 detected a failure.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30004

Explanation: A database access agent received an invalid message. This is a DB2 internal error.

This abend reason code is issued by the following

CSECTs:

DSNLABRT DSNLPREP DSNLRUSE DSNLTMRR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30005

Explanation: DB2 detected a failure while retrying DB2 recovery.

This abend reason code is issued by the following CSECT: DSNLFRCV

System action: DB2 abends after it writes a SYS1.LOGREC record and requests a SVC dump.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A distributed data facility (DDF) module retried recovery after an abend, but invalidly returned control to the DDF functional recovery routine (DSNLFRCV) that issued the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D30008

Explanation: The distributed transaction manager (DTM) could not allocate a RALE for the distributed data facility (DDF). This is a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNLARALDSNLTACCDNSNLTMRA

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30009

Explanation: During allocation of a database access agent, simultaneous use of an APLE was attempted. An APLE can be used once during allocation of a database access agent. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLTMRA

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3000A

Explanation: DB2 invoked the DSNLTDSC macro or a function of the distributed transaction manager (DTM). The required function could not be performed because the DPSB control block does not exist. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLBABR DSNLCMT1 DSNLDALB DSNLTGBK
DSNLTMIG DSNLTRNA

System action: DB2 writes a SYS1.LOGREC record

and requests a SVC dump. The execution unit abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 detects this error when the module that abnormally terminated is invoked and determines that the existence of the DDF agent local anchor block (DPSB) is not indicated by the DDF RALE or is not indicated by the ACE.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5

00D3000B

Explanation: A function of the distributed transaction manager (DTM) was invoked and attempted to establish a functional recovery environment. The functional recovery element (FRE) that was created was not the first one on the chain of FREs anchored in the DPSB. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNLAGNT, DSNLCMT1.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3000C

Explanation: The location name received in a response message from a responding site disagrees with the location name to which the request message was sent. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLCMT1

System action: A record is written to SYS1.LOGREC

and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3000D

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'.

System action: The application statement was not processed.

User response: Recode the application to remove the alias reference at the remote server that resolves to an object stored at the local DB2. Objects stored at the local site must be referenced using a local name.

Problem determination: If necessary, consult with the data base administrators at the local site and the remote server location. Inspect the remote SYSIBM.SYSTABLES catalog table to determine the object at this location being referenced in a circular manner.

00D3000E

Explanation: The DSNLFTMB macro was invoked to determine whether an update request was sent to a specified location, but the transaction has not yet been migrated to that location. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3000F

Explanation: A DB2 resource manager attempted to add a duplicate entry to the list of resource managers. This list contains the names of resource managers that can participate in the allocation of a database access agent at a remote site. This is a DB2 error.

This abend reason code is issued by the following CSECT: DSNLADRA

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The module that incorrectly invoked this function also invoked DSNLADRA.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00D30010

Explanation: A DB2 resource manager attempted to delete a resource manager that is not given in the list of resource managers that participate in the allocation of a database access agent at a remote site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLADRA

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This module which incorrectly invoked this function also invoked DSNLADRA.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00D30011

Explanation: Only a certain number of resource managers can participate in the allocation of a database access agent at a remote site. The maximum has been attained and cannot be extended. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLADRA

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00D30012

Explanation: More than one resource manager attempted to reserve the same RALE for use in the allocation of a database access agent at a remote site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLTMIG

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The RALE was previously reserved by another resource manager and is not available.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00D30013

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module does not exist.

This abend reason code is issued by the following CSECT: DSNLSSRW

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The distributed data facility is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a listing of the DSNZPARM module used.

Problem determination: Ensure that DSN6FAC was installed correctly.

00D30014

Explanation: The distributed transaction manager (DTM) detected an internal error. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30015

Explanation: The facility section (DSN6FAC) in the DB2 initialization parameter module is invalid.

This abend reason code is issued by the following CSECT: DSNLSSRW

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The distributed data facility (DDF) is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a listing of the DSNZPARM module used.

Problem determination: Ensure that DSN6FAC was installed correctly.

00D30016

Explanation: An allied agent received an invalid response. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLCMT1

System action: A record is written to SYS1.LOGREC

and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30018

Explanation: An agent exists at the site at which the abend occurred, but an agent that should exist at another site does not exist at that site. This is probably a DB2 internal error.

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The distributed data facility (DDF) error monitor, which terminates the agent that is waiting for some action to be taken by the nonexistent agent, detects this error. The module that was waiting for the action of the nonexistent agent is the module that issued the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D30019

Explanation: The distributed data facility (DDF) error monitor detected an error at another site which caused the agent at this site to be canceled. This is probably a DB2 internal error.

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The DDF error monitor, which terminates the agent because of an error detected at another site to which the agent is connected and for which the agent is waiting, detected this error. The module that was suspended to wait for the action to be taken at the other site is the module that issued the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D3001A

Explanation: A CANCEL THREAD or CANCEL DDF THREAD command naming a distributed thread caused the thread to be terminated. A dump is provided for diagnostic purposes as a result of the CANCEL command DUMP keyword.

System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump. The execution unit abends. If the canceled distributed thread is an allied thread, DB2 requests the cancelation of each associated database access thread at each of the server sites (refer to the explanation for 00D30000).

Operator response: Notify the system programmer.

System programmer response: The command might have been used to terminate a thread that was in a state where no processing was occurring and the thread could not continue.

If you suspect an internal DB2 error, obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735 1, 2, 5.

The module that was suspended while waiting for some action to be taken is the module that issued the abend.

00D3001B

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing what DB2 authorization ID to be used for the remote primary authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECTs: DSNLTACC, DSNLTMRA.

System action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator response: Notify the communications database administrator

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for each possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3001C

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing what DB2 authorization ID to be used for the remote new user primary authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B' requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECTs: DSNLRUSE, DSNLTEXC.

System action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for each possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3001D

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing what DB2 authorization ID to be used for the remote plan owner authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', requiring inbound name translation, the SYSIBM.USERNAMES

table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT:
DSNLTMRA

System action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for each possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3001E

Explanation: The SYSTEM PARAMETER section (DSN6SYSP) in the DB2 installation parameter module does not exist.

This abend reason code is issued by the following CSECT: DSNLTMIN

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DDF is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a listing of the DSNZPARM module used.

Problem determination: Ensure that DSN6SYSP was installed correctly.

00D3001F

Explanation: ACCRDBRM received from the remote server indicates incompatible server.

This abend reason code is issued by the following CSECT: DSNLTAC1

System action: The TYPDEFNAM or TYPDEFOVR values returned from the remote server in the DDM ACCRDBRM reply require data type and/or code page translations that cannot be supported by the local DB2. The local DB2 has disconnected the conversation with the remote server. DB2 requests neither a SVC dump nor a SYS1.LOGREC record.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Notify the system programmer at the remote location that the remote server may not be usable.

Problem determination: Determine the server being accessed by examining the SQLCODE -30041 message text. Refer also to the DDM documentation of the ACCRDB command and the ACCRDBRM reply message.

00D30020

Explanation: The processing of the CONNECT statement at a remote server has failed. This is because acceptable CONNECT information was not conveyed in the distributed relational database architecture (DRDA) EXCSAT command sent by the local DB2 to the remote server.

This reason code is issued by the following CSECT:
DSNLTEXC

System action: The remote server database access agent (DBAA) sends a DRDA reply message (for example, MGRLVLRM) to the local DB2 which indicates the specific nature of the problem. The above reason code is sent in the server diagnosis area of the reply message. The DBAA awaits further DRDA commands from the local DB2.

User response: The SQLCA returned in response to the CONNECT statement indicates what DRDA reply message was sent by the remote server. The user should contact the local DB2 system administrator with this information.

Operator response: Operator will not detect this problem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This represents a DRDA configuration mismatch between the local DB2 and the remote server. The precise mismatch is determined from the reply message sent from the remote server to the local DB2. The reply message may be determined by examining the SQLCODE and the SQLCA tokens returned for the CONNECT statement.

The remote server and local DB2 system administrators should consult together to determine if this is a system configuration error, or if an internal error exists at either the local DB2 or remote server.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

Collect the following local DB2 diagnostic items:

- Application source code and runtime listing.

- Relevant error and system logs spanning the time of the failure.

00D30021

Explanation: The processing of the CONNECT statement at a DB2 remote server has failed. This is because acceptable CONNECT information was not conveyed in the distributed relational database architecture (DRDA) ACCRDB command sent by the local DB2 to the remote server.

This reason code is issued by the following CSECT: DSNLTACC

System action: The remote server database access agent (DBAA) sends a DRDA reply message (for example, VALNSPRM) to the local DB2 which indicates the specific nature of the problem. The above reason code is sent in the server diagnosis area of the reply message. The DBAA awaits further DRDA commands from the local DB2.

User response: The SQLCA returned in response to the CONNECT statement indicates what DRDA reply message was sent by the remote server. The user should contact the local DB2 system administrator with this information.

Operator response: Operator will not detect this problem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This represents a DRDA configuration mismatch between the local DB2 and the remote server. The precise mismatch is determined from the reply message sent from the DB2 remote server to the local DB2. The reply message may be determined by examining the SQLCODE and the SQLCA tokens returned for the CONNECT statement. It could indicate any one of the following problems (but is not limited to these):

- The EXCSAT command was not successfully processed prior to receipt of the ACCRDB command.
- The TYPDEFNAM parameter (specifies local DB2 data types) in the ACCRDB command is not supported.
- The TYPDEFOVR parameter (specifies local DB2 CCSIDs) in the ACCRDB command is not supported.
- The local DB2 product is not recognized/supported by the remote server.

The system administrators for the two locations should consult together to determine if this is a system configuration error or if an internal error exists at either location.

Collect the following diagnostic items at the remote server:

- Console output from the system on which the job was run and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set obtained by executing IFCEREP1.
- The system CCSIDs.

Collect the following diagnostic items at the local DB2:

- Application source code and runtime listing.
- Relevant error and system logs spanning the time of the failure.
- The system CCSIDs.

00D30022

Explanation: The processing of the CONNECT statement at the remote server has failed and the local DB2 Data Base Access Agent (DBAA) has been abended. This is because authorization checking has failed at the remote server.

Thisabend reason code is issued by the following CSECTs: DSNLTACC DSNLTExc

System action: The conversation with the local DB2 is terminated by the remote server with an LU6.2 SNA sense code. The DBAA is abended. A DSNL030I message is written to the MVS console at the remote server, and an alert is generated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Either the user does not have the proper authority to execute at the remote server, or there is a security configuration mismatch between the local DB2 and the remote server. Examine the DSNL030I message or the alert for a more specific reason code describing the failure. Consult with the two system administrators if necessary to fix the problem. No dump is generated for this abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00D3002D

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an 'O' describing the remote authorization identifier to be used for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries

describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This abend reason code is issued by the following CSECTs: DSNLTXXAC DSNLTMIG

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3002E

Explanation: No resync list entry exists during resynchronization when one is expected to exist. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRLA DSNLTRLO DSNLTRPA DSNLTRPN
DSNLTRRH

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3002F

Explanation: An unrecognized function request was detected during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRD DSNLTRE DSNLTRLS DSNLTRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30030

Explanation: This site is not considered a coordinator or participant during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRE DSNLTRLO DSNLTRPV DSNLTRVS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30031

Explanation: An unknown 2-phase COMMIT protocol is being used during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRLO DSNLTRVS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30032

Explanation: This site is not considered either an initiator or recipient of resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRCN DSNLTRLA DSNLTRLN DSNLTRPA DSNLTRPN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30033

Explanation: This site is invalidly an initiator of resynchronization. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTRPN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30034

Explanation: An INDOUBT resync list entry does not have the correct associated structures during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRPA DSNLTRPN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30035

Explanation: A resolved unit of work still has internal structures associated with it during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLTRPA DSNLTRPN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30036

Explanation: Either the coordinator or participant has an invalid status during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRCA DSNLTRCN DSNLTRLA DSNLTRLN
DSNLTRLO DSNLTRPA DSNLTRPN DSNLTRRA

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30037

Explanation: The resync list latch is erroneously still being held during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30038

Explanation: The storage calculation for the amount of storage needed for -DISPLAY THREAD is invalid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTDIT

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D30039

Explanation: A resync conversation is invalid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLTRVR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3003A

Explanation: An error occurred during resynchronization. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLTRCA	DSNLTRCN	DSNLTRE	DSNLTRLA
DSNLTRLN	DSNLTRPA	DSNLTRPN	DSNLTRPV
DSNLTRRA			

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine the sites to which the abending agent was connected by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3003B

Explanation: A distributed thread was canceled because the timeout value in the DB2 startup parameters module (usually DSNZPARM) was exceeded. This value is specified by the IDLE THREAD TIMEOUT value in the DSNTIPR installation panel or the IDTHTOIN value in the DSN6FAC macro, which is used to build the DB2 start up parameters module.

System action: The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: The server thread was holding DB2 resources and the requester application did not make a request to the DB2 server thread for an extended period of time. The server thread is terminated in order to releases resources that might affect other threads.

This usually occurs for one of these reasons:

- The ACTIVE thread option was specified in the DDF THREADS field of the DSNTIPR installation panel, and a requester application or its user did not make a request to the DB2 server for an extended period. This can happen, for example, during a lengthy end user absence. As a result, the server thread becomes susceptible to being canceled because of the timeout value.
- The INACTIVE thread option was specified in the DDF THREADS field of the DSNTIPR installation panel, and a requester application or its user:
 - Failed to commit before an extended dormant period (such as end user absence), or
 - Committed before an extended dormant period (such as end user absence), but database resources are still held because of other existing conditions.

As a result, the server thread cannot be moved to the inactive state and becomes susceptible to being canceled because of the timeout value.

Determine why the server thread was not moved to the inactive state. For information about active and inactive threads, see the description of the DDF THREADS option of the DSNTIPR installation panel in "Planning and Installing DB2" in Part 2 of *DB2 Installation Guide*. If the design or use of the application requires additional time, increase the IDLE THREAD TIMEOUT value or set it to zero to deactivate the function.

Problem determination: This abend reason code is issued by the following CSECT: DSNLBABR

00D300F1

Explanation: The DSNLTOKS macro was invoked to extract error information from the DTMF block using the CHECK_SQLCODE keyword and the DTMF block was either uninitialized or contained an SQL return code that was not negative. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The execution unit is abnormally terminated.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This name of the module that invoked the function given as the abending module name. This is not the module in error. An earlier failing module neglected to report error information in the DTMF block.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D300F2

Explanation: EXCSATRD reply received from a remote server indicates an incompatible server.

This abend reason code is issued by the following CSECT: DSNLTTEX1

System action: The manager levels returned from the local DB2 in the DDM EXCSATRD reply were too low for the local DB2 to support. The local DB2 has disconnected the conversation with the remote server. DB2 requests neither an SVC dump nor a SYS1.LOGREC record written.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Notify the system programmer at the remote location that the remote server is not usable.

Problem determination: Determine the server being accessed by inspecting the SQLCODE -30041 message text. Refer to the DDM documentation of the EXCSAT command.

00D300F3

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified

as an 'O' describing the remote authorization identifier to be used for the new user primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This abend reason code is issued by the following CSECTs: DSNLTMIG DSNLTXAC

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D300F4

Explanation: A DRDA protocol error occurred. Either a reply chain is broken but there is no DDM reply with a high enough severity to break the chain, or a message chain is unbroken in spite of a high severity code, or a conversation expected to be available has been terminated. The problem, though detected by DB2, is believed to have originated at the remote server. The server might not be a DB2 subsystem.

This abend reason code is issued by the following CSECTs:

DSNLBABR DSNLCMT1 DSNLTAC1 DSNLTTEX1 DSNLTXAC

System action: This reason code is returned to the application. A request message has likely been sent to the remote site but the outcome is uncertain. A DSNL031I message may have been written to the console. Refer to the description of this message for more information. If this reason code is returned for an SQL 'COMMIT' statement, determine if manual recovery of the unit of work is necessary.

Operator response: Notify the operator or systems programmer for the remote server.

System programmer response: Determine the product type of the server. The DISPLAY THREAD command may be used. Refer to the server products' diagnostic

recommendations. If the server DBMS is DB2, contact your IBM representative to report the problem and open an APAR.

Problem determination: The problem originated with the remote server. Follow the diagnostic recommendations published for the server DBMS product, which might not be DB2.

00D300F5

Explanation: DDM command chaining is in use.

This reason code is issued by the following CSECT: DSNLTXAC

System action: The DTM module returns to its invoker with a return code = 4.

00D300F6

Explanation: A valid but unexpected DDM reply was received from a remote server during a connect, commit, or abort operation. For a connect, the expected DDM reply is EXCSATRD (for EXCSAT command) or ACCRDBRM (for ACCRDB command). For a commit or abort, the expected DDM reply is ENDUOWRM. (The DDM command for a commit is RDBCMM. For a rollback, it is RDBRLBCK).

This reason code is issued by the following CSECTs:

DSNLBABR DSNLCMT1 DSNLTAC1 DSNLTEX1

System action: The local DB2 tried to access a remote server and the server replied with an unexpected DDM answer. The remote server may have suffered permanent damage. The local DB2 may or may not subsequently disconnect the conversation to the server. This is an internal-only DDF reason code. The local DB2 requests neither a SVC dump nor a SYS1.LOGREC record.

User response: Contact the system programmer

System programmer response: If the SQLCA is available, examine all fields in the SQLCA. Using this information, try to determine what DDM reply was received. Contact the system programmer at the server site with this information. This is probably a programming error at the server database system, although it may be a DB2 error. The server database system may have recorded diagnostic information for the problem. If this is a DB2 error, write an APAR.

Problem determination: Examine the SQL return code in the SQLCA. It should give further indication of the real cause.

00D300F7

Explanation: A DDM reply message was too big to fit in the DTM reply buffer.

This abend reason code is issued by the following CSECTs:

DSNLBABR DSNLCMT1 DSNLTAC1 DSNLTEX1
DSNLTXAC

System action: The requesting allied agent is terminated. A SYS1.LOGREC record is written and an SVC dump is requested at the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error should never occur. Write an APAR.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00D300F8

Explanation: An attempt was made to access data at a remote location that has been started in restricted access mode. When a DB2 system is started in restricted access mode, no remote inbound or outbound access is allowed.

System action: Remote access is not allowed.

Operator response: Notify the system programmer.

System programmer response: Determine the remote location where the remote data access was attempted. Retry the request when the remote location and/or the local DB2 has been restarted in full access mode.

00D300F9

Explanation: The DB2 server was unable to allocate a database access agent since the maximum number allowed was zero (ZPARM MAXDBAT value was zero).

This abend reason code is issued by the following CSECT: DSNLAGNT

System action: The DB2 server terminates the conversation with a 084B6031 SNA sense code for application-directed access and a 00D300F9 DB2 code for system-directed access. A DSNL030I message containing this reason code is written to the MVS operator console at the DB2 server site.

System programmer response: At the server, currently no data base access agents are allowed because the MAXDBAT value in the ZPARM is zero. If access to this site from a remote site is desirable, change the

MAXDBAT parameter in ZPARM to the maximum number of database access agents desired. Restart DB2 at the server. Notify the user to rerun the application.

00D300FA

Explanation: You attempted a COMMIT statement for a plan that specified ISOLATION (RR) and update operations were performed either at the local site or at a remote site. The COMMIT operation could not be performed because the COMMIT request could not be transmitted to a remote site where Repeatable Read operations had been performed.

This abend reason code is issued by the following CSECT: DSNLCMT1

System action: All update operations were backed out.

System programmer response: Determine why the COMMIT failed and retry the application.

00D300FB

Explanation: A resource was not available during database access agent allocation at a remote site.

This abend reason code is issued by the following CSECTs: DSNLTACC DSNLTMRA

System action: The allocation of the database access agent was unsuccessful. A 'resource not available' code is returned to the user. DB2 requests neither a SVC dump nor a SYS1.LOGREC record.

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

System programmer response: If you suspect an error in DB2, refer to Part 2 of the *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Determine the name of the resource being allocated and correct the problem.

00D300FC

Explanation: You attempted to allocate a resource at a remote site using an invalid name.

This abend reason code is issued by the following CSECTs: DSNLTACC DSNLTMRA

System action: The allocation of the database access agent was unsuccessful. A 'resource not available' code is returned to the user. DB2 requests neither a SVC dump nor a SYS1.LOGREC record. This reason code is returned only for system-directed access (DSNLTMRA).

User response: Notify the system programmer. Invoke the application after the problem has been corrected.

System programmer response: If you suspect an error in DB2, refer to Part 2 of the *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: Determine the resource being allocated and correct the problem.

00D300FD

Explanation: An attempt was made to disconnect a connection with a specified location, but the transaction has not yet been connected to that location. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The execution unit is abnormally terminated.

Problem determination: Obtain a copy of SYS1.LOGREC and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO). Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The name of the module that invoked the function incorrectly is given as the abending module name.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D300FE

Explanation: You executed a COMMIT statement and update operations were performed at a remote site. The success of the COMMIT operation could not be determined because a failure occurred at the remote site or in the communication link with the remote site after the request to commit the operation had been transmitted.

This abend reason code is issued by the following CSECT: DSNLCMT1

System action: The remote updates have been committed or backed out, depending on when the error occurred.

User response: After communication has been reestablished with the remote site, use SQL to query the updated data to determine whether the updates were committed. If the updates were not committed, rerun the application and perform the updates again.

00D300FF

Explanation: You attempted a COMMIT statement and update operations were performed at a remote site. The attempt failed.

This abend reason code is issued by the following CSECT: DSNLCMT1

System action: The updates at the remote site have been backed out.

User response: Rerun the application.

Problem determination: Determine why the COMMIT failed and retry the application.

00D30100

Explanation: A COMMIT statement was chained to a set of commands sent to an remote server. The remote server stopped processing the chained commands before it reached the COMMIT. COMMIT was NOT performed.

This reason code is issued by the following CSECT: DSNLCMT1

System action: Any updates performed within the current unit of Work have been backed out.

User response: Notify the system programmer of the failure.

After the problem causing the chain to be broken at the remote server is fixed, rerun the application and perform the updates again.

Operator response: Operator will not detect this problem.

System programmer response: See “Problem Determination” section below.

Problem determination: Collect the following diagnostic items from the local DB2 system.

- Listing of application program and output from application program.
- Console output and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.

Consult with the remote server system programmer to determine the cause of the error.

The remote server system programmer may need to collect the following remote server diagnostic items:

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server dumps.

00D30101

Explanation: A COMMIT was attempted but failed due to a prior error. Communications to a remote site have been lost. The COMMIT operation cannot be performed because the COMMIT request could not be transmitted to a remote site. If the program has performed updates, the updates have been backed out to the prior COMMIT point.

This reason code is issued by the following CSECT: DSNLCMT1

System action: All update operations were backed out.

Operator response: Notify the system programmer.

System programmer response: Restart DDF at the affected sites and rerun the application.

00D30103

Explanation: This reason code may be returned for a failed distributed commit using DRDA protocols. It indicates that commit has failed because an ABNUOWRM reply message was received from the server for a prior SQL statement, but an abort had not been driven at the DB2 requester prior to this commit and after the receipt of the ABNUOWRM.

An ABNUOWRM reply message is sent by the server when it has rolled back its unit-of-work in response to an unusual situation at the server (for example, deadlock or operator intervention). When an ABNUOWRM reply message is received by the requester, an abort must be driven at the requester to synchronize the distributed systems. Until an abort is driven, all subsequent SQL statements will receive an SQLCODE -906. After an abort is driven, further SQL statements will be accepted.

This reason code is issued by the following CSECT: DSNLCMT1

System action: The commit at the DB2 requester fails.

User response: Scan backwards in your application for the first non -906 SQLCODE prior to the commit. This SQLCODE was returned with the ABNUOWRM from the server system. Use the server product reference manuals to determine and correct whatever problem this SQLCODE represents on the server and rerun your application. This may involve contacting your system programmer if the situation at the Server cannot be corrected or improved by changes to the application program.

Operator response: The operator will not detect this problem.

System programmer response: Determine the cause of the problem represented by the SQLCODE returned with the ABNUOWRM and if necessary, work with the system programmer at the server to resolve it. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- User’s application output, including SQLCAs returned for each SQL statement.

00D30104

Explanation: The unit-of-work disposition (commit or rollback) received from a DRDA server is inconsistent with the command sent (commit or rollback), and the SQL code returned from the server. For example, if a

commit is sent to the server, and the reply message indicates the unit of work (UOW) was committed, but the SQL code returned is negative, then this reason code will be contained in the alert sent to NetView.

This reason code is issued by the following CSECTs: DSNLCMT1 DSNLBABR.

System action: An alert is generated and sent to NetView. Two trace records, IFCID 0191 and IFCID 0193, may be written to the Statistics Class 4 trace, and two DSNL031I messages may be written to the console. The trace records and messages will not be written if this error was previously detected within the last 5 minutes. The Statistics Class 4 trace must be active for the trace records to be written.

An SQLCODE +30100, -30020, or -30030 is returned to the application. An SQLCODE -30020 indicates a rollback was sent to the DRDA server, but a commit unit-of-work disposition was received. An SQLCODE +30100 or -30030 conveys the unit-of-work disposition reported by the server, and replaces the original SQL return code sent by the server, which was not consistent with the UOW disposition. The original SQL return code and SQLSTATE returned by the server are saved as tokens in the SQLCA.

Operator response: Notify the system programmer.

System programmer response: This is a DRDA distributed protocol problem. Once the nature of the inconsistency is known, the server system programmer may have to be contacted to help resolve the problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Listing of the user's application program output, including printouts of the SQLCAs received for all SQL statements.
- Console output from the system on which the job was run, and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of the Statistics Class 4 trace records for the LUWID associated with the failing request.

If no DSNL031I messages were written at the same time as the alert, then scan the log backwards for previous DSNL031I messages. A DB2 filter function prohibits multiple occurrences of the same problem detected within a 5 minute period from flooding the console and trace data set with diagnostic information. You will have to find an earlier occurrence of the same problem to start diagnosing it.

Once you have found the two DSNL031I messages, locate the IFCID 0191 and 0193 trace records written for the problem by using the IFCID sequence numbers from the DSNL031I messages.

The IFCID 0193 trace record will document the nature of the inconsistency (command sent, UOW disposition received, SQL return code received).

The IFCID 0191 trace record will document the exact data stream returned from the Server. Use this information to determine if the reply message from the server was correctly converted into the UOW disposition and the SQL return code reported in the IFCID 0193 record. If the data stream was correctly converted, then the problem lies at the server and you should contact the system programmer at the server and have him or her analyze the data stream produced by the server.

00D30105

Explanation: A distributed commit has failed because the allied agent was cancelled as a result of a STOP DDF MODE(FORCE) command during a previous execution of DDF which has terminated. When an allied agent does not issue database requests for more than 2 minutes after a STOP DDF MODE(FORCE) command is issued, DDF will come down without terminating the allied agent. The agent is cancelled when it makes its next request to DB2.

This reason code is issued by the following CSECT: DSNLCMT1

System action: The commit operation is failed and the agent is cancelled. The last unit of work was rolled back at all server systems when the STOP DDF MODE(FORCE) command was processed.

User response: Contact the operator to re-start DDF. After DDF is re-started, continue your application's work starting with the last unit of work that was rolled back.

Operator response: Re-start DDF.

00D30106

Explanation: The result of a DRDA distributed commit could not be determined because the reply message from the server either was invalid or could not be deciphered.

This reason code is issued by the following CSECT: DSNLCMT1

System action: An alert is generated and sent to NetView. An IFCID 0191 trace record may be written to the statistics class 4 trace, and a DSNL031I message may be written to the console. The trace record and message will not be written if this error was previously detected within the last 5 minutes. The statistics class 4 trace must be active for the trace records to be written.

The requester disconnects from the server system. The state of the unit of work at the server is unknown. It may have been committed, or it may have been rolled back. An SQLCA indicating the nature of the DRDA

reply message distortion is given to the application.

User response: Notify the system programmer. After the problem has been resolved, re-connect to the server site to determine whether the last unit of work was committed or rolled back. Continue your application after correcting the server database (if necessary).

Operator response: Notify the system programmer whenever a DSNL031I message is written to the MVS console.

System programmer response: This is a DRDA distributed protocol problem. Once the nature of the problem is known, the server system programmer may have to be contacted to help resolve the problem.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items:

- Listing of the user's application program output, including printouts of the SQLCAs received for all SQL statements.
- Console output from the system on which the job was run, and a listing of SYSLOG data set for the period of time spanning the failure.
- Listing of the statistics class 4 trace records.

If no DSNL031I message was written at the same time as the alert, then scan the log backwards for a previous DSNL031I message. A DB2 filter function prohibits multiple occurrences of the same problem detected within a 5 minute period from flooding the console and trace data set with diagnostic information. You will have to find an earlier occurrence of the same problem to start diagnosing it.

Once you have found the DSNL031I message, locate the IFCID 0191 trace record written for the problem by using the IFCID sequence number from the DSNL031I message.

The IFCID 0191 trace record will document the exact data stream returned from the server. Use this information to determine if the reply message from the Server was correct, and if so, the error resides with the DB2 AR.

If the data stream is incorrect, then the problem lies at the server and you should contact the system programmer at the server and have he or she analyze the data stream produced by the server.

00D30109

Explanation: Phase 1 of a distributed commit failed. One or more remote servers did one of the following:

- Voted NO
- Voted heuristic mixed

- Experienced a communications error
- Made an error in their use of commit protocol

This reason code is issued by the following CSECT: DSNLCMT1

System action: The commit fails. The unit of work is backed out.

For communication errors, message DSNL406I is written to the system console, alert A006 is generated, and trace record IFCID 0209 is produced to record the server affected (LUWID of the unit of work, and other information).

For protocol errors, message DSNL413I is written to the system console, alert A005 is generated, and trace record IFCID 0208 is produced to describe the nature of each server's protocol violation.

User response: Contact the DB2 systems programmer. If the commit failed for other than a commit protocol violation by a remote server, resubmit your application. Otherwise, wait for resolution of the protocol error.

System programmer response: For protocol errors, contact the system programmer for the remote site. The invalid sync point message is recorded in the IFCID 0208 trace record. The system logic error that causes the invalid sync point message must be corrected at the remote site.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3010A

Explanation: This might occur when a version of IMS that does not support the COMMIT VERIFY exit is running an IMS MODE=MULTI application with one or more non-DB2 servers. This is probably a user error, since this scenario is not supported by DB2 and IMS unless the IMS version is 4 or later.

IMS requested a new user SIGNON without an immediately preceding commit or abort, and your application was connected to one or more remote non-DB2 servers. In order to preserve the consistency of database updates made at several different servers, when at least one server is a non-DB2 server, a commit or abort must precede any new user SIGNON.

This reason code is issued by the following CSECT: DSNLXNEW

System action: The execution unit writes a record to SYS1.LOGREC. No dump is requested. The IMS application terminates as a result of the abend.

Operator response: Collect the SYS1.LOGREC. Notify the system programmer.

System programmer response: Determine if the IMS version and release being used invokes the DB2 COMMIT VERIFY exit, which is available in DB2

Version 3 and later. Obtain the SYS1.LOGREC.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1.

00D3010B

Explanation: Cached information was used to determine whether updates are allowed at the server. From the time of the execution of the CONNECT statement to the time that the first SQL statement was sent to the server, the conversation SYNC_LEVEL supported by the partner changed from a cached value of SYNC to the current of value NONE.

SYNC_LEVEL NONE servers are not allowed to update in the current unit of work. Since an update might have been performed by the partner during execution of the first statement at the server, the application must roll back (abort).

This reason code is returned as a token in the SQLCODE -904.

This reason code is issued by the following CSECT: DSNLTAC1

System action: The connection to the server is deallocated. The server’s portion of the current unit of work is rolled back at the server. The application is placed in a must-abort state. All subsequent operations except rollback or abort fail with an SQLCODE -918. The remainder of the current unit of work is backed out when rollback or abort is performed or when the application terminates.

User response: If your application does not do any work at a server for a long time after issuing a CONNECT, consider rewriting it to perform the CONNECT immediately before performing any work at the server. This minimizes the possibility of the server system going down and coming back up at a different SYNC_LEVEL.

Rerun your application starting with the unit of work containing the SQL statement that received an SQLCODE -904.

00D3010C

Explanation: Cached information was used to determine whether updates are allowed at the server. From the time of the execution of the CONNECT statement to the time that the first SQL statement was sent to the server, the partner was started with a program that does not support two-phase commit.

Such servers are not allowed to update in the current unit of work. Since an update might have been performed by the partner during execution of the first

statement at the server, the application must roll back.

This reason code is returned as a token in the SQLCODE -904.

This reason code is issued by the following CSECT: DSNLTAC1

System action: The connection to the server is deallocated. The server’s portion of the current unit of work is rolled back at the server. The application is placed in a must-abort state. All subsequent operations except rollback or abort fail with an SQLCODE -918. The remainder of the current unit of work is backed out when rollback or abort is performed or when the application terminates.

User response: If your application does not do any work at a server for a long time after issuing a CONNECT, consider rewriting it to perform the CONNECT immediately before performing any work at the server. This minimizes the possibility of the server system going down and coming back up at a different level.

Rerun your application starting with the unit of work containing the SQL statement that received the SQLCODE -904.

00D3010D

Explanation: DB2 requested updates at multiple servers, but at least one server does not support distributed two-phase commit.

This reason code is issued by the following CSECT: DSNLCMT1

System action: The commit fails for this unit of work (UOW). If the application is using TSO or BATCH attach, then DB2 rolls back the UOW. If the application is using CICS or IMS attach, then CICS or IMS rolls back the UOW after receiving the NO commit vote from DB2.

User response: Change the application so that updates to multiple servers (including the local server) are not performed within a single UOW unless all the update servers in the UOW support distributed two-phase commit.

Problem determination: In the UOW that was not committed, the first SQL statement that performed an update that was not allowed received an SQLCODE -919. All subsequent SQL statements also received an SQLCODE -919 until a ROLLBACK or a static ROLLBACK SQL statement was executed (if either occurred).

00D3010E

Explanation: The DRDA server system does not support the authentication mechanism specified in the communications database. For example, the communications database specified that RACF

passtickets were supposed to be used, but the server does not support it.

System action: The attempt to access the remote server fails. An SQLCODE -30073 is returned to the application.

User response: Notify the system programmer.

System programmer response: Modify the row in SYSIBM.LUNAMES or SYSIBM.IPNAMES to specify a security mechanism in the SECURITY_OUT column that the remote server supports.

00D3010F

Explanation: DB2 was unable to authenticate the DRDA end user, due to an error detected by RACF or DCE.

System action: The end user's attempt to connect is rejected. An SQLCODE -30082 is returned to the application.

User response: Notify the system programmer.

System programmer response: Correct the error detected by DCE or RACF. Both products write messages to the MVS console describing the error.

00D30110

Explanation: A DRDA error occurred. The DB2 crypto security component detected an error and could not process the encryption security tokens used to authenticate the end user.

System action: The attempt to connect to DB2 fails, the failure is reported to the SQL application with an SQLCODE of -30082, and the connection is terminated.

System programmer response: Determine the reason for the failure by verifying the DRDA data stream and by reviewing the server diagnostic work area returned in the DRDA security check reply message.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D30112

Explanation: Integrated Cryptographic Service Facility (ICSF) detected an error and could not process the DRDA request.

System action: A DSNL045I or DSNL046I message might have been written to the console. Refer to the description of the message for more information.

If ICSF fails during connection processing at the DB2 requester, the connection attempt fails, and the failure is reported to the application with SQLCODE -904. The connection is terminated.

If ICSF fails during connection processing at a remote DB2 server, the connection attempt fails, and the failure is reported to the application with SQLCODE -30082. The connection is terminated.

If ICSF fails at a remote DB2 server during one of the following actions:

- Processing of an encrypted DRDA request
- Generation of an encrypted DRDA reply

the attempt to access the DB2 server fails, and the failure is reported to the local DB2 server. A DSNL032I message might have been written to the console. Refer to the description of the message for more information.

If ICSF fails at the DB2 requester during one of the following actions:

- Processing of an encrypted DRDA reply
- Generation of an encrypted DRDA request

the attempt to access the distributed resource fails, and the failure is reported to the local DB2 server. A DSNL031I message might have been written to the console. Refer to the description of the message for more information.

System programmer response: Check the console message and the reason code in the message for further analysis. Determine the reason for failure by verifying the DRDA data stream. If the server diagnostic work area is returned in the DRDA reply message, check the contents of the server diagnostic work area.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D31010

Explanation: An internal logic error occurred while a DCRM functional service was being invoked.

This abend reason code is issued by the following CSECT: DSNLCnnn

DSNLCnnn identifies that a DCRM Conversation manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31011

Explanation: An internal logic error occurred while invoking a VTAM functional service.

This abend reason code is issued by the following CSECT: DSNLVnnn

DSNLVnnn identifies that a DCRM VTAM manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31012

Explanation: A VTAM functional service request failed because the state of the conversation was invalid for the request.

This abend reason code is issued by the following CSECTs: DSNLVDDC DSNLVFSM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on

identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31013

Explanation: A DB2 message was received with an invalid message block header (MBH). The MBH is a header that precedes all messages exchanged between two DB2 subsystems.

This abend reason code is issued by the following CSECTs:

DSNLVASY	DSNLVRCA	DSNLVRQP
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System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Determine which connected sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31014

Explanation: One or more invalid parameters were supplied while invoking a VTAM functional service.

This abend reason code is issued by the following CSECTs:

DSNLVASY	DSNLVDDC	DSNLVFSM	DSNLVINP
DSNLVRCA	DSNLVREQ	DSNLVRQP	DSNLVSCA
DSNLVSDA	DSNLVSEA		

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at

the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31018

Explanation: A syntax error was detected in a DDM reply received from a remote distributed database remote server.

This abend reason code is issued by the following CSECTs: DSNLCSSRR DSNLCMSR

System action: The attempt to access the remote database resource fails, and the failure is reported to the application.

A DSNL031I message might have been written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

00D31019

Explanation: A DDM protocol error was detected in a DDM reply received from a remote distributed database remote server.

This abend reason code is issued by the following CSECTs: DSNLCMSR DSNLCSSRR

System action: The attempt to access the distributed resource fails, and the failure is reported to the local DB2.

A DSNL031I message might have been written to the console. Refer to the description of this message in this book for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

00D3101A

Explanation: A syntax error was detected in a DDM request received from a remote distributed database local DB2.

This abend reason code is issued by the following CSECT: DSNLCRTD

System action: The attempt to access the DB2 server fails, and the failure is reported to the local DB2.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

00D3101B

Explanation: A DDM protocol error was detected in a DDM request received from a remote distributed database local DB2.

This abend reason code is issued by the following CSECT: DSNLCRTD

System action: The attempt to access the DB2 server fails, and the failure is reported to the local DB2.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

00D3101C

Explanation: DB2 has detected an error while processing a connection request from DDCS. A DB2RA connection request was received from DDCS.

This reason code is issued by the following CSECTs: DSNLCRTD and DSNLIRTR.

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the DDCS system administrator.

System programmer response: This is probably not a DB2 problem. This error is most likely caused by an incorrect entry in the DCS directory on DDCS. Refer to IBM Distributed Database Connection Services Installation and Configuration Guide for information on configuring your DDCS system.

00D31022

Explanation: The requested VTAM function for allocating a conversation was not performed because the data manager returned an unavailable resource when attempting to read the SYSIBM.LOCATIONS table in the communication database (CDB). The LOCATION cannot be resolved to the remote DB2 subsystem LUNAME.

This abend reason code is issued by the following CSECT: DSNLVCLM

System action: Notification of the failure is returned to the application. The conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For more information, refer to the explanation of message DSNL700I. Collect the following diagnostic items:

- Definitions of the communication database (CDB) table space, tables, and indexes involved in the error.
- Items 1 and 5 listed in Appendix C, "Problem determination," on page 735.

00D31023

Explanation: A request for a protected SNA conversation was rejected by a DB2 server because the SNA exchange log names (XLN) process has not yet completed with the requesting system.

This abend reason code is issued by the following CSECT: DSNLVPFV

System action: Message DSNL030I is displayed on the system console with reason code 00D31023. The SNA conversation is rejected with SNA sense code 08640001, indicating the SNA protocol for protected conversations was violated.

User response: Notify the DB2 system programmer.

System programmer response: The requesting system should have sent a valid SNA XLN request before starting a protected conversation. Contact the system programmer for the requesting system to determine why the SNA XLN process was not completed successfully.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem

determination," on page 735: 1.

00D31024

Explanation: The requested VTAM function for allocating a conversation was not performed because the location name is not defined in the SYSIBM.LOCATIONS table in the communication database (CDB).

This abend reason code is issued by the following CSECTs:

DSNLVAAC DSNLVCLM DSNLVPF5

System action: Notification of the failure is returned to the application. The conversation is not allocated to the specified location.

Operator response: Notify the system programmer.

System programmer response: Add the location to the SYSIBM.LOCATIONS table.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 73, 74.

00D31025

Explanation: The requested VTAM function for allocating a conversation was not performed because a mode name could not be found in the SYSIBM.MODESELECT table in the communication database (CDB) for the requesting thread.

This abend reason code is issued by the following CSECT: DSNLVCLM

System action: Notification of the failure is returned to the application. The conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: Add the mode name to be selected in the SYSIBM.MODESELECT table for the authorization ID, PLANNAME, and LUNAME of the service request that failed.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 75, 76.

00D31026

Explanation: The requested VTAM function was not performed because VTAM returned a nonzero return code while attempting to communicate on a conversation.

This abend reason code is issued by the following CSECT: DSNLVRPL

System action: Notification of the failure is returned

to the application. The conversation is abnormally deallocated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For more information, refer to the explanation of message DSNL500I or message DSNL502I, depending on the type of conversation that failed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5,

00D31027

Explanation: The requested VTAM function cannot be performed because VTAM is abending or because the operator has issued a HALT NET command to terminate VTAM.

System action: Notification of DDF termination is reported to the application. No remote communications are allowed. The distributed data facility is terminated.

Operator response: Notify the system programmer.

System programmer response: Determine why VTAM was terminated.

00D31029

Explanation: The requested VTAM function to allocate a conversation failed. VTAM returned a nonzero return code while attempting to negotiate limits with a remote location for a mode.

Thisabend reason code is issued by the following CSECT: DSNLVCNS

System action: Notification of the failure is returned to the application. All communications to the remote location on the mode fail until the CNOS is successfully negotiated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For more information, refer to the explanation of message DSNL501I.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5,

00D3102A

Explanation: A conversation was not allocated because a VTAM LU name contained in the LUNAME column of the SYSIBM.LULIST table was also present in the LUNAME column of the SYSIBM.LUNAMES table. A given VTAM LU name can appear in only one of these two tables.

System action: The conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: Make sure each remote VTAM LU is defined in the SYSIBM.LULIST table or the SYSIBM.LUNAMES table, but not both tables.

Problem determination: Collect the following diagnostic items:

- Print the contents of the SYSIBM.LUNAMES table.
- Print the contents of the SYSIBM.LULIST table.

Thisabend reason code is issued by the following CSECT: DSNLVCLM

00D3102B

Explanation: A conversation was not allocated because the partner LU attempted to allocate a conversation using a blank mode name. Although DB2 tolerates CNOS requests with a blank mode name, DB2 does not accept conversations with a blank mode name.

System action: Message DSNL030I is displayed on the system console with reason code 00D3102B. The conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: Correct the definitions at the partner LU to prevent conversations from being allocated with a blank mode name.

00D31031

Explanation: The local distributed data facility (DDF) is terminating.

System action: Notification of the failure is returned to the application. DB2 does not allow any new distributed threads while DDF is in termination or is terminated.

User response: Contact your system programmer to determine why DDF was terminated.

Operator response: Contact the system to determine the cause of DDF termination.

System programmer response: To determine why DDF was terminated and then start DDF.

00D31032

Explanation: The requested VTAM function failed because the distributed data facility (DDF) at the remote location is terminating.

This abend reason code is issued by the following CSECTs:

DSNLCRTR DSNLCTRM DSNLVRPL

System action: DB2 writes a SYS1.LOGREC record. No communication on the conversation is allowed.

Operator response: Notify the system programmer.

System programmer response: To determine the cause of the DDF termination, contact the communication administrator at the location.

00D31033

Explanation: The VTAM function request to allocate a conversation failed because the thread timed-out while waiting for a session.

This abend reason code is issued by the following CSECT: DSNLVALM

System action: Notification of the failure is returned to the application.

Operator response: Notify the system programmer.

System programmer response: The defined session limit for the mode used by the thread might be too small. The CONVLIMIT specified for the mode might have to be negotiated with the communication administrator at the remote subsystem.

Problem determination: Refer to message DSNL510I for the limit negotiated by VTAM for the location and mode used by the thread. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 77.

00D31034

Explanation: The MAX REMOTE CONNECTED limit was reached and the conversation was abnormally deallocated. The thread was not allowed to connect to DB2.

This abend reason code is issued by the following CSECT: DSNLVPFV

System action: The requester is not connected to DB2.

Operator response: Notify the system programmer.

System programmer response: The maximum number of database access threads that can concurrently exist is defined by the installation option MAX REMOTE CONNECTED. When the MAX REMOTE CONNECTED limit is equal to the number of active database access threads plus the number of inactive

database access threads, additional threads are not allowed to connect to DB2. Use the DDF global statistics to determine if the limit should be increased.

Problem determination: Collect the following diagnostic items:

- DDF global statistics to determine the number of requests that failed because of the MAX REMOTE CONNECTED limit.

00D31035

Explanation: The requested distributed function failed. The database access agent was aborted at the remote location. Notification of the failure is returned to the requester system application however the failure is really due to an unexpected failure at the remote server system. This error is an internal error at the remote server system. Evidence of the failure should be visible as an abend in the remote server system's SYS1.LOGREC information, or, you might find the failure recorded in a dump.

System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the remote DB2 site. DB2 server system recovery returns this reason code back to the requester system.

Operator response: Notify the system programmer.

System programmer response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. A dump should be present at the server system, or evidence of an abend should be visible in SYS1.LOGREC information around the time that this reason code was returned back to the requester system application. The internal error that caused the server system abend must be corrected.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31036

Explanation: The LINKNAME column of the SYSIBM.LOCATIONS table was invalid. Since LINKNAME is a foreign key of the SYSIBM.LUNAMES table, the LINKNAME column must specify one of the values provided in the LUNAME column of the SYSIBM.LUNAMES table. This error should not occur.

This abend reason code is issued by the following CSECT: DSNLVCLM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC, and the SVC dump.

System programmer response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from the DB2 site with the inconsistently defined communications database (CDB).

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31037

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an 'O' describing the remote authorization identifier to be used for the primary DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This reason code is issued by the following CSECTs:

DSNLCCCN DSNLCRRR DSNLTMIG

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D31038

Explanation: A conversation was not allocated for one of these reasons:

- The requesting LU is part of a DB2 sysplex. When one or more LU names within a DB2 sysplex appear in the SYSIBM.LULIST table at the remote site, all LU names within the sysplex must be identified in the SYSIBM.LULIST table at the remote site.

- You might have intended to list all the sysplex's LU names in the SYSIBM.LULIST table, but you did not include one or more LU names.
- You listed a subset of the LU names in SYSIBM.LULIST but none of the LU names you listed are currently available. Please note that it can take up to 3 minutes for LU availability information to be updated following START DDF at the remote site.
- The location name sent to a remote site does not match the location name recorded in the BSDS at that remote site.
- The local SYSIBM.LULIST table is incorrectly defined for the remote location.

A DSNL030I message might have been written to the console.

System action: A record is written to SYS1.LOGREC and the conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: The CDB tables and DB2 BSDS parameters must correctly associate the LOCATION names with their corresponding LUNAME names.

The cause of this error is usually one of the following:

- The BSDS at the remote site does not have the correct LOCATION or LUNAME value, which causes the remote DBMS to respond to the wrong LOCATION name when receiving distributed database requests.
- The SYSIBM.LOCATIONS table at the local DB2 system has an incorrect value in the LINKNAME or LOCATION column for the failing LOCATION, which causes the request to be sent to the wrong remote DBMS.
- The SYSIBM.LULIST table at the local DB2 system has an incorrect value in the LUNAME column for the failing LOCATION, which causes the request to be sent to the wrong remote DBMS.
- Not all LU names in the requesting DB2 sysplex are defined in the SYSIBM.LULIST table at the remote site.
- Not all LU names in the requesting DB2 sysplex are defined in the SYSIBM.LULIST table at the server DB2 subsystem. The remote LU is not allowed access to the server subsystem.

In general, when the requester is a member of a sysplex, each member of the requesting sysplex should be defined in SYSIBM.LULIST of the server subsystem. However, there may be cases where an LU of a remote sysplex is not defined in SYSIBM.LULIST of the local subsystem to prevent the remote LU from being a candidate member when accessing the remote sysplex. This is known as “member specific routing”. If the remote sysplex LU attempts to access the local subsystem, this reason

code will be returned if the remote LU is not defined in the local SYSIBM.LULIST table and is also not defined in SYSIBM.LUNAMES. Remote requesting sysplex members can be defined in SYSIBM.LULIST, or, when member specific routing requirements to the remote sysplex member are desired, the remote sysplex LU can be defined in SYSIBM.LUNAMES for inbound purposes from the remote sysplex LU that contain the appropriate inbound security characteristics.

- The local DB2 system contains a SYSIBM.LULIST row for a remote system that is not a member of a Data Sharing group. SYSIBM.LULIST rows CANNOT be defined for remote non Data Sharing server systems. Remove the SYSIBM.LULIST row for the remote systems.

Problem determination:

- Determine the LUNAME and LOCATION name of the DB2 system that attempted to start a VTAM conversation.
- Print the contents of the SYSIBM.LOCATIONS table at that site.
- Print the contents of the SYSIBM.LULIST table at both the local site and the remote site.
- Determine the LUNAME and LOCATION name of the remote DBMS involved in the failure from the BSDS at the remote site.
- Issue the -DISPLAY LOCATION command to determine which LUNAMES and LOCATIONs were active at the time of failure.

This abend reason code is issued by the following CSECTs:

DSNLCSIM	DSNLVCLM	DSNLVPF5
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00D31039

Explanation: The requested VTAM function to allocate a conversation was not performed because the SYSIBM.USERNAMES table at the requesting site did not contain a row describing the remote authorization ID to be used for this DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B', outbound name translation is in effect. The SYSIBM.USERNAMES table must contain entries describing the remote authorization ID to be used for each DB2 authorization ID communicating with that LUNAME.

This abend reason code is issued by the following CSECT: DSNLVCLM

System action: A record is written to SYS1.LOGREC, and the conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been

specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization ID, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID. These rows must specify 'O' in the TYPE column of the SYSIBM.USERNAMES table.

Problem determination: Determine the LUNAME and authorization ID for the failing VTAM conversation. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 58, 59.

00D3103A

Explanation: Database access agent allocation failed because the RACROUTE REQUEST=EXTRACT macro failed to locate a user profile for the DB2 primary authorization ID obtained from the SYSIBM.USERNAMES table. When the ENCRYPTPSWDS column in SYSIBM.LUNAMES specifies 'Y', the requesting DB2 system must be able to extract the encrypted password (via RACROUTE REQUEST=EXTRACT) and send this encrypted password to the responding DB2 system for validation.

This reason code is issued by the following CSECT: DSNLVINF

System action: The reason code is returned to the application.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the new authorization ID column in SYSIBM.USERNAMES has been specified correctly for the indicated LUNAME. If you intend to use encrypted passwords, the new authorization ID must be defined to your MVS security subsystem.

Problem determination:

- Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.
- Verify that the names given in the NEWAUTHID column are defined to your MVS security subsystem properly.

00D3103B

Explanation: An attempt to allocate an LU6.2 conversation failed because the conversation limits for the desired partner LU and VTAM MODE have been reached.

This abend reason code is issued by the following CSECT: DSNLVALM

System action: This reason code is generated internally when an attempt is made to allocate an LU6.2 conversation and conversation limits have been reached for the desired partner LU and VTAM MODE.

In this situation, the requesting DB2 system will attempt to reuse one of the existing LU6.2 conversations that have already been allocated to the agent in question.

The allocate process will be retried using the existing conversation.

System programmer response: If you increase the LU6.2 conversation limits for the indicated partner LU and VTAM MODE, it will not be necessary for DB2 to reclaim conversations in order to allocate additional LU6.2 conversations. The reclaiming process will reduce system throughput, since the reclaimed conversation will have to service multiple SQL statements.

00D3103C

Explanation: An attempt to allocate an LU6.2 conversation failed because the specified partner LU cannot support the LU6.2 SECURITY=SAME capability (that is, the LU6.2 Already-Verified security function).

This abend reason code is issued by the following CSECT: DSNLVAAC

System action: The attempt to allocate an LU6.2 conversation fails, and the error is reported to the DB2 application that requested access to the distributed resource.

User response: Notify your DB2 system programmer.

System programmer response: DB2 will attempt to use SECURITY=SAME when connecting to remote database systems whose USERSECURITY column in the SYSIBM.LUNAMES table contains a value other than 'C'. In order to support the LU6.2 SECURITY=SAME function, the target DBMS must declare support for the SECURITY=SAME function.

If the target DBMS is DB2, support for the SECURITY=SAME function is declared by specifying the following:

1. The DB2 VTAM APPL definition must specify SECACPT=ALREADYV at the remote DB2 subsystem.
2. The value in the USERSECURITY column of the SYSIBM.LUNAMES table at the remote DB2 subsystem must specify a value other than 'C' in the row associated with the requesting DB2 subsystem.

Problem determination: Collect the following diagnostic items:

- The VTAM APPL definition for the remote DB2 system.
- The contents of the SYSIBM.LUNAMES table.

00D3103D

Explanation: An attempt to allocate a VTAM LU6.2 conversation with a remote site failed because the request did not contain the proper security information.

This abend reason code is issued by the following CSECT: DSNLVRPL

System action: The attempt to access the remote database resource failed and the failure is reported to the application.

User response: Notify the communications database administrator.

System programmer response: This error is usually caused by transmitting an invalid authorization ID or password in a request to the remote site. However, this is not always the case, so it is important to review the diagnostic information at the remote site to determine the cause of the failure.

- If the remote site is a DB2 subsystem, refer to the DSNL030I message at the remote site for the cause of the security failure. Additionally, an ALERT will be recorded in NetView (if the NetView product is available) to describe the security failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the security failure at the remote site.

If you suspect the authorization ID or password is not correct, the DB2 CDB on the local DB2 system should be examined to validate the following items:

- If the remote site requires both an authorization ID and a password on LU6.ALLOCATE requests (i.e., the remote site does not accept already-verified ALLOCATE requests), the USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system must specify either 'O' or 'B'.
- If the USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system specifies 'O' or 'B', the SYSIBM.USERNAMES table will be used to determine the authorization ID and password sent on the LU6.ALLOCATE request.
If you intend to translate the authorization IDs, ensure that the NEWAUTHID column of the SYSIBM.USERNAMES table contains the correct authorization ID to be used at the remote site.
- If the remote site is a DB2 system, the ENCRYPTPSWDS value in the SYSIBM.LUNAMES table must exactly match the ENCRYPTPSWDS column of the SYSIBM.LUNAMES table at the remote site.
- If the remote site is not a DB2 system, the ENCRYPTPSWDS value in the SYSIBM.LUNAMES table must be set to 'N'.
- If you are transmitting passwords to the remote site, the password transmitted by the local DB2 system must exactly match the value expected by the remote site.

1. For encrypted passwords, the password sent to the remote DB2 subsystem is obtained by extracting the RACF password of the user identified by the NEWAUTHID column in the SYSIBM.USERNAMES table. This user's RACF password must exactly match the password at the remote site.
2. If password encryption is not used, the password will be taken from the PASSWORD column of the SYSIBM.USERNAMES table. This value must exactly match the password at the remote site.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 58, 59, 1.

00D3103E

Explanation: The requested VTAM function to allocate a conversation was not performed because the VTAM MODE specified a conversation limit of zero. The conversation limits must be set to a value greater than zero before a conversation can be allocated.

This abend reason code is issued by the following CSECT: DSNLVALM

System action: The conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: If you have placed entries in the SYSIBM.LUMODES table, make sure CONVLIMIT column has a nonzero value. If you are allowing the session limits to be chosen by VTAM, make sure the DSESLIM values on the VTAM APPL and mode entries are nonzero.

Problem determination: Collect the following diagnostic items:

- Determine the LUNAME and MODE name of the DB2 system that attempted to start a VTAM conversation.
- Print the contents of the SYSIBM.LUMODES table.
- Determine the session limits defined on the VTAM APPL statement and the VTAM MODE entry.

00D3103F

Explanation: An attempt to allocate a VTAM LU6.2 conversation with a remote site failed because the server at the remote LU does not support the SNA two-phase commit process.

This abend reason code is issued by the following CSECT: DSNLVRPL

System action: DB2 starts a new conversation to the remote site that does not use two-phase commit. DB2 does not attempt to use two-phase commit with this remote site until DDF is restarted.

System programmer response: This reason code is produced when the LU at the remote site supports

two-phase commit, but the TPN at the remote LU does not support two-phase commit. This is a normal situation, so no system programmer action is required.

00D31040

Explanation: The requested VTAM function failed before the database access agent has failed. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCTRC	DSNLCRTR	DSNLCRTD
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System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the failed DB2 site.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 failure. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31041

Explanation: The requested VTAM function to allocate a conversation was not performed because the SYSIBM.USERNAMES table at the responding site did not contain a row whose authorization ID column matches the DB2 authorization ID received from the requesting DB2 system. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', inbound name translation is in effect. The SYSIBM.USERNAMES table must contain entries describing the local DB2 authorization ID to be used for each DB2 authorization ID sent by the requesting DB2 system.

This abend reason code is issued by the following CSECT: DSNLVCLM

System action: A record is written to SYS1.LOGREC and the conversation is not allocated.

Operator response: Notify the system programmer.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use local authorization IDs that differ from the remote DB2 authorization ID, verify that the

SYSIBM.USERNAMES table has rows that correctly specify the local authorization ID to be used for each possible remote authorization ID. These rows must specify 'I' in the TYPE column of the SYSIBM.USERNAMES table.

Problem determination: Determine the LUNAME and authorization ID for the failing VTAM conversation. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 58.

00D31042

Explanation: The requested VTAM function failed. The connection to the remote location was interrupted. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSIM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the failed DB2 site.

Operator response: Notify the system programmer.

System programmer response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31043

Explanation: The requested VTAM function failed. The connection from the remote location was interrupted. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSIM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the failed DB2 site.

Operator response: Notify the system programmer.

System programmer response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31044

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem did not contain any security subfields. This represents SECURITY=NONE in the LU6.2 architecture, which is not supported by DB2.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL030I message may have been written to the console.

User response: Notify the communications database administrator.

Operator response: Notify the system programmer.

System programmer response: Verify that the remote subsystem is configured to send valid security subfields.

If the remote subsystem is DB2, make sure the VTAM APPL definition does not specify SECACPT=NONE, which is the default for the VTAM APPL definition. SECACPT=NONE will cause VTAM to remove the security subfields from the FMH5.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59.

00D31045

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem did not contain the security subfield that supplies the USERID, or the USERID was not 1 to 8 bytes in length.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

User response: Notify the communications database administrator.

Operator response: Notify the system programmer.

System programmer response: Verify that the remote subsystem is configured to send valid security subfields.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 83, 59.

00D31046

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem indicated SECURITY=SAME (also known as Already-Verified) and the subsystem in question was not authorized to send requests with SECURITY=SAME.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL030I message may have been written to the console.

User response: Notify the communications database administrator.

Operator response: Notify the system programmer.

System programmer response: The request was rejected because the SECURITY_IN column of the SYSIBM.LUNAMES table contained a 'V' in the row associated with the remote system. The value 'V' indicates that the remote system must send both a USERID and a PASSWORD, which corresponds to SECURITY_PGM in the SNA LU6.2 architecture. Users should also be aware that in the absence of a SYSIBM.LUNAMES row that specifically identifies the remote LU, a "default" SYSIBM.LUNAMES row (blank LUNAME) may be utilized, if defined, if the inbound connection is via DRDA protocols. This "default" row may not reflect the desired inbound security characteristics in which case a SYSIBM.LUNAMES row can be defined that explicitly identifies the remote LU.

If the remote LU is a member of a remote sysplex and the local system requires access to the remote sysplex, then members of the remote sysplex to be accessed must be defined in the local SYSIBM.LULIST table. In this case, the remote sysplex LU can be defined in the local SYSIBM.LULIST table although a SYSIBM.LUNAMES definition, default row or explicit definition, is appropriate in cases where it is undesirable to define the remote LU in SYSIBM.LULIST (for example when you don't want the remote LU to be

a candidate member when outbound accessing the remote SYSPLEX location).

This problem can be corrected in two ways:

1. If you would like DB2 to accept requests that are marked with SECURITY=SAME, change the SECURITY_IN value in the SYSIBM.LUNAMES table to 'A' for the remote LU in question. Also the DB2 VTAM APPL definition should specify SECACPT=ALREADYV.
2. If you would like DB2 to continue to reject requests of this kind, the remote LU must be configured to send requests that contain both a USERID and PASSWORD (SECURITY=PGM in SNA LU6.2 terms).

If the remote LU is DB2, the SECURITY_OUT column in the SYSIBM.LUNAMES table must specify either 'R' or 'P' in the row associated with the local DB2 subsystem.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59.

00D31047

Explanation: A remote subsystem has attempted to allocate a VTAM LU6.2 conversation, but the request was rejected because the request did not contain the proper security information. The FMH5 received from the remote subsystem did not contain the security subfield that supplies the PASSWORD, or the PASSWORD was not 1 to 8 bytes in length.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: The attempt to access the remote database resource fails and the failure is reported to the application.

A DSNL032I message may have been written to the console. Refer to the description of this message for further information.

User response: Notify the communications database administrator.

Operator response: Notify the system programmer.

System programmer response: Verify that the remote subsystem is configured to send valid security subfields.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

00D31048

Explanation: The requested VTAM function for allocating a conversation at the DB2 server was not performed because the requester's LUNAME is not defined in the SYSIBM.LUNAMES table of the communication database (CDB) at the server.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: Notification of the failure is returned to the application. The conversation is not allocated to the specified location.

Operator response: Notify the system programmer.

System programmer response: Add the requester's LUNAME to the SYSIBM.LUNAMES table at the server. If the remote LU is DB2, the requester's LUNAME is the label name, as opposed to the ACBNAME keyword, on the DB2 VTAM APPL statement for the requester site. A server's SYSIBM.LUNAMES table should contain an entry for the requester's LUNAME.

Users should also be aware that in the absence of a SYSIBM.LUNAMES row that specifically identifies the remote LU, a "default" SYSIBM.LUNAMES row (blank LUNAME) may be utilized, if defined, if the inbound connection is via DRDA protocols. This "default" row may not reflect the desired inbound security characteristics in which case a SYSIBM.LUNAMES row can be defined that explicitly identifies the remote LU.

If the remote LU is a member of a remote sysplex and the local system requires access to the remote sysplex, then members of the remote sysplex to be accessed must be defined in the local SYSIBM.LULIST table. In this case, the remote sysplex LU can be defined in the local SYSIBM.LULIST table although a SYSIBM.LUNAMES definition, default row or explicit definition, is appropriate in cases where it is undesirable to define the remote LU in SYSIBM.LULIST (for example when you don't want the remote LU to be a candidate member when outbound accessing the remote SYSPLEX location).

A DSNL030I message may have been written to the console at the server.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 58.

00D31049

Explanation: A request using application-directed access starting at site 'A' referenced an object at site 'B' that is stored at site 'A'

This abend reason code is issued by the following CSECT: DSNLCCCN

System action: The application statement was not processed.

User response: Recode the application to remove the alias reference at the remote server that resolves to an object stored at the local DB2. Objects stored at the local site must be referenced using a local name.

Problem determination: If necessary, consult with the database administrators at the local site and the remote server location. Inspect the remote SYSIBM.SYSTABLES catalog table to determine the object at this location being referenced in a circular manner.

00D3104A

Explanation: A remote server issued an SNA BACKOUT, which was not sent as a reply to an SNA PREPARE or REQUEST_COMMIT. This indicates the server backed out the current unit of work without waiting for the SQL application to either commit or roll back.

This abend reason code is issued by the following CSECT: DSNLVRPL

System action: The attempt to access the remote database resource fails and the failure is reported to the application. DB2 terminates the SNA conversation to the remote server and forces the application to roll back.

User response: Notify the DB2 systems programmer.

System programmer response: DB2 never issues an unsolicited SNA BACKOUT. Non-DB2 servers can send an SNA BACKOUT indication when resources required to complete the unit of work are not available. For example, a deadlock might cause the non-DB2 server to send an SNA BACKOUT. Contact the system programmer for the remote system to determine why the unit of work had to be aborted.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3104B

Explanation: An SNA conversation was rejected by a DB2 server because the SNA FMH5 specified SNA persistent verification. DB2 does not support the SNA persistent verification option.

This abend reason code is issued by the following CSECT: DSNLVPF5

System action: Message DSNL030I is displayed on the system console with reason code 00D3104B. The SNA conversation is rejected with SNA sense code X'080F6051', indicating the SNA security parameters in the FMH5 were not acceptable.

User response: Notify the DB2 system programmer.

System programmer response: The SECACPT keyword on the VTAM APPL statement tells VTAM whether DB2 supports persistent verification. Because

DB2 does not support persistent verification, the SECACPT=PERSISTV and SECACPT=AVPV options cannot be used on DB2's VTAM APPL statement.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3104C

Explanation: The SNA Exchange Log Names (XLN) process failed because of a log name mismatch between DB2 and a remote LU in the network.

This abend reason code is issued by the following CSECT: DSNLCXLI

System action: The attempt to allocate an SNA two-phase commit conversation fails with reason code 00D3104C. Message DSNL410 is displayed on the system console to describe the error.

User response: Contact the DB2 systems programmer.

System programmer response: The log name recorded in the DB2 log does not match the log name currently in use at the remote LU. There are indoubt units of work that need to be resolved at this DB2 system. The log name required to resolve the indoubt units of work is displayed in the DSNL410 message.

If a non-DB2 partner was started with the wrong log, it might be possible to restart the non-DB2 partner with the desired log name. This should cause the indoubt units of work to be resolved automatically.

If the partner cannot be restarted with the desired log name, the -RECOVER INDOUBT command can be used to resolve the indoubt units of work. Once the indoubt units of work are resolved, DB2 will accept an SNA XLN with a new partner log name.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3104D

Explanation: The local DB2 system does not support connectivity to the DB2 release currently running at the remote DB2 site.

This abend reason code is issued by the following CSECT: DSNLCSIM

System action: The attempt to allocate an SNA conversation is rejected with reason code 00D3104D.

User response: Contact the DB2 systems programmer.

System programmer response: DB2 distributed database connections can only be established between compatible DB2 releases. For example, DB2 Version 3 can connect to DB2 2.3, but not to DB2 2.2.

In order to establish connectivity, the down-level DB2

system must be migrated to a supported release of DB2.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3104E

Explanation: An SNA Exchange Log Names (XLN) protocol violation was detected when attempting to establish a connection to a remote site.

This abend reason code is issued by the following CSECT: DSNLCXLI

System action: The attempt to allocate an SNA conversation is rejected with reason code 00D3104E. Message DSNL421E is written to the system console and IFCID 0213 is produced to describe the protocol violation.

User response: Contact the DB2 systems programmer.

System programmer response: Contact the system programmer for the remote site. The invalid XLN message is recorded in the IFCID 0213 trace record. The system logic error that causes the invalid XLN message must be corrected at the remote site.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3104F

Explanation: A connection to a remote location was lost during a previous communication operation.

This abend reason code is issued by the following CSECTs:

DSNLCBCS DSNLCSRM DSNLCSSR DSNLCMSR

System action: If the communication failure occurred during a commit or abort operation, the SQL application might not be aware that a failure occurred. Messages associated with the failure were written to the system console at the time of failure. Additionally, alerts were reported to NetView at the time of failure.

User response: Reestablish the connection to the remote site and reissue the SQL statement.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D31050

Explanation: DB2 expected to receive security information for the remote client but a valid DRDA SECCHK command was not received for a connection request from a DRDA application requester (AR). The DRDA SECCHK command is only valid with a DRDA

security manager level greater than or equal to 5.

This can be the case if one of the following occurs:

- The DRDA AR requested a DRDA security manager less than level 5 for an SNA connection where the APPL command for DB2 was specified with the SECACPT=NONE option.
- The DRDA SECCHK command did not contain the required security information.
- The DRDA AR requested a DRDA security manager less than level 5 for a TCP/IP connection.

This abend reason code is issued by the following CSECTs: DSNLTSEX, DSNLTSEC.

System action: The attempt to access the local database resource fails, the failure is reported to the SQL application, and the conversation is terminated.

System programmer response: For SNA connections, if SECACPT=NONE and the DRDA AR does not support DRDA security manager level 5, contact the DB2 security administrator to change the SECACPT option to ALREADYV or CONV to allow for security information in the VTAM FMH-5 in the form of userid or userid/password fields. If SECACPT=NONE is not changed, then DB2 cannot accept connection requests from this remote client.

For SNA connections, If SECACPT=ALREADYV or CONV, then even though userid or userid/password fields in the FMH-5 are received and validated, DB2 must evaluate a DRDA SECCHK command if it is sent. If the DRDA AR requests this level of security but does not provide the correct information in the form of a SECCHK command, this is a DRDA protocol error committed by the DRDA AR implementation at the remote client.

For TCP/IP connections, this is a DRDA protocol error committed by the DRDA AR implementation at the remote client.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D31052

Explanation: An application caused recursive access to a remote location, followed by access to another remote location, which is not permitted.

For example, an application at location LOC1 might have connected to location LOC2 and accessed a table using an alias that resolves back to LOC1. There was a subsequent remote access from LOC1 to LOC n , which caused the error.

System action: The attempt to access the remote

location fails. The SQL application receives a -904 SQLCODE.

System programmer response: Correct the application program so that it does not cause recursive access to a location followed by remote access from that location. The application might have used table aliases, three-part table names, stored procedures, user-defined functions, or triggers to cause the condition.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 35, 73, 74.

00D31055

Explanation: The remote location defined in the SYSIBM.LOCATIONS table could not be accessed because the TCP/IP interface to DDF is not available.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: One of the following actions should be taken:

- If the remote site is not supposed to be using TCP/IP, add a row to SYSIBM.LUNAMES defining the LUNAME used by the remote location.
- If the remote site is correctly defined in the CDB, examine the messages written to the console during -START DDF processing. Those messages describe any errors that would prevent DDF from using TCP/IP.
- Determine if DB2 is started in restricted access mode. If so, retry the request when DB2 has been started in full access mode.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D31056

Explanation: The PORT column of the SYSIBM.LOCATIONS table could not be converted to a TCP/IP port number by the getservbyname TCP/IP socket call.

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE, and message DSNL514, DSNL517, or DSNL518 is written to the console describing the error.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: Use the information in the DSNL514, DSNL517, or DSNL518 message to resolve the error.

Problem determination: Collect the following

diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1.

00D31057

Explanation: DB2 was able to find the row in SYSIBM.LOCATIONS for the LOCATION specified in the SQL request. However, the LINKNAME column value specified in LOCATIONS did not match any row in SYSIBM.LUNAMES or SYSIBM.IPNames.

This abend reason code is issued by the following CSECT: DSNLxxxx

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: Insert a row in SYSIBM.LUNAMES or SYSIBM.IPNames that matches the LINKNAME specified in SYSIBM.LOCATIONS.

00D31058

Explanation: The IPADDR column of the SYSIBM.IPNames table could not be converted to an IP address by the gethostbyname TCP/IP socket call.

This abend reason code is issued by the following CSECT: DSNLxxxx

System action: The request to connect to a remote site fails. The SQL application receives a -904 SQLCODE, and message DSNL513, DSNL517, or DSNL518 is written to the console describing the error.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: Use the information in the DSNL513, DSNL517, or DSNL518 message to resolve the error.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1.

00D31059

Explanation: An attempt to allocate a conversation to the remote site failed because DB2 was unable to obtain a RACF PassTicket. The user specified an 'R' in the SECURITY_OUT column of the SYSIBM.IPNames and/or SYSIBM.LUNAMES communications database (CDB) tables for the partner site. As a result, DB2 invokes RACF to extract a PassTicket for the partner site. However, RACF could not provide a PassTicket, and the attempt failed.

System action: The attempt to access the remote database resource failed, and the failure is reported to the application.

User response: Notify the system programmer.

System programmer response: The error usually occurs due to incorrect or missing RACF definitions. To avoid this error, specify the proper RACF definitions to provide for the PassTicket. Alternatively, you may avoid the use of PassTickets by changing the SECURITY_OUT column of the SYSIBM.IPNames and/or SYSIBM.LUNAMES CDB table for the partner site. For information regarding PassTickets, refer to Part 3 (Volume 1) of *DB2 Administration Guide*.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 14, 58, 74.

00D3105A

Explanation: Userid, password is not valid for the location specified. An SQL CONNECT with userid/password was issued to connect to a location that requires RACF PassTicket authorization. The entry in SYSIBM.SYSLUNAMES or SYSIBM.IPNames for the location specified on the SQL CONNECT specifies that a connection request must contain a user ID and RACF PassTicket.

System action: The connect request is not processed. The application is placed in the unconnected and connectable state.

00D31100

Explanation: The data communications function service was invoked with a parameter list that contained one or more invalid parameters. This is an internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and STS1.LOGREC at the site of a DB2 abend.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31101

Explanation: A data communications functional service was invoked with the cursor table marked invalid. This is an internal error.

This abend reason code is issued by the following

00D31102 • 00D31105

CSECTs:

DSNLCCCN DSNLCCDR DSNLCSRM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31102

Explanation: A data communications functional service encountered an inconsistency in the requesting thread control block structure. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCCCN DSNLCSRM DSNLCTCN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31103

Explanation: A data communications functional service received an invalid logical-unit-of-work ID (LUWID) or no LUWID. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCCCN, DSNLCCDR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC as the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31104

Explanation: A data communications functional service cannot find a distributed processing block for the primary thread. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCSRM DSNLCTCN DSNLCBCS DSNLCCNR
DSNLCPCR DSNLCTDR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31105

Explanation: A data communications functional service detected an invalid or incorrect buffer size on a send message operation. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSRM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31106

Explanation: A data communications functional service detected an invalid message sequence. One or more rows of data might have been lost. This is an internal error.

Thisabend reason code is issued by the following CSECT: DSNLCSRMR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31107

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to wait for a message. This is an internal error.

Thisabend reason code is issued by the following CSECTs: DSNLCSRMR, DSNLCCNR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the

DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31108

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to receive a message. This is an internal error.

Thisabend reason code is issued by the following CSECTs: DSNLCSRMR, DSNLCCNR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31109

Explanation: A data communications functional service was invoked incorrectly (protocol violation) to send a message. This is an internal error.

Thisabend reason code is issued by the following CSECTs: DSNLCSRMR, DSNLCCNR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following

diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3110A

Explanation: A data communications functional service detected an invalid message sequence. One or more rows of data might have been lost. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCSRM, DSNLCBCS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3110B

Explanation: While a message was being sent or received by the data communications resource manager, an internal error was detected in DB2. Register 4 contains a reason code that provides additional information about this error. This is an internal error.

This abend reason code is issued by the following CSECTs:

DSNLCSRM DSNLCBCS DSNLCSIM DSNLCSRR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem

determination,” on page 735: 56, 57.

00D31110

Explanation: Instrumentation facility component (IFC) has passed a nonzero return code to the data communications resource manager. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31111

Explanation: The instrumentation facility component (IFC) passed a nonzero return code to the data communications resource manager. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D31112

Explanation: The data communications resource manager cannot find the LUWID for the remote thread in the database thread control blocks. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLCRTR, DSNLCRTD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain any related diagnostic information from each connected site and the SVC dump and SYS1.LOGREC at the site of the DB2 failure.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31113

Explanation: The data communications resource manager received an invalid set of control block pointers. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31114

Explanation: A data communications resource manager(DCCM) block for a deallocated conversation which belongs to a database access thread cannot be found. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31115

Explanation: The data communications resource manager attempt to enqueue a request for a database access thread failed. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31116

Explanation: The data communications resource manager received an invalid DC message number. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31117

Explanation: The data communications resource manager received a request with an invalid response type. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31118

Explanation: A message-processing routine returned to the data communications resource manager without the requested response. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31119

Explanation: The data communications resource manager processed a request with an unassigned or disconnected message class. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3111A

Explanation: The data communications resource manager received an unexpected communications error when processing a request. This can occur for any of the following reasons:

- A VTAM session failure caused the premature termination of a DB2 conversation.
- A VTAM VARY NET, INACTIVE or HALT NET command was issued which interrupted a DB2 conversation.
- A DB2 internal logic error occurred.

This abend reason code is issued by the following CSECTs:

DSNLCRTR DSNLCSIM DSNLCSND

System action: A record is written to SYS1.LOGREC and an SVC dump may be requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: If the abend appears to have been caused by a DB2 logic error, determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site as well as any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3111B

Explanation: The data communications resource manager cannot find the remote location for the requesting thread in the control blocks. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLCSIM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of

the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3111C

Explanation: An internal logic error occurred while invoking a TCP/IP functional service.

This abend reason code is issued by the following CSECT: DSNLIInnn

DSNLIInnn identifies that a DCRM TCP/IP manager CSECT detected a logic error. Refer to the dump title for the specific CSECT name.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3111F

Explanation: The maximum amount of buffered query data has been exceeded. Rather than return one block of query data, the DRDA server system elected to return multiple extra blocks. Instead of fetching all rows in all the extra blocks, the requesting application executed an SQL statement not related to the query or executed a commit while a held cursor was still open. DB2 buffers the extra in-transit blocks, however DB2 was not able to buffer the entire set of extra blocks and thus truncated the result set. The application then resumed fetching and attempted to fetch data beyond the point of truncation.

System action: The SQL statement fails.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: Determine the failing application program and consider the following resolutions:

- The cursor definition may cause the server to return extra blocks. In this case, the cursor definition can be changed to reduce the number of rows, thus extra blocks, being returned by the server.

DB2 UDB for z/OS systems return extra blocks for cursors defined with the Optimize For *n* Rows clause and will return only enough extra blocks in order to return *n* rows. When a cursor is defined with Optimize For *n* Rows, either in the application or in a stored procedure, this indicates an application intent to fetch all *n* rows before attempting to execute other SQL statements. The application is not abiding by its intent and is executing other SQL, or committing, prior to fetching all *n* rows. In this case, the cursor definition can be changed to reduce the value of *n*, or the application logic can be modified to fetch all *n* rows or to close the cursor before executing the statement that caused the in-transit data to be buffered.

- The number of extra blocks returned can be controlled by DB2 installation parameters. The maximum number of extra blocks requested by a DB2 requester system is determined by the "Extra Blocks Req" option of the DSNTIP5 DB2 installation panel. This value can be reduced which prevents the server system from returning more blocks than the DB2 requester system can buffer.

Similarly, the server system may also provide a method to regulate the maximum number of extra blocks that it will return to a requester in which case this number can also be reduced. For DB2 UDB for z/OS systems, this is determined by the "Extra Blocks Srv" option of the DSNTIP5 DB2 installation panel.

For information about block fetching result sets, see Part 5 (Volume 2) of *DB2 Administration Guide*.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 14, 17.

00D31200

Explanation: DB2 thread inactivation processing failed to inactivate a database access thread (DBAT) because the DBAT's unit of recovery state was marked as "inflight". This processing occurs only when DB2 is configured with DDF Inactive Threads support (when the "DDF THREADS" field is set to "INACTIVE" in the DSNTIPR installation panel). This error is an internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

System programmer response: Determine which sites

the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. If you suspect an error in DB2, refer to Part 2 of DB2 Diagnosis Guide and Reference for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D31202

Explanation: DB2 has detected an inconsistent change in the TCP/IP PORT configuration parameter for the RSYNC PORT. A BIND ipaddr specified on the RSYNC PORT statement was changed in the PROFILE.TCPIP data set since DDF was started.

System action: DDF is abnormally terminated. This change can cause outages because of invalid sysplex routing information or commit resynchronization failures due to invalid IP addresses being returned to requesters.

System programmer response: Verify the BIND ipaddr specified on the RSYNC PORT number in the TCP/IP PORT statement and start DDF.

00D34401

Explanation: The relational data system (RDS) passed an invalid function code to the distributed RDS (DRDS). This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXRDS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34404

Explanation: The relational data system (RDS) passed the distributed RDS (DRDS) an invalid distributed interface block (DIB). This is an internal RDS error.

This abend reason code is issued by the following CSECT: DSNLXRDS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34405

Explanation: The data communications resource manager (DCRM) passed an invalid LMPP message number to the distributed relational data system (DRDS). This is either an internal DCRM error or an internal DRDS error.

This abend reason code is issued by the following CSECT: DSNLXRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34406

Explanation: The distributed relational data system (DRDS) detected a message of invalid length from the data communications resource manager (DCRM). The message is longer than the buffer size. This is either an internal DRDS error or an internal DCRM error.

This abend reason code is issued by the following CSECTs: DSNLXQPR, DSNLXSQD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34407

Explanation: The distributed relational data system (DRDS) received an invalid return code from the data communications resource manager (DCRM) on a SEND request. This is a DCRM internal error.

This abend reason code is issued by the following CSECTs:

DSNLXQEX DSNLXQFH DSNLXQOP DSNLXQPR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34408

Explanation: The distributed relational data system (DRDS) received an invalid LMPP from the data communications resource manager (DCRM). This is either a DCRM internal error or a DRDS internal error.

This abend reason code is issued by the following CSECTs:

DSNLXOPF DSNLXPCL DSNLXPEX DSNLXPPR
DSNLXPXI DSNLXRTR

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34409

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state transition occurred. This is a DRDS internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3440B

Explanation: The distributed relational data system (DRDS) detected an inconsistency. This is an internal error.

System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump at the failed DB2 site.

Operator response: Notify the system programmer.

System programmer response: Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3440C

Explanation: The distributed relational data system (DRDS) requesting site control block must exist at this time but does not. This is an internal DRDS error.

This abend reason code is issued by the following CSECT: DXNLXRDS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3440D

Explanation: The distributed statistics and accounting control block does not exist. This is an internal distributed data facility (DDF) error.

This abend reason code is issued by the following CSECT: DSNLXDSA

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3440E

Explanation: A distributed request was received, but the distributed data facility (DDF) is inactive.

This reason code is issued by the following CSECTs: DSNLXRDS, DSNLXRUF

System action: The request is not processed.

User response: Notify the system operator.

Operator response: Ensure that the DDF has been started.

00D3440F

Explanation: The distributed relational data system (DRDS) detected a message of invalid length from the data communications resource manager (DCRM). The message is smaller than the buffer size, but the return code from the DCRM indicates that the message is greater than one buffer. This is either an internal DRDS error or an internal DCRM error.

Thisabend reason code is issued by the following CSECTs: DSNLXQPR, DSNLXSQD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34410

Explanation: The distributed relational data system (DRDS) received an invalid return code from the data communications resource manager (DCRM) on a RECEIVE request. This is an internal DCRM error.

Thisabend reason code is issued by the following CSECTs: DSNLXQPR, DSNLXQFH

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34411

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An invalid state is specified. This is an internal DRDS error.

Thisabend reason code is issued by the following CSECTs:

DSNLXOPF	DSNLXQFH	DSNLXRTR
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System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34412

Explanation: The distributed relational data system (DRDS) detected an internal inconsistency. An internal buffer offset variable contains an invalid value. This is an internal DRDS error.

This abend reason code is issued by the following CSECT: DSNLXQGT

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34413

Explanation: The data header on the message received from the responding site contains invalid information. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNLXQGT, DSNLXQFH

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34414

Explanation: The relational data system (RDS) did not specify an area for the null indicator of the data. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXQGT

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34415

Explanation: The input host variable SQLDA format specified in the RDI is not valid. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXIVB

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34416

Explanation: An incomplete response was received on a conversation when a complete response was expected.

This abend reason code is issued by the following CSECT: DSNLXQFH

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34417

Explanation: DRDS detected an illegal attempt to enter Continuous Block Fetch mode.

This abend reason code is issued by the following CSECT: DSNLXQFH

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34418

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an 'O' describing the remote authorization identifier to be used for the plan owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation,

the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This reason code is issued by the following CSECT: DSNLXQAL

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D34419

Explanation: RDS has passed an invalid DESCRIBE request to DRDS. This is an internal error.

This abend reason code is issued by the following CSECT: DSNLXRDS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3441B

Explanation: DRDS detected an invalid use of a conversation.

This abend reason code is issued by the following CSECT: DSNLXCNV

System action: A record is written to SYS1.LOGREC

and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3441C

Explanation: Allocation of the distributed processing services block (DPSB) failed.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3441D

Explanation: The distributed relational data system (DRDS) subcomponent has determined that control structures necessary for processing do not exist. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites

the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3441E

Explanation: The distributed relational data system (DRDS) subcomponent has determined that the function to be executed is not a valid function. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected left 20he SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3441F

Explanation: The distributed relational data system (DRDS) subcomponent is in an invalid state and cannot process the function requested. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of

the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D34420

Explanation: The application executed a dynamic COMMIT or ROLLBACK operation while executing in an environment in which DB2 is not coordinating the COMMIT/ROLLBACK process (for example, IMS or CICS). This is an application error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D34422

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Transaction Manager (DTM) subcomponent during CONNECT processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR CN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of

the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D34423

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Data Interchange Service (DDIS) subcomponent on an invocation to generate a request. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLXPRS	DSNLXRAX	DSNLXRBF	DSNLXRCL
DSNLXR CM	DSNLXRDT	DSNLXRFT	DSNLXR OP
DSNLXRSL	DSNLXR SQ		

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D34424

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Distributed Data Interchange Service (DDIS) subcomponent on an invocation to parse a reply. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLXRAX	DSNLXRBF	DSNLXRCL	DSNLXR CM
DSNLXRDT	DSNLXRFT	DSNLXR OP	DSNLXR QX
DSNLXRSL	DSNLXR SQ		

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34425

Explanation: The distributed relational data system (DRDS) subcomponent has received an unexpected return code from the Data Communications Resource Manager (DC) subcomponent. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLXRAX	DSNLXRB	DSNLXRCL	DSNLXRCM
DSNLXRCX	DSNLXRCX	DSNLXRFT	DSNLXRFP
DSNLXRQX	DSNLXRQX	DSNLXRSQ	

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34426

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid date format in DSNHDECP. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRCM

System action: A record is written to SYS1.LOGREC

and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34427

Explanation: The distributed relational data system (DRDS) subcomponent has detected an invalid time format in DSNHDECP. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRCM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34429

Explanation: The distributed relational data system (DRDS) subcomponent has detected that the call type in the RDI is invalid. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRSQ

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites

the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3442A

Explanation: The distributed relational data system (DRDS) subcomponent has received a return code from the Data Communications Resource Manager (DCRM) indicating that an exit was chained; however, no exit should have been chained. This is a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNLXRBF	DSNLXRCL	DSNLXRFT
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System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3442B

Explanation: The distributed relational data system (DRDS) subcomponent has received a nonzero SQL return code from an invocation of the parser. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXRCM

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites

the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets or similar data from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3442E

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

The local DB2 has received an ENDUOWRM that indicates that the remote server processed a dynamic COMMIT request successfully; however, the SQLCARD that accompanies the ENDUOWRM contains a negative SQL return code.

This reason code is issued by the following CSECT: DSNLXRAX

System action: An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server are written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During execution the application will receive an SQLCODE +30100 for this operation.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the trace record associated with the failing request's LUWID to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D3442F

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

The inconsistency may manifest itself as follows:

- In the processing of an embedded SELECT SQL statement, a prior execution of this embedded SELECT SQL statement resulted in a SQLDTARD that is NOT the same as the SQLDTARD received on the current execution of this SQL statement.
- In the processing of an OPEN cursor SQL statement, a prior description of the resultant data, obtained either as a result of a PREPARE or a prior execution of this SQL statement is NOT the same as the description of the resultant data that was received on the current execution of this SQL statement.

The data length, the data type and CCSID of each column of resultant data is checked for consistency.

This reason code is issued by the following CSECTs: DSNLXROP, DSNLXRSL

System action: An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During execution the application will receive an SQLCODE -30020 for this operation. Subsequent requests within this unit of work will receive an SQLCODE -900 or -906.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the trace record associated with the failing request's LUWID to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.

At the local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 83.

At the remote server, collect the following items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D34431

Explanation: The distributed relational data system (DRDS) subcomponent encountered an error while processing a FREE package request. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: The request was not processed successfully.

00D34432

Explanation: The Distributed Relational Data System (DRDS) subcomponent encountered a positive SQL return code during remote program BIND processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: The request was successfully processed.

00D34433

Explanation: The distributed relational data system (DRDS) subcomponent encountered a negative SQL return code during remote program BIND processing. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR UW

System action: The request was not successfully processed.

00D34434

Explanation: The distributed relational data system (DRDS) subcomponent was forced to deallocate the conversation. This is a DB2 internal error.

System action: The request was not processed successfully.

00D34436

Explanation: The distributed relational data system (DRDS) subcomponent detected that a remote program BIND request specified the local site. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXR CN

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the BB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining

the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D34438

Explanation: The distributed relational data system (DRDS) subcomponent received an invalid SQLD value from the Relational Data System (RDS) component as a result of a DESCRIBE request. This is a DB2 internal error.

This abend reason code is issued by the following CSECT: DSNLXXSS

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the ABENDING agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 ABEND. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3443A

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing the DB2 authorization ID to be used for the remote plan owner authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B', requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This abend reason code is issued by the following CSECT: DSNLXALC

System action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator response: Notify the system programmer.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from the DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for every possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443B

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a chained request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

Examples of inconsistencies follow:

- The local DB2 believes that the chain is intact but the remote server believes that the chain has been severed.
- The local DB2 believes that the chain has been severed but the remote server believes that the chain is intact.
- The local DB2 has received a negative SQL return code while processing a response to BEGIN BIND yet the remote server has not severed the chain.

This reason code is issued by the following CSECTs: DSNLXRCX, DSNLXRQX

System action: An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server are written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During BIND, the application will receive a DSNT500I message. During execution the application will receive an SQLCODE -904 for this operation. Subsequent requests within this unit of work will receive an SQLCODE -900 or -906.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the trace record associated with the failing request's LUWID to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.

At the local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 83.

At the remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D3443C

Explanation: The distributed relational data system (DRDS) received an invalid return code from the relational data system (RDS) on a string translation request. This is a DRDS internal error.

This reason code is issued by the following CSECT: DSNLXQTD

System action: A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 abend.

Operator response: Notify the system programmer.

System programmer response: Determine which sites the abending agent was connected to by examining the DSNL027 and DSNL028 SYSLOG console messages at the site of the DB2 abend. Obtain copies of the SYS1.LOGREC and SYSLOG data sets from each connected site, the SVC dump at the site of the DB2 failure, and any related dumps from each connected site. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 56, 57.

00D3443D

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing the DB2 authorization ID to be used for the remote primary authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B' requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT: DSNLXALC

System action: The DSNL030I message is issued at the server. The database access agent is not allocated.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the

USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for every possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443E

Explanation: The database access request from a remote site failed because the SYSIBM.USERNAMES table did not contain an inbound row, the TYPE column specified as an 'I' describing the DB2 authorization ID to be used for the remote package owner authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'I' or 'B' requiring inbound name translation, the SYSIBM.USERNAMES table must contain entries describing which DB2 authorization IDs are to be used for each remote authorization ID from the LU.

This reason code is issued by the following CSECT: DSNLXRCS

System action: The database access agent is not allocated.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the DB2 authorization IDs to be used for every possible remote authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D3443F

Explanation: The remote server was not successfully connected. The SYSIBM.USERNAMES table did not contain an outbound row, the TYPE column specified as an 'O' describing the remote authorization identifier to be used for the package owner DB2 authorization ID. When the USERNAMES column in SYSIBM.LUNAMES specifies 'O' or 'B' requiring outbound name translation, the SYSIBM.USERNAMES table must contain entries describing the remote authorization IDs to be used for each DB2 authorization ID communicating with the LU.

This reason code is issued by the following CSECT: DSNLXRCS

System action: A resource unavailable is returned to the application. The request is not sent to the remote site.

Operator response: Notify the communications database administrator.

System programmer response: Make sure the USERNAMES column in SYSIBM.LUNAMES has been specified correctly for the indicated LUNAME. If you intend to use remote authorization IDs that differ from DB2 authorization IDs, verify that the SYSIBM.USERNAMES table has rows that correctly specify the remote authorization ID to be used for each possible DB2 authorization ID.

Problem determination: Analyze the SYSIBM.USERNAMES table for an incorrect or missing entry.

00D34440

Explanation: A timeout or deadlock was detected during remote bind processing. This can occur during BIND, REBIND, or FREE.

This reason code is issued by the following CSECT: DSNLXR UW

System action: The BIND is not successful.

User response: Reissue the BIND subcommand.

System programmer response: None is required.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1 on page 735

00D34442

Explanation: The distributed relational data system (DRDS) subcomponent has detected an inconsistency processing a request using advanced SQL protocols (ASP) of distributed relational database architecture at the local DB2.

The local DB2 has received an ENDUOWRM that indicates that the remote server processed a dynamic ROLLBACK request successfully; however, the server should not have processed the ROLLBACK for one of the following reasons:

- The server was not available to update
- The server was participating in two phase commit protocols with the current request

System action: An alert is generated. If this error has not been previously detected, then message DSNL031I is written to the MVS console and trace record containing the reply from the remote server are written in statistics class 4. If the error was already detected, information from the previous occurrence can be used to diagnose the problem.

During execution, the application will receive an

SQLCODE -904 for this operation. The connection to the server will be terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the trace record associated with the LUWID of the failing request to determine the reply message and data that was received by the local DB2. Consult with the remote server system programmer to diagnose the problem.

For the local DB2 that made the request, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 83.

For the remote server that received the request, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D34443

Explanation: Userid, password not valid in an IMS or CICS environment. An IMS or CICS application issued an SQL CONNECT with userid password.

System action: The connect request is not processed. The application is placed in the unconnected and connectable state.

00D34444

Explanation: The Userid or Password submitted on a request to CONNECT to the local DB2 exceeded the maximum length supported. The maximum length for each is 8 characters.

System action: The connect request is not processed. The application is placed in the unconnected and connectable state.

00D34445

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. A previous CNTQRY command specified a QRYROWSET parameter, indicating the number of rows to be returned as a rowset. Because of the blocking limits in effect with the requester, only a partial rowset was returned to the requester and a number of rows in the requested rowset are still unfetched, and thus pending. The DRDA rules require that this subsequent CNTQRY command must specify a QRYROWSET value equal to the pending rows in the rowset or must reset the query blocks from the pending rowset. The CNTQRY command did not specify the QRYRSTBLK parameter to reset the query blocks, and thus this command is assumed to one that completes the pending rowset. Since the requested QRYROWSET

| value does not equal the number of pending rows in
| the rowset requested by the previous CNTQRY, a
| DRDA exception is generated.

| **System action:** A message DSNL032I is written to the
| console. Refer to the description of this message for
| further information.

| A DDM reply message (PRCCNVRM) is returned to the
| requester system.

| **Operator response:** Notify the system programmer.

| **System programmer response:** If you suspect an error
| in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*
| *Reference* for information on identifying and reporting
| the problem.

| **Problem determination:** The statistics class 4 trace
| record identified by the IFCID sequence number
| enumerated in the DSNL032I message should be
| analyzed.

| If the requester system is a DB2 for OS/390 system,
| collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

| At the DB2 server system generating the DSNL032I
| message, collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

00D34447

| **Explanation:** The distributed relational data system
| (DRDS) subcomponent detected an error while
| processing a DDM CNTQRY command received from a
| remote requester. If either or both the OPNQRY
| command and the first CNTQRY command specified
| QRYROWSET parameter, then all subsequent CNTQRY
| commands must specify the QRYROWSET parameter
| explicitly. The CNTQRY command did not specify a
| QRYROWSET parameter as required by the DRDA
| rules and a DRDA exception is generated.

| **System action:** A message DSNL032I is written to the
| console. Refer to the description of this message for
| further information.

| A DDM reply message (PRCCNVRM) is returned to the
| requester system.

| **Operator response:** Notify the system programmer.

| **System programmer response:** If you suspect an error
| in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*
| *Reference* for information on identifying and reporting
| the problem.

| **Problem determination:** The statistics class 4 trace
| record identified by the IFCID sequence number
| enumerated in the DSNL032I message should be
| analyzed.

| If the requester system is a DB2 for OS/390 system,
| collect the following diagnostic items listed in

| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

| At the DB2 server system generating the DSNL032I
| message, collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

00D34448

| **Explanation:** The distributed relational data system
| (DRDS) subcomponent detected an error while
| processing a DDM CNTQRY command received from a
| remote requester. If both the OPNQRY command and
| the first CNTQRY command did not specify the
| QRYROWSET parameter, then all subsequent CNTQRY
| commands may not specify the QRYROWSET
| parameter. The CNTQRY command specified a
| QRYROWSET parameter which is prohibited by the
| DRDA rules and a DRDA exception is generated.

| **System action:** A message DSNL032I is written to the
| console. Refer to the description of this message for
| further information.

| A DDM reply message (PRCCNVRM) is returned to the
| requester system.

| **Operator response:** Notify the system programmer.

| **System programmer response:** If you suspect an error
| in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*
| *Reference* for information on identifying and reporting
| the problem.

| **Problem determination:** The statistics class 4 trace
| record identified by the IFCID sequence number
| enumerated in the DSNL032I message should be
| analyzed.

| If the requester system is a DB2 for OS/390 system,
| collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

| At the DB2 server system generating the DSNL032I
| message, collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 83, 49.

00D34449

| **Explanation:** The distributed relational data system
| (DRDS) subcomponent detected an error while
| processing a DDM CNTQRY command received from a
| remote requester. Scrolling parameters were specified
| on the CNTQRY command (such as QRYSCORRN,
| QRYROWNBR, QRYROWSNS, QRYBLKRST,
| QRYRTNDTA) but either the cursor is not scrollable or
| the cursor is scrollable but is being accessed by the
| requester in a non-scrollable manner (both the
| OPNQRY command and the first CNTQRY command
| did not specify the QRYROWSET parameter). A DRDA
| exception is generated.

System action: A message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the requester system is a DB2 for OS/390 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

At the DB2 server system generating the DSNL032I message, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

00D3444A

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. The CNTQRY is fetching data from a scrollable cursor which is being accessed in a scrollable manner by the requester. The CNTQRY command will return one or more LOB columns as LOB data, but the RTNEXTDTA parameter on the CNTQRY command (indicating how LOB values are to be returned) did not specify RTNEXTALL as required by the DRDA rules. A DRDA exception is generated.

System action: A message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the requester system is a DB2 for OS/390 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

At the DB2 server system generating the DSNL032I message, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

00D3444B

Explanation: The distributed relational data system (DRDS) subcomponent detected that at least one of the encoding parameters (SBCS, MBCS, or DBCS) is zero. This message is a result of a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D34446

Explanation: The distributed relational data system (DRDS) subcomponent detected an error while processing a DDM CNTQRY command received from a remote requester. A previous CNTQRY command specified a QRYROWSET parameter, indicating the number of rows to be returned as a rowset. Because of the blocking limits in effect with the requester, only a partial rowset was returned to the requester and a number of rows in the requested rowset are still unfetched, and remain in pending state. The DRDA rules require that this subsequent CNTQRY command either reset the pending query blocks by means of the QRYRSTBLK parameter or must explicitly or implicitly specify a FETCH NEXT orientation (RELATIVE +1) to complete the pending rowset. The CNTQRY command did not reset the pending rowset and did not specify the FETCH NEXT orientation, resulting in a DRDA exception.

System action: The message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the requester system.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

If the requester system is a DB2 for OS/390 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

00D3444D • 00D35101

| At the DB2 server system generating the DSNL032I message, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83, 49.

00D3444D

| **Explanation:** The distributed relational data system (DRDS) subcomponent detected an error. This is a DB2 internal error.

| **System action:** A record is written to SYS1.LOGREC and an SVC dump is requested at the site of the DB2 ABEND.

| **Operator response:** Notify the system programmer.

| **System programmer response:** Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 56, 57.

00D3444E

| **Explanation:** The stored procedure result set contains an unsupported data type.

| **System action:** The stored procedure call fails.

| **Programmer response:** Modify the stored procedure to return result sets that include only data types that are supported by the requester. You may also upgrade the level of the code at the requester to one that supports the data types that were returned by the server.

00D35000

Explanation: DB2 has detected a DRDA exception condition. This is a generic reason code that describes a situation not covered by any other reason codes.

This reason code is issued by the following CSECT: DSNLZxxx

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35030

Explanation: DB2, acting as a DRDA server, detected an error while processing an SQL request from a remote DRDA client. DB2 was building a DDM query descriptor (QRYDSC or FDODSC) to return to the DRDA client, but could not do so because the descriptor required more late environment descriptors (LEDs) than DB2 can support.

System action: The DBAA is abended. The conversation with the remote site is terminated. At the server console, the DSNL027I message is issued, accompanied by one or more DSNL028I messages identifying all remote sites where the distributed agent also exists and where diagnostic information might also be collected.

User response: The SQL request issued by the client cannot be processed by DB2. As a circumvention, the SQL request can be simplified to reduce the number of LEDs required to describe the data using DRDA. LEDs may be required, for example, if columns being fetched are in a different code page (CCSID) than the default CCSID for the DB2 for MVS system.

Operator response: Notify the application programmer or user creating the SQL statement.

If the remote DRDA client is a DB2 for MVS system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

This abend reason code is issued by the following CSECT: DSNLZSRD.

00D35101

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM level 6b object, other than a Reply DSS or an Object DSS, is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35102

Explanation: DB2 has detected an error in the DDM reply data object received from the remote server in response to a DDM command. The object, carried in a level 6b OBJDSS, is not defined as valid for DDM level 3.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30072 and SQLSTATE 58016.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35103

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. Multiple instances of a DDM reply data object, defined

within DDM level 3 as nonrepeatable, have been returned.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35104

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The reply data object is not defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30071 and SQLSTATE 58015.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics Class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35105

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. While defined by DDM Level 3 as a valid reply object for this command, DB2 does not support the object.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35106

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The object must be contained within a single OBJDSS, but was received in an OBJDSS which contained other objects. The object must be contained within a single DSS but was received in a DSS which contained other DDM objects.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35107

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. One or more DDM reply data objects, defined by DDM Level-3 as required for the DDM command, were not received.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35108

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The SQL operation is a SELECT and the size of the FDODSC scalar, contained within the SQLDTARD, exceeds 32KB. The DDM

extended length field required to support this is invalid. The SQL operation is a SELECT and the size of the FDODSC object, contained within the SQLDTARD collection, exceeds 32KB. The DDM extended length field required to support this is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35109

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The DDM SQLDTARD object is a collection consisting of the FDODSC and FDOTA scalars. The FDODSC scalar, describing a single row returned on SELECT, is not contained within the SQLDTARD reply data object. The DDM SQLDTARD object is a collection which contains the FDODSC and FDOTA DDM objects. The FDODSC element, describing the single row, is not contained within the SQLDTARD reply data object.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3510A

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The DDM SQLDTARD object is a collection consisting of the FDODSC and FDOTA scalars. The FDOTA scalar, containing the single row described by the FDODSC, is not contained within the SQLDTARD reply data object. The DDM SQLDTARD object is a collection which contains the FDODSC and FDOTA DDM objects. The FDOTA element, containing the single row, is not contained within the SQLDTARD reply data object.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3510B

Explanation: DB2 has detected an error in the DDM SQLDTARD reply data object received in response to a DDM EXCSQLSTT command. The SQL operation is a SELECT and the size of the resultant row, contained with the FDOTA scalar, exceeds 32KB. The FDOTA DDM extended length field required to support this is

invalid. The SQL operation is a SELECT and the size of the resultant row exceeds 32KB. The DDM extended length field required to support this is invalid.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3510C

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The SQL operation is a SELECT and the size of the SQLDTARD, a DDM collection consisting of the FDODSC and FDOTA scalars, SQLDTARD is greater than the sum of the lengths of the constituent FDODSC and FDOTA scalars. The object is invalid.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items

listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3510D

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFNAM signaling a change in machine representation. The length of the DDM object is incorrect.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3510E

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFNAM signaling a change in machine representation. The value of the DDM object specifies a machine environment which is not supported by DRDA.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D3510F

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The length of one of the constituent scalars, CCSIDSBC, CCSIDMBC or CCSIDDBC is incorrect.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35110

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server in response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSBC scalar (SBCS CCSID). This is an error. The

DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDSBC (SBCS CCSID) code point is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35111

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSBC scalar (MIXED CCSID). This is an error. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDMBC (MIXED CCSID) code point is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35112

Explanation: DB2 has detected an error in the DDM TYPEDEFOVR reply data object received from the remote server in response to a DDM command, signaling a change in the remote server CCSIDs. The TYPEDEFOVR contains multiple occurrences of the CCSIDSB scalar (GRAPHIC CCSID). This is an error. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The CCSIDDBC (GRAPHIC CCSID) code point is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35113

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a TYPDEFOVR collection signaling a remote server change in CCSIDs. The DDM object length is invalid.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35114

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The length of the DDM reply message is inconsistent with the length of its DSS carrier.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
 - Any relevant remote server trace information or dumps.
-

00D35115

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The sum of the lengths of the constituent DDM objects within an OBJDSS is inconsistent with the length of the DSS carrier.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35116

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM reply message is not valid for the current command.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35117

Explanation: DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQLSTT DDM command. The FDOTA element of the SQLDTARD collection contains a null SQLDTAGRP containing no data and a null SQLCAGRP, indicating that the SQL SELECT operation was successful. This is an inconsistency.

This reason code is issued by the following CSECT: DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35118

Explanation: DB2 detected an error in the DDM reply data object received from the application server (AS) in response to a DDM command. The DDM minimum level attribute of the reply data object (that is, the level of DDM required to support the object) exceeds the DDM level of the AS specified during CONNECT processing.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application receives SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735:

00D35119

Explanation: DB2 detected an error in the DDM reply message received from the application server (AS) in response to a DDM command. The DDM minimum level attribute of the reply message (that is, the level of DDM required to support the reply message) exceeds the DDM level of the AS specified during CONNECT processing.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application received SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4

trace record identified by the IFCID sequence number included in the DSNL031I message.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3511A

Explanation: DB2 has detected an error in the DRDA summary component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. Neither the SQLCARD nor the SQLDTARD is contained in the summary component.

This reason code is issued by the following CSECT:
DSNLZRPA.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3511B

Explanation: DB2 has detected an error in the DRDA summary component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. The SQLRSLRD object is not contained in the summary component.

This reason code is issued by the following CSECT:
DSNLZRPA.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1

00D3511C

Explanation: DB2 has detected an error in the DRDA summary component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. The SQLRSLRD reply data object was not preceded by the RSLSETRM reply message.

This reason code is issued by the following CSECT:
DSNLZRPA.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D3511D

Explanation: DB2 has detected an error in the DRDA summary component or the DRDA result set component received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The DRDA summary component should consist of the DDM RSLSETRM reply message, a DDM SQLCARD or SQLDTARD reply data object, and a DDM SQLRSLRD reply data object. The DRDA result set component should consist of at least the DDM OPNQRYRM reply message and the DDM QRYDSC reply data object. The OPNQRYRM message is not present following the SQLRSLRD object.

This reason code is issued by the following CSECT:
DSNLZRPA.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D351FF

Explanation: DB2 received a DDM reply message from the remote server in response to a DDM command. The reply message, while valid for the DDM command, indicates that the DDM command and hence the SQL statement was not successfully processed. The application is notified of the failure through the architected SQLCODE (-300xx) and associated SQLSTATE.

This reason code is issued by the following CSECT:
DSNLZRPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35201

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is the FDODSC element of an SQLDTARD. The size of the FDODSC is greater than 32KB and the DDM level 6b extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35202

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. The SQLCADATA row (RLO) MDD is either invalid or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35203

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. The SQLCADATA row triplet (RLO) is either invalid or has not been included with the SQLDTARD descriptor.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35204

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the first component of the SQLCADTA row is other than an SQLCAGRP (early) group or the number of elements taken from the SQLCAGRP or SQLCAGRP replication factor (or both) are incorrect. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC element of the SQLDTARD collection. The FDOCA geometry is incorrect. The first elements of the row are other than the elements of the early SQLCAGRP. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35205

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the

FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. The first component of the SQLCADTA row correctly enumerates the elements of the SQLCAGRP; however, the second component, identifying the SQLDTAGRP (late) group is incorrect. Either the SQLTAGRP local identifier (LID) is different than the LID of the SQLDTAGRP previously specified or the number of elements taken from the SQLDTAGRP replication factor (or both) are incorrect. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC element of the SQLDTARD collection. The FDOCA geometry is incorrect. The first elements of the row correctly enumerate the elements of the early SQLCAGRP, however, the local identifier (LID) following the SQLCAGRP LID is different than the LID of the SQLDTAGRP group previously specified. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35206

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. One or more late environmental descriptors is included within the previously specified SQLDTAGRP late group descriptor. However, SQLDTARD row (RLO) Meta Data Definition (MDD) is either incorrect or has not been included within the SQLDTARD descriptor. The descriptor is invalid. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. One or more late environmental descriptors have been

included within the previously processed SQLDTAGRP group. However, the Meta Data Definition (MDD) of the SQLDTARD row (RLO) has not been included within the descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35207

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the SQLDTARD is specified as other than a row triplet (RLO) or the SQLDTARD RLO triplet length is invalid. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35208

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the SQLCADTA LID referenced within the SQLDTARD RLO did not match the LID defined within the SQLCADTA RLO or the number of elements or replication factor (or both) within the SQLDTARD RLO was non zero. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If this DB2 is the AR for the thread, the DDM object received is an SQLDTA or QRYDSC. The application will receive SQLCODE -30000 and SQLSTATE 58008. If this DB2 is an remote server for the thread, the DDM object received is SQLDTA. DSCINVRM will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at the local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
 - Any relevant remote server trace information or dumps.
-

00D35209

Explanation: DB2 has detected an error in the QRYDSC or SQLDTARD reply data object received in response to an OPNQRY or EXCSQLSTT DDM command. The DDM object is either a QRYDSC or the FDODSC scalar of the SQLDTARD collection. The FDOCA geometry is incorrect. Either the length is specified in the LL preceding the QRYDSC or FDODSC is greater than the length of the OBJDSS carrier or the length of one of the constituent geometries (triplet lengths) is inconsistent with the length of the QRYDSC or FDODSC. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3520A

Explanation: DB2 has detected an error in the SQLDTARD reply data object received in response to an EXCSQLSTT DDM command. The DDM object is the FDODSC scalar of the SQLDTARD collection and is contained within multiple DDM Level 6b OBJDSS carriers. The descriptor is invalid. The DDM object is the FDODSC scalar of the SQLDTARD collection. The SQLDTARD is contained in multiple level 6b object DSSs. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3520B

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a QRYDSC returned from an OPNQRY command which spans multiple DDM level 6b DSSs. One or more of the containing level 6b DSSs is (are) other than an object (OBJ) DSS. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3520C

Explanation: DB2 has detected an error in the DDM reply message or DDM reply data object received from the remote server in response to a DDM command. The DDM object is a QRYDSC returned from an OPNQRY command which spans multiple DDM level 6b object DSSs. One or more of the DDM code points within the containing object DSSs is (are) other than QRYDSC (X'241A'). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3520D

Explanation: DB2 has detected an error in the QRYDSC reply data object received in response to an OPNQRY DDM command. The QRYDSC contained in one or more query blocks is incomplete, i.e., the entire QRYDSC has not been returned in response to the OPNQRY command.

This reason code is issued by the following CSECT: DSNLZRDS

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3520E

Explanation: DB2 has detected an error in the DDM QRYDSC or the DDM SQLCINRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The number of columns described by the QRYDSC object is inconsistent with the number of columns described by the DDM SQLCINRD object.

This reason code is issued by the following CSECT: DSNLZRDS.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D35301

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The reply message code point is not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the

description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35302

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The reply message contains one or more constituent instance variables whose code point is not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35303

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of the reply message is greater than the sum of the lengths of the constituent instance variables.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35304

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. One or more instance variables, specified by DDM Level 3 as required for this reply message, is (are) not contained within the reply message.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35305

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of the reply message exceeds the sum of the lengths of all the constituent instance variables.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35306

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of the RDBNAM instance variable is 18 bytes as specified by DDM Level 3, however, bytes 17 and 18 are non blank. DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35307

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The value of the DDM enumerated value instance variable, DTALCKST is other than TRUE (X'F1') or FALSE (X'F0').

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35308

Explanation: DB2 has detected an error in the MGRVLVLRM reply message received from the remote server in response to the EXCSAT DDM command. The MGRVLV specified is not supported by DB2. DB2 supports the following DDM Level 3 managers: CMNAPPC, SUPERVISOR, SECMGR, AGENT,

DIRECTORY, SQLAM, and RDB.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35309

Explanation: DB2 has detected an error in the ACCRDBRM reply message received from the remote server as in response to the ACCRDB command. The length of the PRDID instance variable is invalid.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530A

Explanation: DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to ACCRDB DDM command. DB2 is currently disabled to connect to the server specified by the value of the PRDID instance variable.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530B

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM OPNQRY command. The value of the enumerated instance variable, QRYPRCTYP, is other than SNGROWPRC or LMTBLKPRC.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58017.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530C

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The value of the severity code (SVRCOD) instance variable, as specified by DRDA, is not valid for this reply message.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530D

Explanation: DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to ACCRDB DDM command. The DDM TYPDEFOVR instance variable, a collection, contains a scalar instance variable other than CCSIDSBC, CCSIDMBC or CCSIDDBC.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530E

Explanation: DB2 has detected an error in the ACCRDBRM reply message received from the remote server in response to the ACCRDB DDM command. The length of the TYPDEFOVR instance variable, a collection, is different than the sum of the lengths of the constituent scalar instance variables.

This reason code is issued by the following CSECT: DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3530F

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of a DDM fixed length collection or scalar is different than that specified by DDM Level 3.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35310

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The length of a DDM variable length collection or scalar is different than that specified by DDM Level 3.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35311

Explanation: DB2 detected an error in the DDM reply message received from the application server (AS) in response to a DDM EXCSQLIMM or EXCSQLSTT command. The AS DDM level specified during CONNECT is 4 and an ENDUOWRM was returned signaling that a dynamic COMMIT or ROLLBACK was performed. The correct response from an AS supporting DDM Level 4 is the CMMRQSRM reply message.

This reason code is issued by the following CSECT:
DSNLZRPY

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application receives SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL031I message.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35313

Explanation: DB2 has detected an error in the DDM reply message received from the remote server in response to a DDM command. The value of the QRYATTUPD instance variable is not recognized for this command in DDM Level 6.

System action: DB2 generates an alert, and writes message DSNL031I to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system,

| then at the requester DB2 system, collect the following
| diagnostic items listed in Appendix C, "Problem
| determination," on page 735: 83.

| At this remote server, collect the following diagnostic
| items listed in Appendix C, "Problem determination,"
| on page 735: 49.

00D35314

| **Explanation:** DB2 detected an error in the DDM reply
| message received from the remote server in response to
| a DDM command. The value of the QRYATTNS
| instance variable is not recognized for this command in
| DDM Level 6.

| **System action:** DB2 generates an alert, and writes
| message DSNL031I to the console. Refer to the
| description of this message for further information.

| The application will receive SQLCODE -30000 and
| SQLSTATE 58008.

| **Operator response:** Notify the System Programmer.

| **System programmer response:** If you suspect an error
| in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*
| *Reference* for information on identifying and reporting
| the problem.

| **Problem determination:** Analyze the statistics class 4
| trace record identified by the IFCID sequence number
| enumerated in the DSNL031I message.

| If the DRDA requester is also a DB2 for OS/390 system,
| then at the requester DB2 system, collect the following
| diagnostic items listed in Appendix C, "Problem
| determination," on page 735: 83.

| At this remote server, collect the following diagnostic
| items listed in Appendix C, "Problem determination,"
| on page 735: 49.

00D35401

Explanation: DB2 detected an error in the DDM
SQLCARD reply data object received from the remote
server in response to a DDM command. The object
contains nonzero lengths for both the SQLERRMSG_m
and SQLERRMSG_s elements as described by the
SQLCAXGRP early group descriptor. This is invalid as
specified by DRDA.

This reason code is issued by the following CSECT:
DSNLZRCA

System action: An alert is generated and message
DSNL031I is written to the console. Refer to the
description of this message for further information.

The application will receive SQLCODE -30000 and
SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error
in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting
the problem.

Problem determination: Analyze the statistics class 4
trace record identified by the IFCID sequence number
identified in the DSNL031I message.

00D35501

Explanation: DB2 has detected an error in the DDM
SQLDARD reply data object received from the remote
server in response to a DDM PRPSQLSTT command.
The value of the single element of the SQLNUMGRP,
SQLNUM, defining the total number of SQLDAROW
occurrences within the SQLDARD array, is either
negative or is inconsistent with the size of the
SQLDARD array.

This reason code is issued by the following CSECT:
DSNLZRDA

System action: An alert is generated and message
DSNL031I is written to the console. Refer to the
description of this message for further information.

The application will receive SQLCODE -30000 and
SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error
in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*
Reference for information on identifying and reporting
the problem.

Problem determination: The statistics class 4 trace
record identified by the IFCID sequence number
enumerated in the DSNL031I message should be
analyzed.

At this local DB2, collect the following diagnostic items
listed in Appendix C, "Problem determination," on
page 735: 83.

At this remote server, collect the following diagnostic
items listed in Appendix C, "Problem determination,"
on page 735: 1, 49.

00D35502

Explanation: DB2 has detected an error in the DDM
SQLDARD reply data object received from the remote
server in response to a DDM PRPSQLSTT command.
Within one or more SQLDAROW occurrences, either (a)
the lengths of SQLNAME_m and SQLNAME_s are
both non-0, or (b) the lengths of SQLLABEL_m and
SQLLABEL_s are both non-0, or (c) the lengths of
SQLCOMMENTS_m and SQLCOMMENTS_s are both
non-0. The data is invalid with regard to the Early
SQLDAGRP group descriptor as defined by DRDA.

This reason code is issued by the following CSECT:
DSNLZRDA

System action: An alert is generated and message
DSNL031I is written to the console. Refer to the

description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35601

Explanation: DB2 has detected an error in command data received from a local DB2, or reply data received from the remote server in response to a DDM command. The command or reply data is described by either an FDOCA early or late descriptor. Any Late descriptors have been previously validated. The data currently being retrieved from the data stream is described by a simple data Array (SDA) defining variable length data whose length is given by a 2 byte length field. The value of the length field is either negative or greater than the maximum length specified by the SDA. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within reply data, then the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within command data, a DDM DTAMCHRM reply message will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items

listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35602

Explanation: DB2 has detected an error in a SQLSTT, SQLSTTVRB, SQLOBJNAM or SQLDTA data object received from a local DB2. The length of the data to be retrieved from the data stream is defined by an SDA which is part of an early or late descriptor. The length exceeds the length of remainder of the OBJDSS carrier of the command data object. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT: DSNLZFDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM DTAMCHRM reply message will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35603

Explanation: DB2 has detected an error in SQLCARD, SQLDARD, or SQLDTARD reply data object received from an remote server in response to a DDM command. The reply data is described by either the SQLCAGRP or SQLDAGRP early descriptors or the SQLDTAGRP (contained within a SQLDTARD) late descriptor. The length of the data to be retrieved is specified by the default length of a constituent SDA within the SQLCAGRP or SQLDAGRP early groups or the SDA length specification within the SQLDTAGRP late group. All OBJDSSs received in response to the DDM command have been processed but the SQLCARD, SQLDARD, or SQLDTARD is incomplete. These must be returned in their entirety. The data is inconsistent with the descriptor.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35604

Explanation: DB2 has detected an error in SQLCARD, SQLDARD, or SQLDTARD reply data object received from a remote server in response to a DDM command. The reply data is described by either the SQLCAGRP or SQLDAGRP early descriptors or the SQLDTAGRP (contained within a SQLDTARD) late descriptor. The length of the data to be retrieved is specified by the default length of a constituent SDA within the SQLCAGRP or SQLDAGRP early groups or the SDA length specification within the SQLDTAGRP late group. The carrier OBJDSS has been exhausted but the complete object has not been assembled. The object must be contained in exactly one OBJDSS carrier. This is not the case and the data is inconsistent with the descriptor.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35605

Explanation: DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SQLDTARD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The reply data spans multiple query blocks, each of which are contained in a level 6b DSS. One or more of the containing level 6b DSSs is other than a DDM level 6b object DSS. This is invalid.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35606

Explanation: DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SQLDTARD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The reply data spans multiple query blocks, each of which are contained in a level 6b Object DSS (OBJDSS). The code points of one or more of the DDM reply data objects is other than

QRYDTA (X'241B'). This is invalid.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35607

Explanation: DB2 has detected an error in a QRYDTA reply data object received from a remote server in response to a DDM OPNQRY or CNTQRY. The cursor is being processed with single row protocols (SNGROWPRC). The QRYDTA may span multiple query blocks but must be returned in its entirety. This is not the case.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35608

Explanation: DB2 has detected an error in a QRYDTA reply data object received from the remote server in response to a DDM OPNQRY or CNTQRY command. The reply data, described by an SQLDTARD late descriptor carried in a DDM QRYDSC reply data object, has been previously validated. The current data to be retrieved from the QRYDTA is described by an SDA defining Null-Terminated data (DRDA types X'2C', X'2D', X'2E', X'2F', X'42' or X'43'). The null terminator cannot be located within the reply data. The data is inconsistent with the descriptor defined by the QRYDSC.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35609

Explanation: DB2 detected an error in conversion of numeric data. Possible scenarios are: floating point conversion overflow, or digits of numeric character out of range.

This reason code is issued by the following CSECT:
DSNLZFDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application receives SQLCODE -30073 and SQLSTATE 58017.

User response: Check your numeric data. If you are connecting to DB2 via a non-S/370 type machine, overflow can occur when the floating point value is out of the System/370 floating point range. Refer to Appendix A of *DB2 SQL Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35701

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late descriptor includes late environmental descriptors and the SQLDTAGRP meta data definition (MDD) is either invalid or has not been included within the descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic

items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35702

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The SQLDTAGRP triplet is not defined as an FDOCA nullable group. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35703

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The local identifier (LID) of one of the SQLDTAGRP constituent triplets has not been previously defined by a late environmental descriptor and the LID is outside of the bounds of the default environmental descriptor LIDs (LID > X'49'). Note that the default LIDs are identical to the DRDA types. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the AR.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35704

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The local identifier (LID) of one of the constituent SQLDTAGRP SDAs has either not been previously defined by a late environmental descriptor, or is not a valid default LID. Note that the default LIDs are identical to the DRDA types. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35705

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD reply data object, or the SQLDTA command data object. The FDOCA geometry is incorrect. All the OBJDSS carriers have been processed and the SQLDTAGRP has not been assembled. The SQLDTAGRP is incomplete and the descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: If the error occurs within the QRYDSC or SQLDTARD reply data object, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35706

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is either an SQLDTARD or SQLDTA and must be contained within

a single OBJDSS. The descriptor, as defined by the length of the SQLDTARD or SQLDTA DDM objects, is incomplete and is therefore invalid.

This reason code is issued by the following CSECT:
DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the SQLDTARD DDM object, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35707

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTARD late descriptor. The DDM object is a QRYDSC spanning multiple query blocks and DDM Level 6b DSSs. One or more of the containing level 6b DSSs is other than an object (OBJ) DSS. The descriptor is invalid.

This reason code is issued by the following CSECT:
DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

the application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35708

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTARD late descriptor. The DDM object is a QRYDSC spanning multiple query blocks and DDM level object 6b DSSs. The code point of one or more of the containing DDM objects is other than QRYDSC (X'241B'). The descriptor is invalid.

This reason code is issued by the following CSECT:
DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

the application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35709

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor contained within a QRYDSC DDM object. The FDOCA geometry is incorrect. The SQLDTAGRP length specification exceeds the size of the QRYDSC level 6b DSS carrier. The descriptor is invalid.

This reason code is issued by the following CSECT:
DSNLZGDT

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D3570A

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within either the DRDA SQLDTARD or SQLDTA late descriptors. The DDM object is one of the following: QRYDSC, SQLDTARD or SQLDTA. The length override value in one of the constituent SQLDTAGRP SDAs is a placeholder length value, but an allowable placeholder length was not received. This is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL032I is written to the console if the error is detected while parsing a command or message DSNL031I is written to the console if the error is detected while parsing a command reply. Refer to the description of this message for further information.

If the error occurs within a QRYDSC or SQLDTARD DDM object, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3570B

Explanation: DB2 has detected an error while processing the SQLDTAGRP late group descriptor, contained within the DRDA SQLDTA late descriptor. The DDM object is the OUTOVR object. A non-zero local identifier (LID) was received as an output override descriptor, but the LID value was not one of the values allowed for the current DRDA level (DRDA Level 4). This is invalid.

This reason code is issued by the following CSECT: DSNLZGDT

System action: An alert is generated and message DSNL032I is written to the console if the error is detected while parsing a command. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35801

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition does not specify a valid DRDA type. The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35802

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD reply data object, or an SQLDTA command data object. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition (MDD) either specifies a local identifier (LID) of 0 or defines a nonrelational database application class (other than X'05') or the meta data reference type is other than X'01'. The MDD and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35803

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition (MDD) is valid, however, the descriptor following the MDD is either not an SDA or is an SDA with a length other than 12 (X'0C'). The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items

listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35804

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either a QRYDSC, SQLDTARD or SQLDTA. The FDOCA geometry is incorrect. The late environmental descriptor meta data definition (MDD) is valid, however, the SDA immediately following the MDD is overriding a DRDA type not supported by DRDA. The SDA and the entire descriptor are invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35805

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is a QRYDSC, SQLDTARD, or an SQLDTA data object. The FDOCA geometry is incorrect. The size of the late environmental descriptors exceeds the size of the DDM level 6b DSS carrier. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If the error occurs within a QRYDSC or SQLDTARD replay data object (SQLDTARD late descriptor), the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within an SQLDTA command data object (SQLDTA late descriptor), a DSCINVRM reply message will be returned to the local DB2.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35806

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within either the SQLDTARD or SQLDTA late descriptors. The DDM object is either an SQLDTARD or SQLDTA, each of which may not span DDM level 6b object (OBJ) DSSs. The containing level 6b OBJDSS contains only late environmental descriptors and neither groups or rows are defined. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35807

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within the SQLDTARD late descriptor. The DDM object is a QRYDSC which spans multiple query blocks. One or more of the containing level 6b DSSs is (are) other than an object (OBJ) DSS. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35808

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor, contained within the SQLDTARD late descriptor. The DDM object is a QRYDSC which spans multiple query blocks. One or more of the code points of the DDM objects carrying the descriptor is (are) other than QRYDSC (X'241B'). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

If the error occurs within the QRYDSC or SQLDTARD DDM objects, the application will receive SQLCODE -30000 and SQLSTATE 58008. If the error occurs within the DDM SQLDTA object, a DSCINVRM reply message will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35809

Explanation: DB2 has detected an error while processing late environmental descriptors which precede the SQLDTAGRP late group descriptor contained within the SQLDTARD late descriptor. This late descriptor is within a QRYDSC which spans one or more query blocks. The QRYDSC contains only late environmental descriptors and is, therefore, incomplete.

This reason code is issued by the following CSECT: DSNLZLEP

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant remote server trace information or dumps.

00D35901

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. A reply DSS (RPYDSS) has been received from the local DB2. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35902

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first level 6b DSS received is an object DSS. The DDM command carried in a level 6b request DSS (RQSDSS) must be the first level 6b DSS received.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35903

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first level 6b DSS received is neither a request (RQS) DSS, Object (OBJ) DSS nor Reply (RPY) DSS and is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35904

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM command, specified by the code point contained within the level 6b RQSDSS, is invalid or not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (CMDNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35905

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The first DDM command received on this conversation, while a valid DDM Level 3 command, is other than EXCSAT. The first command must be EXCSAT.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35906

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The EXCSAT command has been successfully processed but the current DDM command, while supported by DDM Level 3 and DB2, has been sent prior to ACCRDB. The only valid command prior to ACCRDB is another EXCSAT command.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35907

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. the ACCRDB command has been successfully processed and the current command is another ACCRDB instance. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBACCRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35908

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. The state of the DB2 remote server is in 'BIND processing' and the current DDM command is other than BNDSQLSTT, ENDBND, RDBCMM or RDBRLLBCK.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PKGBPARM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35909

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from an local DB2. The DDM command has been successfully processed, however, one or more of the level 6b DSSs are other than object (OBJ) DSSs. The only valid level 6b DSS chain is a single RQS DSS, followed by one or more OBJ DSSs.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3590A

Explanation: DB2 has detected an error while parsing DDM command data received from a local DB2. The DDM command data object, as defined by the DDM code point, is either invalid or not valid for this command, as specified by DDM level 3.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (OBJNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this DB2 local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3590B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. One or more DDM command data objects, defined as required by DDM Level 3, were not received with the DDM command.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3590C

Explanation: DB2 has detected an error while parsing DDM command data received from a local DB2. The DDM object is a TYPDEFNAM, signaling a change in machine representation from the local DB2, however, the length, as specified by DDM level 3, is incorrect.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3590D

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is a TYPDEFNAM, signaling a change in machine representation from the local DB2, however, the value of this DDM scalar is other than QTDSQL370, QTDSQLX86 or QTDSQL400. These are the only valid machine representations supported by DRDA.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3590E

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The length of one of the constituent scalars is incorrect.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D3590F

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The TYPDEFOVR contains multiple instances of the CCSIDSBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35910

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The TYPDEFOVR contains multiple instances of the CCSIDMBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35911

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The TYPDEFOVR contains multiple instances of the CCSIDDBC scalar. This is invalid.

This reason code is issued by the following CSECT:
DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35912

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data received from a local DB2. The DDM object is a TYPDEFOVR, signaling a change in CCSIDs from the local DB2. This is a DDM collection consisting of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The TYPDEFOVR length exceeds the sums of the lengths of the constituent scalars. This is invalid.

This reason code is issued by the following CSECT:
DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following

diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35913

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is TYPDEFOVR, signaling a CCSID change from the local DB2. This is a collection consisting of CCSIDSBC, CCSIDMBC, and CCSIDDBC. The TYPDEFOVR contains an object other than CCSIDSBC, CCSIDDBC, or CCSIDDBC. This is invalid.

This reason code is issued by the following CSECT:
DSNLZSPA

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35914

Explanation: DB2 detected an error while parsing a DDM command received from the application requester (AR). The minimum level attribute of the DDM command received from the AR, (that is, the level of DDM required to support the command) exceeds the DDM level specified by the AR during CONNECT processing.

This reason code is issued by the following CSECT:
DSNLZSPA

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL032I message.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35915

Explanation: DB2 detected an error while parsing a DDM command data object received from the application requester (AR). The minimum level attribute of the DDM command data object received from the AR (that is, the level of DDM required to support the object) exceeds the DDM level specified by the AR during CONNECT processing.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number included in the DSNL032I message.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35918

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The DDM command, specified by the code point contained within the level 6b RQSDSS, is invalid or not supported by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: A DDM reply message (CMDNSPRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35919

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is greater than or equal to 5, and the required ACCSEC and SECCHK commands were not received before the ACCRDB command.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (MGRDEPRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3591A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is less than 5, and an ACCSEC command was received.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: A DDM reply message (CMDNSPRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3591B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC command was received when an ACCSEC command had already been executed successfully.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic

items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3591C

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. The negotiated security manager level is less than 5, and a SECCHK command was received.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: A DDM reply message (CMDNSPRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D3591D

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A SECCHK command was received out of order, which means either an ACCSEC command has not executed successfully, or a SECCHK command has already been processed.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D3591E

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent after an ACCRDB was successfully processed.

This reason code is issued by the following CSECT: DSNLZSPA.

System action: The conversation is terminated, and message DSNL030I is issued. Refer to the description of this message for further information.

A DDM reply message (PRCCNVRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35A01

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is either an SQLSTT, SQLOBJNAM or SQLSTTVRB. These objects are described by early group descriptors, each of which contains both SBCS and mixed SDAs describing character data. In all cases, the instantiation of the SBCS and mixed elements are mutually exclusive, i.e. if the SBCS element is sent, then the mixed must not be sent and conversely. The instantiation of both the SBCS and mixed data SDAs has been sent. This is invalid.

This reason code is issued by the following CSECT: DSNLZSMT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (DTAMCHRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35A02

Explanation: DB2 has detected an error while parsing a DDM command data object received from a local DB2. The DDM object is either an SQLSTT, SQLOBJNAM, or SQLSTTVRB. These objects are described by early group descriptors, each of which contains both SBCS and mixed SDAs describing character data. In all cases, the instantiation of the SBCS and mixed elements are mutually exclusive, i.e. if the SBCS element is sent, then the mixed must not be sent and conversely. Further, either the SBCS or mixed (not both) must be instantiated. The data retrieved from the object instantiates neither the SBCS nor the mixed SDA. This is invalid.

This reason code is issued by the following CSECT: DSNLZSMT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem

determination,” on page 735: 1, 49.

00D35B01

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The length of the SQLDTA exceeds 32KB, however, the DDM extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35B02

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA is a DDM collection consisting of the FDODSC and FDODTA scalars. The first scalar within the SQLDTA is other than the FDODSC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35B03

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA is a DDM collection consisting of the FDODSC and FDODTA scalars. The length of the FDODSC scalar exceeds 32KB, however, the format of the DDM extended length is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35B04

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained in the FDODSC scalar, includes late environmental descriptors, however, the SQLDTA meta data definition (MDD) is either invalid or has not been included within the SQLDTA descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the

description of this message for further information.

A DDM reply message (DSCINVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35B05

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor geometry is incorrect. Either the SQLDTA triplet length is incorrect or the SQLDTA triplet type is other than an row layout (RLO). The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (DSCINVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35B06

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor geometry is incorrect. The SQLDTA RLO triplet either specifies a local identifier (LID) which is different than that defined in the previously processed SQLDTAGRP late group descriptor, or specifies a nonzero number of elements or a repetition factor other than 1. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (DSCINVRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35B07

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained within the FDODSC scalar, has been validated, however, the FDODTA scalar, containing the host variable data, is not included within the SQLDTA DDM object. This is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35B08

Explanation: DB2 has detected an error while parsing an SQLDTA command data object received from a local DB2. The SQLDTA FDOCA descriptor, contained within the FDODSC scalar, has been validated. The length of the FDODTA scalar, containing the host variable data, exceeds 32KB, however, the format of the DDM extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZSDT

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C01

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a BGNBND command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C02

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a BNDSQLSTT command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C03

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a DRPPKG command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C04

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on an ENDBND command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C05

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. An invalid instance has been received as a parameter on a REBIND command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C06

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. One or more instance variables, defined by DDM Level 3 as required parameters for this DDM command, were not received.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C07

Explanation: DB2 has detected an error while parsing a DDM command or DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command data received from a local DB2. The DDM command contains an instance variable which is not defined within DDM level 3.0. The instance variable (parameter) is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this DB2 remote server.

- Statistics Class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35C08

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Multiple occurrences of a DDM instance variable, defined by DDM Level 3 as nonrepeatable, have been processed as parameters on this DDM command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C09

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDCHKEXS, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C0A

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDCRTCTL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C0B

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDEXPOPT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C0C

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, BNDSTTASM, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C0D

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, DECPRC, is invalid.

This reason code is issued by the following CSECT:
DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C0E

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Bytes 9 through 18 of the DDM scalar, DFTRDBCOL are other than blank. While DDM defines the length of DFTRDBCOL to be 18 bytes, DB2 supports only 8-byte collection identifiers.

This reason code is issued by the following CSECT:
DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem

determination," on page 735: 1, 49.

00D35C0F

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGATHOPT, is invalid.

This reason code is issued by the following CSECT:
DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C10

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of the DDM scalar PKGDFTCC is invalid.

This reason code is issued by the following CSECT:
DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C11

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDSBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C12

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDDBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the

description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C13

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains multiple instances of the CCSIDMBC scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C14

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM PKGDFTCC collection consists of three DDM scalars: CCSIDSBC, CCSIDMBC, and CCSIDDBC. The PKGDFTCC collection contains an invalid DDM object.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C15

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGDFTCST, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C16

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGISOLVL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C17

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAM is a mapped scalar containing RDBNAM, RDBCOLID and PKGID. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM defines the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C18

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAM is a mapped scalar containing RDBNAM, RDBCOLID and PKGID. Bytes 9 through 18 of the DDM scalar, PKGID, are other than blank. While DDM defines the length of PKGID to be 18 bytes, DB2 supports only 8 byte package identifiers.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C19

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAMCT is a mapped scalar containing RDBNAM, RDBCOLID, PKGID and PKGCNSTKN. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM defines the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35C1A

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM object PKGNAMCT is a mapped scalar containing RDBNAM, RDBCOLID, PKGID and PKGCNSTKN. Bytes 9 through 18 of the DDM scalar, PKGID, are other than blank. While DDM defines the length of PKGID to be 18 bytes, DB2 supports only 8 byte package identifiers.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

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in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C1B

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, PKGRPLOPT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C1C

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, QRYBLKCTL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message

DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C1D

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM defines the length of RDBNAM to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C1E

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the RDBNAM scalar is other than the local DB2 RDBNAM.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C1F

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, RDBRISOPT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C20

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, STTDATFMT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C21

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, STTDECDL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

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in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C22

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The value of the DDM enumerated scalar, STTSTRDEL, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C23

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from the local DB2. The value of the DDM enumerated scalar, STTIMFMT, is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message

DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C24

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The DDM TIMESTAMP scalar has been received as a command parameter from a database other than DB2. The TIMESTAMP scalar is private to DB2.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C25

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of a DDM object is less than 4, the minimum length of any DDM object. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C26

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of the DDM command is less than the sum of the lengths of the constituent instance variables appearing as parameters.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C27

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of a DDM object exceeds the length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C28

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. The length of a DDM object is less than the length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35C29

Explanation: DB2 has detected an error while parsing a DDM command or DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from a local DB2. A package related identifier or collection identifier is in violation of the SAA syntax. This is either the collection identifier (DFTRDBCOL) received on a BGNBND or REBIND command or the package identifier or collection identifier within the PKGNAM, PDGNAMCT, or PKGNAMCSN mapped scalars received on a BGNBND, BNDSQLSTT, ENDBND, or DRPPKG command.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35C2A

Explanation: DB2 has detected an error while parsing a DDM BGNBND, BNDSQLSTT, ENDBND, DRPPKG, or REBIND command received from the local DB2. The value of MAXSCTNBR received on the ENDBND command is invalid. The value must be within the range 1 to 32767 inclusive.

This reason code is issued by the following CSECT: DSNLZSBD

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

Collect the following diagnostic items at this local DB2.

- Statistics class 4 trace record identified by the IFCID sequence number specified in message DSNL031I.

Collect the following diagnostic items at the remote server.

- Relevant error and system logs spanning the time of the failure.
- Any relevant AS trace information or dumps.

00D35C2B

Explanation: DB2 detected an error in a DDM BGNBND or REBIND command received from a DRDA requester. The value of the enumerated scalar, PKGATHRUL, is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for more information.

A DDM reply message (VALNSPRM) is returned to the DRDA requester.

Operator response: Notify the system programmer.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL032I.

If the DRDA requester is a DB2, then DB2 diagnostic information is available. In that case, at the DB2 requester, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At the DB2 server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

This reason code is issued by the following CSECT:
DSNLZSBD

00D35D01

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on one of the following DDM commands: CLSQRY, DSCRDBTBL, DSCSQLSTT, or EXCSQLIMM.

This reason code is issued by the following CSECT:
DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D02

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM CNTQRY command.

This reason code is issued by the following CSECT:
DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D03

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM OUTEXP enumerated value instance variable, contained within a DDM EXCSQLSTT command, is other than FALSE (X'F0') or TRUE (X'F1').

This reason code is issued by the following CSECT:
DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D04

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM EXCSQLSTT command.

This reason code is issued by the following CSECT:
DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D05

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of DDM QRYBLKCTL instance variable, received as a parameter on OPNQRY, is other than FRCSNGROW. The local DB2 may not specify LMTBLKPRC or SNGROWPRC as values of QRYBLKCTL as an OPNQRY parameter.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D07

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM RTNSQLDA enumerated value instance variable, contained within a DDM EXCSQLSTT command, is other than FALSE (X'F0') or TRUE (X'F1').

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D08

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM PRPSQLSTT command.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D09

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined as valid by DDM Level 3, but not supported by DB2, has been detected on a DDM RDBCMM or RDBRLBCK command.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0A

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of the DDM command is not equal to the sum of the lengths of the constituent instance variables.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0B

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. One or more instance variables, defined by DDM Level 3 as required for this command, were not received as command parameters.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0C

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. An instance variable, defined by DDM Level 3 as not valid for this command, has been received as a command parameter.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the

description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0D

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. Multiple occurrences of one or more instance variables, defined by DDM level 3 as nonrepeatable, have been received as parameters of this DDM command.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0E

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. Bytes 17 and 18 of the DDM scalar, RDBNAM, are other than blank. While DDM Level 3 defines the length of this scalar to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D0F

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the RDBNAM instance variable is different than that received on the ACCRDB command.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (RDBNACRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D10

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The mapped scalar, PKGNAMCSN, is invalid. Bytes 17 and 18 of the DDM scalar RDBNAM, contained within PKGNAMCSN, are other than blank. While DDM Level 3 defines the length of this scalar to be 18 bytes, DB2 supports only a 16 byte RDBNAM.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D11

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The mapped scalar, PKGNAMCSN, is invalid. Either bytes 9 through 18 of the package name are other than blank or the section number is nonpositive. While the DDM scalar, PKGID, is defined by DDM level 3 to be 18 bytes in length, DB2 supports only 8 byte package names.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D12

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The value of the DDM scalar, QRYBLKSZ, contained as a parameter on a DDM OPNQRY, CNTQRY, or EXCSQLSTT command, is invalid. The value of QRYBLKSZ must be between 512 and 32767, inclusive.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D13

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. a `TIMESTAMP` instance variable has been included as a command parameter received from a database other than DB2. This DDM scalar is private to DB2.

This reason code is issued by the following CSECT: `DSNLZSQL`

System action: An alert is generated and message `DSNL032I` is written to the console. Refer to the description of this message for further information.

A DDM reply message (`PRMNSPRM`) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the `DSNL032I` message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D14

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of one or more instance variables received as command parameters is less than 4. This is the minimum length to support a DDM length and code point (`llcp`).

This reason code is issued by the following CSECT: `DSNLZSQL`

System action: An alert is generated and message `DSNL032I` is written to the console. Refer to the description of this message for further information.

A DDM reply message (`SYNTAXRM`) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the `DSNL032I` message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D15

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of the DDM command is less than the sum of the lengths of all constituent instance variables.

This reason code is issued by the following CSECT: `DSNLZSQL`

System action: An alert is generated and message `DSNL032I` is written to the console. Refer to the description of this message for further information.

A DDM reply message (`SYNTAXRM`) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the `DSNL032I` message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35D16

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of an instance variable received as a command parameter exceeds the length of the instance variable, as specified by DDM Level 3.

This reason code is issued by the following CSECT: `DSNLZSQL`

System action: An alert is generated and message `DSNL032I` is written to the console. Refer to the description of this message for further information.

A DDM reply message (`SYNTAXRM`) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D17

Explanation: DB2 has detected an error while parsing a DDM command received from a local DB2. The length of an instance variable received as a command parameter is less than the length of the instance variable, as specified by DDM Level 3.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this DB2 remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D18

Explanation: DB2 has detected an error while parsing a DDM command received from a DRDA requester. The value of the DDM scalar, MAXRSLCNT, contained as a parameter on a DDM EXCSQLSTT command, is invalid. The value of MAXRSLCNT must be greater than or equal to -1.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the DRDA requester.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL032I.

If the DRDA requester is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 requester, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1.

At the DB2 server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 83.

00D35D19

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM DSCSQLSTT command received from a remote DRDA client. The value of the DDM enumerated scalar TYPSQLDA is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 UDB for OS/390, at the DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem

determination,” on page 735: 1, 49.

00D35D1A

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM DSCSQLSTT command received from a remote DRDA client. An instance variable, defined as valid by DDM Level 5, but not supported by DB2, has been detected on a DDM DSCSQLSTT command.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 UDB for OS/390 system, at the DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D1B

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM OPNQRY or EXCSQLSTT command received from a remote DRDA client. The value of the DDM enumerated scalar OUTOVROPT is invalid.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace

record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D1C

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM CNTQRY command received from a remote DRDA client. The value of the DDM enumerated scalar RTNEXTDTA is invalid.

This reason code is issued by the following CSECT: DSNLZSQL

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35D1D

Explanation: DB2 detected an error while parsing a DDM command received from DRDA requester. The value of the DDM QRYSCRORN enumerated value instance variable, contained within a DDM CNTQRY command, is unrecognized.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the

description of this message for further information.

A DDM reply message (VALNSPRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 49.

00D35D1E

Explanation: DB2 detected an error while parsing a DDM command received from a DRDA requester. The value of the QRYROWSET instance variable on an OPNQRY or CNTQRY command is less than zero. The minimum defined value for this instance variable is zero.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 49.

00D35D1F

Explanation: DB2 has detected an error while parsing a DDM CNTQRY command received from a DRDA requester. The value of the QRYROWSET instance value is zero, but the the minimum defined value for

this instance variable on a CNTQRY command is one.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 49.

00D35D20

Explanation: DB2 has detected an error while parsing a DDM command received from a DRDA requester. The value of the QRYROWSET instance variable on an EXCSQLSTT is less than zero. The minimum defined value for this instance variable is zero.

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 49.

00D35D21

Explanation: DB2 detected an error while parsing a DDM command received from a DRDA requester. The value of the DDM QRYRSTBLK enumerated value instance variable, contained within a DDM CNTQRY command, is other than FALSE (X'F0') or TRUE (X'F1').

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM)) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 49.

00D35D22

Explanation: DB2 has detected an error while parsing a DDM command received from a DRDA requester. The value of the DDM QRYRTNDDTA enumerated value instance variable, contained within a DDM CNTQRY command, is other than FALSE (X'F0') or TRUE (X'F1').

System action: DB2 generates an alert, and writes message DSNL032I to the console. Refer to the description of this message for further information.

A DDM reply message (VALNSPRM)) will be returned to the DRDA requester.

Operator response: Notify the System Programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message.

If the DRDA requester is also a DB2 for OS/390 system, then at the requester DB2 system, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic

items listed in Appendix C, "Problem determination," on page 735: 49.

00D35E00

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS

System action: If the length of the RDBNAM is greater than 18, then A DDM reply message (SYNTAXRM) is returned to the DRDA client. If the data in characters 17-18 of the RDBNAME is non-blank, then a DDM reply message (VALNSPRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E01

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent without one or more of its required DDM instance variables.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E02

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An ACCSEC or SECCHK command was sent with the RQSDSS length fields set improperly.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E03

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic

items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E04

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on an ACCSEC command.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E05

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMGRNM length was sent on an ACCSEC command. The SECMGRNM must be null.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E06

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMEC length was sent on an ACCSEC command. Only one SECMEC can be specified.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E07

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SECCHK command.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E08

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SECCHK command.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E09

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMDGRNM length was sent on a SECCHK command. The SECMDGRNM must be null.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E0A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SECMEC length was sent on a SECCHK command. Only one SECMEC can be specified.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E0B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on a SECCHK command.

This reason code is issued by the following CSECT: DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E0C

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid USRID length was sent on a SECCHK command. DB2 userids cannot exceed 8 bytes.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E0D

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid PASSWRD length was sent on a SECCHK command. DB2 passwords cannot exceed 8 bytes.

This reason code is issued by the following CSECT: DSNLZSAS.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E0E

Explanation: DB2 has detected an error in the DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The sum of the lengths of the constituent DDM objects within an OBJDSS is inconsistent with the length of the DSS carrier.

This reason code is issued by the following CSECT: DSNLZODM

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E0F

Explanation: DB2 has detected an error in the DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The size of the object is greater than 32KB and the DDM level 6b extended length field is invalid.

This reason code is issued by the following CSECT: DSNLZODM

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number

enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E10

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E11

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte or 8-byte floating point number in IEEE format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis*

Guide and Reference for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E12

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E13

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E14

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 8-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E15

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 8-byte floating point number in VAX format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E16

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 4-byte floating point number in 80x86 format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E17

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 4-byte floating point number in 80x86 format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E18

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a 8-byte floating point number in 80x86 format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled "Data organization" of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E19

Explanation: DB2, acting as a DRDA client, has detected a floating point conversion error when converting a nullable 8-byte floating point number in 80x86 format to System/370 format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the floating point value. Overflow can occur when the floating value is out of the System/370 floating point range. Refer to the section entitled “Data organization” of *DB2 Diagnosis Guide and Reference* for details of floating point range.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E1A

Explanation: DB2, acting as a DRDA client, has detected an error in a NUL-terminated string of length less than 257 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E1B

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable NUL-terminated string of length less than 257 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E1C

Explanation: DB2, acting as a DRDA client, has detected an error in a NUL-terminated string of length greater than 256 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E1D

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable NUL-terminated string of length greater than 256 bytes. The NUL-terminator cannot be located within the data field as defined by the DDM descriptor received.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E1E

Explanation: DB2, acting as a DRDA client, has detected an error in a numeric character data field (nullable or non-nullable). DB2 has detected a numeric conversion error, preventing the data from being converted to packed decimal format.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the numeric data.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E1F

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E20

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E21

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E22

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable variable length DBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E23

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length DBCS character data field whose length is given by a 1-byte length field. The value of the length field is greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E24

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable variable length DBCS character data field whose length is given by a 1-byte length field. The value of the length field is greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT: DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E25

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT:
DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E26

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is less than 257 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT:
DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E27

Explanation: DB2, acting as a DRDA client, has detected an error in a variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT:
DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E28

Explanation: DB2, acting as a DRDA client, has detected an error in a nullable variable length SBCS character data field whose length is given by a 2-byte length field and whose maximum length is greater than 256 bytes. The value of the length field is either negative or greater than the maximum length specified by the DDM descriptor for the field.

This reason code is issued by the following CSECT:
DSNLZFEX

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83.

00D35E29

Explanation: DB2, acting as a DRDA client, has detected an error in a zoned decimal data field (nullable or non-nullable). DB2 has detected a numeric conversion error, preventing the data from being converted to packed decimal format.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

Operator response: Notify the system programmer.

User response: Check the numeric data.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At the DB2 for MVS DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

00D35E2A

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains multiple instances of the BNDOPTNM scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E2B

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains multiple instances of the BNDOPTVL scalar. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E2C

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The BNDOPT collection contains an invalid instance.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (PRMNSPRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E2D

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. A BNDOPTNM instance variable is required for this DDM collection but was not received.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E2E

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. A BNDOPTVL instance variable is required for

this DDM collection but was not received.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E2F

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of the DDM object is less than 4, the minimum length of any DDM object. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735

on page 733: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E30

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of the DDM command is less than the sum of the lengths of the constituent instance variables appearing as parameters.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E31

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of a DDM instance variable is less than the minimum length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E32

Explanation: DB2, acting as a DRDA server, has detected an error while parsing a DDM BNDOPT command data object received from a remote DRDA client. The length of a DDM instance variable is greater than the maximum length defined by DDM Level 3. This is invalid.

This reason code is issued by the following CSECT: DSNLZOBO

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DDM reply message (SYNTAXRM) will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E33

Explanation: DB2 has detected an error in the DDM SQLRSLRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The value of the single element of the SQLNUMGRP, SQLNUM, defining the total number of SQLRSROW occurrences within the SQLRSLRD array, is inconsistent with the number of result sets indicated in the RSLSETRM.

This reason code is issued by the following CSECT: DSNLZRRS.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D35E34

Explanation: DB2 has detected an error in the DDM SQLRSLRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. Within one or more SQLRSROW occurrences, the lengths of SQLRSNAME_m and SQLRSNAME_s are both non-0, but only one of these lengths should be non-0. The data is invalid with regard to the Early SQLRSGRP group descriptor as defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRRS.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D35E35

Explanation: DB2 has detected an error in the DDM SQLCINRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. The value of the single element of the SQLNUMGRP, SQLNUM, defining the total number of SQLCIROW occurrences within the SQLCINRD array, is either negative or is inconsistent with the size of the SQLCINRD array.

This reason code is issued by the following CSECT: DSNLZRCI.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D35E36

Explanation: DB2 has detected an error in the DDM SQLCINRD reply data object received from the remote server in response to a DDM EXCSQLSTT command that generated query result sets. Within one or more

SQLCIROW occurrences, the lengths of SQLCNAME_m and SQLCNAME_s are both non-0, but only one of these lengths should be non-0. The data is invalid with regard to the Early SQLCIGRP group descriptor as defined by DRDA.

This reason code is issued by the following CSECT: DSNLZRCI.

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30020 and SQLSTATE 58009.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the statistics class 4 trace record identified by the IFCID sequence number given in message DSNL031I.

At the DB2 requester, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 83.

If the DRDA server is DB2 UDB for z/OS, then DB2 diagnostic information is available. In this case, at the DB2 server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

00D35E37

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid IPADDR length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E38

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SNAADDR length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E39

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RDBNAM length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E3A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid LOGNAME length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT:
DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E3B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid LOGTSTMP length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT:
DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E3C

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCLOG object.

This reason code is issued by the following CSECT:
DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E3D

Explanation: DB2 has detected an error in the DDM command data object or DDM reply data object received from the remote server as part of a DDM command or reply. The DDM level 6b length field is invalid.

This reason code is issued by the following CSECT:
DSNLZPSL

System action: An alert is generated and message DSNL031I is written to the console. Refer to the description of this message for further information.

The application will receive SQLCODE -30000 and SQLSTATE 58008.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL031I message should be analyzed.

At this local DB2, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic

items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E3E

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E3F

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E40

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid SYNCTYPE length was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E41

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RLSCONV length was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, “Problem determination,” on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 49.

00D35E42

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWID length was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E43

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid instance variable was sent on a SYNCRSY command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E44

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A duplicate instance variable was sent on a SYNCRSY command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E45

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid RSYNCTYP length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E46

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWID length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E47

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid UOWSTATE length was sent on a SYNCRSY command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E48

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid FORGET length was sent on a SYNCCTL command.

This reason code is issued by the following CSECT:
DSNLZSAS

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E49

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid TCPHOST length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT:
DSNLZPSL

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E4A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid CNNTKN length was sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL.

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E4B

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. A required instance variable was not sent on a SYNCLOG object.

This reason code is issued by the following CSECT: DSNLZPSL.

System action: A DDM reply message (SYNTAXRM) is returned to the DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E51

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from a remote client. The DDM object is the OUTOVR object. The size of the OUTOVR is greater than 32KB and the DDM level 6b extended length field is invalid.

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A SYNTAXRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E52

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. The SQLCADTA row (RLO) MDD is either invalid or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E53

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. The SQLCADTA row triplet (RLO) is either invalid or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E54

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the

OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the first component of the SQLCADTA row is other than an SQLCAGRP (early) group or the number of elements taken from the SQLCAGRP or SQLCAGRP replication factor (or both) are incorrect. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E55

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. The first component of the SQLCADTA row correctly enumerates the elements of the SQLCAGRP; however, the second component, identifying the SQLDTAGRP (late) group, is incorrect. Either the SQLDTAGRP local identifier (LID) is different from the LID of the SQLDTAGRP previously specified or the number of elements taken from the SQLDTAGRP replication factor (or both) are incorrect. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E56

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. One or more late environment descriptors is included within the previously specified SQLDTAGRP late group descriptor. However, the SQLDTARD row (RLO) Meta Data Definition (MDD) is either incorrect or has not been included within the SQLDTARD descriptor. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E57

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the SQLDTARD is specified as other than a row triplet (RLO) or the SQLDTARD RLO triplet is invalid. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E58

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the SQLCADTA local identifier (LID) referenced within the SQLDTARD RLO did not match the LID defined within the SQLCADTA RLO or the number of elements or replication factor (or both) within the SQLDTARD RLO was non-zero. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message

DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E59

Explanation: DB2, acting as a DRDA server, has detected an error in a DDM command data object received from the remote client. The DDM object is the OUTOVR scalar of the SQLDTARD collection. The FDOCA descriptor geometry is incorrect. Either the length specified in the LL preceding the OUTOVR is greater than the length of the OBJDSS carrier or the length of one of the constituent geometries (triplet lengths) is inconsistent with the length of the OUTOVR. The descriptor is invalid.

This reason code is issued by the following CSECT: DSNLZSOV

System action: An alert is generated and message DSNL032I is written to the console. Refer to the description of this message for further information.

A DSCINVRM reply message will be returned to the remote DRDA client.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

You should also analyze the statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message.

Problem determination: If the remote DRDA client is a DB2 for MVS system, at the DB2 DRDA client, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 83. For other

remote DRDA clients, refer to the client product documentation for diagnostic recommendations.

At the DB2 DRDA server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E5A

Explanation: DB2 has detected an error while parsing a DDM command or DDM command data. An invalid NEWPSWD length was sent on a SECCHK command. New passwords cannot exceed 255 bytes.

System action: A DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E5B

Explanation: DB2 has detected an error while parsing the DDM ACCSEC command or its reply data. The encryption connection key passed in the SECTKN instance variable has an invalid length. The connection key must be a 32-byte security token.

System action: If at the server, a DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00D35E5C

Explanation: DB2 has detected an error while parsing the DDM SECCHK command or its reply data. The encrypted password passed in the SECTKN instance variable has an invalid length. DB2 supports an 8-byte or a 16-byte encrypted password.

System action: If at the server, a DDM reply message (SYNTAXRM) is returned to the local DB2.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The statistics class 4 trace record identified by the IFCID sequence number enumerated in the DSNL032I message should be analyzed.

At this local DB2, collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 83.

At this remote server, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

Chapter 14. X'D4.....' codes

00D40001

Explanation: The IMS attachment facility detected an invalid save area chain pointer. This condition occurs only if the save area is overlaid or if the save area pointer is invalid.

System action: The task is abended.

System programmer response: If the abend occurred in an IMS dependent region, restart the region. If the abend occurred in the IMS control region, restart the connection. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the dump. Register 13 plus four bytes is the address of the invalid save area chain pointer.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 26, 27, 45.

00D40008

Explanation: The IMS attachment facility command module's ESTAE routine places this reason code in the variable recording area of SYS1.LOGREC. The reason code indicates that the entry is not a standard DB2 entry. The reason code is followed by the current IMS attachment facility trace entry, the first four characters of the command, the output destination, and the authorization ID.

This message records information in the variable recording area (VRA).

This abend reason code is issued by the following CSECT: DSNMCMD0

System action: Every attempt is made to return to RTM with the retry option. If the retry is successful, a message is sent to the originating destination to show that the command failed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Analyze the SYS1.LOGREC data. The log record contains the current IMS attachment facility trace entry, the first four characters of the command, the output destination, and the authorization ID for the failing command.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 3, 4, 26, 27, 45.

00D40061

Explanation: The IMS attachment facility could not establish a connection with DB2 because an IMS /STOP SUBSYS command was issued.

This abend reason code is issued by the following CSECT: DSNMSNO0

System action: The application's SQLCA is updated with an SQLCODE -924 and reason code 00D40061. Control is returned to the application.

User response: Wait for the IMS /START SUBSYS command to be issued before reentering the transaction.

Operator response: Issue the IMS /START SUBSYS command to establish a connection with DB2 and reenter the transaction.

System programmer response: Determine why the IMS /STOP SUBSYS command was issued.

Problem determination: Analyze the application's SQLCA.

00D40062

Explanation: The IMS attachment facility could not establish a connection with DB2 because IMS is shutting down.

This abend reason code is issued by the following CSECT: DSNMSNO0

System action: The application's SQLCA is updated with an SQLCODE -924 and reason code 00D40062. Control is returned to the application.

User response: Reenter the transaction after IMS has been restarted.

Operator response: Restart IMS.

System programmer response: Determine why IMS was stopped.

Problem determination: Analyze the application's SQLCA.

00D40063

Explanation: DB2's IMS attachment facility received an unexpected return code from the IMS external subsystem attach facility while attempting to start the subsystem connection to DB2.

This abend reason code is issued by the following CSECT: DSNMSNOO

System action: The application's SQLCA is updated with an SQLCODE -924, reason code 00D40063, and the return code received from the IMS external subsystem facility. One of the following return codes may appear.

- 12 - DB2 connection unsuccessful. The external subsystem encountered an error processing the request.
- 24 - DB2 connection unsuccessful. The external subsystem responded with a 'never connect' return code from the initialization exit.
- 28 - DB2 connection unsuccessful. IMS resources were unavailable to process the request.
- 32 - DB2 connection unsuccessful. An invalid EPL was encountered.
- 36 - DB2 connection unsuccessful. Request rejected due to the external subsystem invoking the subsystem termination service exit.

Control is returned to the application.

Operator response: Notify the system programmer.

System programmer response: This is an internal error. To be certain the proper diagnostic information is available, stop the region with a dump.

Problem determination: The WAL control block in the dump contains an IMS attach trace table. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 5, 26, 27, 45.

00D40069

Explanation: DB2's IMS attachment facility received an unexpected return code from the IMS external subsystem attach facility while attempting to establish a connection to DB2.

System action: The application's SQLCA is updated with an SQLCODE -924, reason code 00D40069, and the return code received from the IMS External Subsystem Attach Facility. Control is returned to the application.

Operator response: Notify the system programmer.

System programmer response: This is an internal error. To be certain the proper diagnostic information is available, stop the region with a dump.

Problem determination: The WAL control block in the dump contains an IMS attach trace table. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4, 5, 26, 27, 45.

00D44011

Explanation: The DB2-DL/I batch support or IMS BMP job step cannot continue because the application program could not be loaded.

This abend reason code is issued by the following CSECT: DSNMTV01

System action: The DB2-DL/I batch support or IMS BMP job step cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Be sure the DDITV02 SYSIN data (for DB2-DL/I batch support) or IMSBATCH procedure (for an IMS BMP job step) names a subsystem member (SSM) parameter that points to a resource translation table (RTT). The RTT maps the IMS application name to the DB2 plan name.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44021

Explanation: The DB2-DL/I batch support cannot continue because the length of a parameter value specified in the DDITV02 SYSIN data set is incorrect.

This abend reason code is issued by the following CSECT: DSNMTV02

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Correct the DDITV02 SYSIN data set parameter value in error and rerun the job. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for more information about failure analysis procedures.

Problem determination: The parameter value length limits are the following:

- DB2 subsystem name: $0 < \text{SSN} < 5$.
- LIT value < 5 .
- DB2 initialization module name = 8.
- DB2 optional resource translation module name < 9 .
- Region error option value < 2 .
- The command recognition value < 2 .
- The connection name < 9 .
- The DB2 plan name < 9 .
- The application program load module name < 9 .

Register 8 indicates the delimiter following the field in error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44022

Explanation: The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set cannot be opened or an end of file was reached before a record was read.

This abend reason code is issued by the following CSECT: DSNMTV02

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Correct the DDITV02 DD statement or data set in error and rerun the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for more information about for information on identifying and reporting the problem.

Problem determination: See if a DDITV02 data set exists and contains a properly formatted record.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44023

Explanation: The DB2-DL/I batch support cannot continue because one or more of the DDITV02 SYSIN data set values are incorrectly specified. The end of the input record was detected before all the values were found.

This abend reason code is issued by the following CSECT: DSNMTV02

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Correct the DDITV02 DD value or data set in error and rerun the job. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for more information about for information on identifying and reporting the problem.

Problem determination: Check the DDITV02 DD SYSIN values for proper format.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44024

Explanation: The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set value for the DB2 initialization module refers to an incorrect module.

This abend reason code is issued by the following CSECT: DSNMTV02

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Correct the DDITV02 SYSIN DD value or data set in error by specifying DSNMIN10 as the initialization module and rerun the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the DDITV02 DD SYSIN value for the required parameter DSNMIN10.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44025

Explanation: The DB2-DL/I batch support cannot continue because the DDITV02 SYSIN data set value for the DB2 region error option is incorrect. Only R, Q, A, or null (specified as „) are valid.

This abend reason code is issued by the following CSECT: DSNMTV02

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Correct the DDITV02 SYSIN DD value for the region error option of R, Q, A, or null and rerun the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the DDITV02 DD SYSIN value for the proper value of the error option of R, Q, A, or null.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54.

00D44031

Explanation: The DB2-DL/I batch support cannot continue because a connection could not be established to the DB2 subsystem named in the DDITV02 SYSIN data set. This error usually occurs for one of these reasons:

- The DB2 subsystem name specified either in the DDITV02 SYSIN data set (default) or in the member defined by the IMSID-SSM combination is incorrect.
- The DB2 system is not operational.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

User response: Notify the system programmer.

Operator response: It might be necessary to start the DB2 subsystem specified.

System programmer response: Either correct the DDITV02 DD SYSIN or the member pointed to by the IMSID-SSM combination for the DB2 subsystem name if it is incorrect, and rerun the job. Otherwise, have the operator start the DB2 subsystem if it is stopped.

Problem determination: Either check the DDITV02 DD SYSIN or the member pointed to by the IMSID-SSM combination for the proper DB2 subsystem name. Make sure the correct data set name is specified by the DDITV02 DD statement and the DCB RECFM is F or FB for the data set.

The WAL control block in the dump contains information about the connection and the IMS attach trace table. Field WALSSID indicates the name of the DB2 subsystem being called.

The last entry in the trace table has an ID of ID00 and the CALL STATUS contains the 2-byte return code and 4-byte reason code of the failure. The 4-byte reason code might provide additional diagnostic information to help determine the cause of the failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If the correct DB2 subsystem name was specified and was available, refer to the specific reason code explanation for details about the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44032

Explanation: The DB2-DL/I batch support cannot continue because the DB2 create thread or signon failed.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support cannot continue and processing terminates abnormally.

Operator response: Notify the system programmer.

User response: Verify that all required DB2 objects are available and that the specified plan name is correct. If the problem persists, notify the system programmer.

Problem determination: Examine the WAL control block in the dump, or any X'5501FF00' IMS attachment log records in the IMS log data set (if available) for specific DB2 return and reason codes, along with the WALERN field which indicates the reason for the failure.

The WAL control block in the dump contains information about the connection and the IMS attach trace table. The last entry in the trace table will have an ID of CTHD or SIGN and the CALL STATUS contains the two-byte return code and four-byte reason code of the failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44033

Explanation: The DB2-DL/I batch support cannot continue because the application was selected as a dead lock victim.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

User response: Notify the system programmer.

Operator response: It may be necessary to schedule the application program when lock out conditions are less likely to occur.

System programmer response: Analyze the reason for the dead lock condition from information sent to the MVS console by DB2 as message number DSNT375I or DSNT376I.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44034

Explanation: The DB2-DL/I batch support cannot continue because an unrecoverable error was encountered during resolve indoubt processing between IMS and DB2. The status of the current indoubt DB2 thread remains unchanged.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support processing is terminated, and a DB2 04E SVC dump is requested.

Operator response: Enter the DISPLAY THREAD TYPE (INDOUBT) command to determine the current status of indoubt thread processing between IMS and DB2 at the time of the failure. Notify the system programmer.

System programmer response: This may be an internal protocol error between the IMS external subsystem attach facility and the DB2 IMS attachment facility, or an execution environment error external to both IMS and DB2. Examine both the IMS and MVS console logs for any error messages or abnormal return codes associated with the DL/I batch job.

Problem determination: Locate and examine any DB2 IMS attachment snap records (code X'5501FE') that are present in the IMS log data set, and examine WAL trace table entries included in the dump.

If a DB2 reason code is provided in either the WAL trace entry, or the WALSFER2 field of the X'5501FE' log record, follow the instructions associated with this reason code for additional information concerning the failure.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 25, 27, 32, 45, 49, 50.

00D44035

Explanation: The DB2-DL/I batch support cannot continue because the PSB name used as the DB2 authorization ID begins with the character string SYSADM which is not allowed.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is a site problem. A PSB name beginning with SYSADM is being used as the authorization ID.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The PSB= parameter of the job step execute statement indicates the PSB name used. Register 3 plus X'34' is the authorization ID specified.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44036

Explanation: The DB2-DL/I batch support cannot continue because the authorization ID has been changed by the application program.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is a site problem. The application program has modified the authorization ID.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The authorization ID saved by DB2 does not match the value in ASXBUSER. Control block modification has occurred. Register 3 plus X'34' is the changed value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44037

Explanation: The DB2-DL/I batch support cannot continue because the stack of save areas has been exhausted. The error can occur when multiple levels of recursion have been invoked.

This abend reason code is issued by the following CSECTs:

DSNMTV03 DSNMTV04 DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer

System programmer response: This might be a multiple recursion problem caused by the execution of a changed data capture exit.

Problem determination: Verify that the user exit(s) are

not being recursively invoked during a data base update operation.

00D44038

Explanation: The DB2 IMS Attach facility attempted to notify the IMS subsystem that captured DB2 table data is ready for propagation. However, the IMS exit manager was not available for notification.

This abend reason code is issued by the following CSECT: DSNMTV03

System action: DB2 propagation processing is abnormally terminated.

User response: Notify the system programmer.

System programmer response: This is a site problem. The required release of IMS is not available.

Problem determination: Verify that the IMS release that supports data propagation from DB2 to IMS is installed.

00D44039

Explanation: The DB2-DL/I batch support cannot continue because the record format (RECFM) for the DDOTV02 output data set has a format of fixed or fixed block.

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

System programmer response: Change the RECFM parameter in the DCB from fixed 'F' or fixed blocked 'FB' to variable 'V' or variable blocked 'VB'. Specify LRECL=4092 and a BLKSIZE of at least LRECL+4. Then rerun the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Check the DDOTV02 DD for the proper DCB-RECFM value of 'V' or 'VB'.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00D44050

Explanation: The DB2-DL/I batch support cannot continue because a DB2 prepare problem was detected.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is an internal error. Refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of PREP. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44051

Explanation: The DB2-DL/I batch support cannot continue because a DB2 commit continue problem was detected.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is an internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of COMC. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 32, 54, 55.

00D44052

Explanation: The DB2-DL/I batch support cannot continue because a DB2 abort problem was detected.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is an internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The WAL control block in the dump contains an IMS attach trace table. The last entry in the trace table will have an ID of ABRT. The CALL STATUS contains the two-byte return code and four-byte reason code of the failure.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 1, 4, 32, 54, 55.

00D44053

Explanation: The DB2-DL/I batch support cannot continue because a DL/1 XRST call problem was detected.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an application program error. Check the PCB status code for a nonblank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 4, 32, 54, 55.

00D44054

Explanation: The DB2-DL/I batch support cannot continue because an IMS XRST call problem was detected. An XRST call, if issued, must be issued before any SQL call is issued; only one XRST call should be issued.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an application program error. Correct the application program so it will issue the XRST call before any SQL statements are processed. Then resubmit the job. Also make sure only one XRST call is issued by the application program.

Check the DDOTV02 data set to see if an INDOUBT unit of recovery has been erroneously aborted.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Follow normal IMS

debugging techniques to gather the DL/I documentation.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 4, 32, 54, 55.

00D44055

Explanation: The DB2-DL/I batch support cannot continue because an IMS CHKP call problem was detected by IMS.

This abend reason code is issued by the following CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an application program error. Check the PCB status code for a nonblank value, validate the PCB used for the call, and validate the parameters passed by the call. Correct the application program and resubmit the job.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Follow normal IMS debugging techniques to gather the IMS documentation.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 4, 32, 54, 55.

00D44056

Explanation: IMS has detected a problem with the call to IMS ROLL or ROLB causing the DB2 DL/I batch support to stop processing. In most cases, the ROLB call has BKNO=NO (which is the default setting) and you have used a temporary dataset. .

System action: The DB2 DL/I batch support processing is terminated.

Operator response: Notify the system programmer.

System programmer response: One of two errors can result in this reason code: an incorrect ROLB call or an application program error.

In most cases, the ROLB has incorrect settings and data. Complete the following actions to correct the ROLB call settings:

1. Validate that you are using an existing dataset that is not temporary.
2. Validate that the BKN setting is set to YES.
3. Resubmit the job.

00D44057

| Sometimes an application program error can cause this
| reason code. Complete the following actions to correct
| the application error:

- | 1. Check the PCB status code for a non-blank value.
- | 2. Validate that the PCB used for the call is correct.
- | 3. Validate the that parameters passed by the call is
| correct.
- | 4. Resubmit the job.

| If you suspect an error in DB2, refer to Part 2 of *DB2
| Diagnosis Guide and Reference* for information on
| identifying and reporting the problem.

Problem determination: Follow normal IMS
debugging techniques to gather the IMS
documentation.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
4, 32, 54, 55.

00D44057

Explanation: The DB2-DL/I batch support cannot
continue because an IMS call problem was detected by
the DB2-DL/I batch support. An IMS SYNC, ROLS, or
SETS call is not allowed.

This abend reason code is issued by the following
CSECT: DSNMTV05

System action: The DB2-DL/I batch support cannot
continue and processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This is probably an
application program error. Correct the application
program to use supported IMS calls and resubmit the
job.

If you suspect an error in DB2, refer to Part 2 of *DB2
Diagnosis Guide and Reference* for information on
identifying and reporting the problem.

Problem determination: Follow normal IMS
debugging techniques to gather the IMS
documentation.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
4, 32, 54, 55.

Chapter 15. X'D6.....' codes

00D60001

Explanation: DB2 detected an inconsistent condition. The index entry for a LOB does not point to a valid LOB in the auxiliary table. The error is probably caused by an extra index entry, but it could also result from a table update not being redone when it should have been or from a point-in-time recovery.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index page. Run the CHECK utility to identify the extent of index inconsistency.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 31, 32, 33, 41, 42.

00D60100

Explanation: DB2 detected an inconsistent condition. The index entry for a LOB does not point to a valid LOB in the auxiliary table. The error is probably caused by an extra index entry, but it could also result from a table update not being redone when it should have been or from a point-in-time recovery.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Message DSNI013I is issued to identify the index page. Run the CHECK utility to identify the extent of index inconsistency.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 31, 32, 33, 41, 42.

00D60801

Explanation: Available LOB space exceeded. The amount of space allowed for processing LOB values by a user or for a system has been exceeded.

This reason code is issued by the following CSECTs: ??

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00D60802

Explanation: Available LOB locator space exceeded. The amount of space allowed for processing LOB locators by a user or for a system has been exceeded.

This reason code is issued by the following CSECTs: ??

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response:

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, "SQL return codes," on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00D60803

Explanation: An attempt was made to access a value in a column with one of the LOB data types (BLOB, CLOB, DBCLOB), but the value of the column is no longer valid.

System action: The operation is not allowed. DB2 returns 'resource not available' to its invoker.

System programmer response: Use the CHECK LOB utility to identify the invalid LOBs. Use update to replace or delete to remove the invalid LOBs.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on

00D60C02 • 00D60C03

identifying and reporting the problem.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. Message DSNT500I or message DSNT501I may also be issued. For more information, refer to the Part 2, “SQL return codes,” on page 9 or to the description of the DSNT500I and DSNT501I messages in *DB2 Messages*.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00D60C02

Explanation: Auxiliary index entry not found. An attempt was made to access an auxiliary index, but the entry was missing. This could be caused by not recovering all the table spaces in the a table space set to the same point in time.

This reason code is issued by the following CSECTs: ??

System action: The operation is not allowed.

System programmer response: Use the CHECK DATA to determine the rows of the table which are inconsistent. Use SQL UPDATE or DELETE to correct these errors.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00D60C03

Explanation: Unable to access a LOB data page because it is not formatted or it belongs to another LOB.

This reason code is issued by the following CSECTs: ??

System action: The operation is not allowed.

System programmer response: Run CHECK LOB to determine the extent of the inconsistency.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The requested operation is not performed.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

Chapter 16. X'D7.....' codes

00D70001

Explanation: Either the data space manager (DSM) subcomponent of DB2 could not access some storage group definition, or the storage group contains no volume IDs. Possible sources of the error include use of an incorrect name for the storage group and removal of all volume IDs via ALTER STOGROUP without providing new ones.

This reason code is issued by the following CSECT: DSNPGSGI

System action: A 'resource not available' code is returned to the caller.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, check the SQLCA for the name of the storage group. Check this storage group (via an SQL SELECT on SYSIBM.SYSTOGROUP) to ensure that it exists. Check for associated SYSIBM.SYSVOLUMES table entries to see if any volume IDs exist for this storage group. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Obtain output listing from SELECT * FROM SYSIBM.SYSTOGROUP and SELECT * FROM SYSIBM.SYSVOLUMES, details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. Use this documentation to determine the cause of the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 15, 32, 35.

00D70002

Explanation: The required data sets are not available to DB2. This is probably a user error. For example, the user might have forgotten to create the needed VSAM data clusters using access method services before issuing a CREATE TABLESPACE request with the USING VCAT parameter.

System action: A 'resource not available' code is returned to the end user.

User response: If you are unable to resolve the problem, notify the system programmer or database administrator.

System programmer response: Take one or both of these actions:

- Make the needed data set available.
- Be sure it is cataloged in the appropriate integrated catalog facility (ICF) catalog.

The data set names appear in the SQLCA, in the DSNP-prefixed message that contained this code, or in an earlier DSNP-prefixed message for the same user (same connection and correlation IDs).

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command on the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in *DFSMS/MVS: Access Method Services for the Integrated Catalog*.

Problem determination: Obtain the following information to determine the cause of the problem:

- Listings of the integrated catalog facility (ICF) catalog and VTOC showing the data set
- Details of the request that led to this code
- The contents of the SQLCA
- The operator's console sheet showing any related messages

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 15, 32, 35.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECTS:

DSNPCLO0 DSNPSCTC DSNPSCTD DSNPSCTO
DSNPSCTE

00D70003

Explanation: Some or all of the data sets already exist. The data space manager (DSM) subcomponent of DB2 has discovered the preexistence of a data set having the same name as one it was about to create. The name of the data set appears in the SQLCA and/or in message DSNP002I (DEFINE FAILED FOR data-set-name) or DSNP023I (RENAME NEW DATASET SHOULD NOT EXIST FOR data-set-name). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the

problem. Refer to Part 2 (Volume 1) of *DB2 Administration Guide* for data set naming conventions.

This may occur if a user creates a data set with VSAM access method services (intending to use it for a table space or index), then creates the table space or index via SQL CREATE statement, but forgets to specify USING VCAT.

Another possibility is that the data set remained from some prior, unsuccessfully completed DROP or DELETE or backout operation of DB2. This failure would probably occur if the data set or integrated catalog facility (ICF) catalog were unavailable at the time of the DROP or DELETE or backout. For example, packs may be offline, or other operational problems may exist. In this case, the table space would be dropped, but the data sets could remain and be brought back online at a later time.

There should have been some indication of this type of failure at the time it occurred. (for example, some DSNP-prefixed message indicating the data set was not deleted). You might check recent console sheets for such a message; however, it may have happened a long time ago.

This reason code is issued by the following CSECTs: DSNPDFN1 DSNPRNM0

System action: Error indication is returned to the end user.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, either use access method services to delete the data set or use a different name for the table or index you are trying to create.

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command against the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in *DFSMS/MVS: Access Method Services for the Integrated Catalog*.

Problem determination: Information is needed concerning the history of the use of this data set; that is, of the table space/index name in conjunction with this database name. Listings of the console, integrated catalog facility (ICF) catalog, and VTOC may also be needed, with details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. Use this documentation to determine the cause of the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 10, 12, 14, 15, 32, 35.

00D70004

Explanation: Certain data set(s) are pending deletion. Creation of a new data set is blocked by the presence of the name on a drop list. This is usually a user error. It usually occurs when the user has dropped an old object (table space, index, and so forth) and then attempted to redefine it without committing the drop.

This reason code is issued by the following CSECTs: DSNPCPS0, DSNPDFN1

System action: Error indication is returned to the user.

User response: You must commit the drop prior to redefining. Notify the system programmer or database administrator, if necessary.

System programmer response: The user must commit the drop of the data set on the drop list. Collect the materials listed in the Problem Determination section of this message to determine the specific cause of the problem.

Problem determination: Documentation is needed showing activities from the last committed action up to and including details of the request that resulted in this code. You also need to examine the contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. Use this documentation to determine the cause of the problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 35.

00D70005

Explanation: The specified data set was access method services user-defined. It does not have the required DB2 attributes.

System action: No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator response: Notify the system programmer.

System programmer response: Delete the named data set and define it with the correct attributes. Refer to Part 2 of *DB2 Installation Guide* for the correct data set definition attributes.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

This reason code is issued by the following CSECTs: DSNPSTC DSNPSTC0

00D70006

Explanation: The data sets are not owned by this DB2 subsystem. The data sets backing a table space or index can be deleted only by the data space manager (DSM) subcomponent of the DB2 subsystem that created them or by one having the same authorization ID at the time of installation. This is a safety feature to restrict DSM from deleting data sets that might have been created by the user but that have a name that matches the one we are trying to delete. This safety feature also prevents the deletion of data sets that might have been created by some other DB2 subsystem and that are still needed there.

This reason code is issued by the following CSECTs:
DSNPDLT1 DSNPDLTE

System action: The data sets remain intact.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, check the name of the data sets in question. Delete those names, then issue appropriate DROP and DELETE requests on the DB2 subsystem that created them (see the 'OWNER' parameter in the integrated catalog facility (ICF) catalog entry for the data set), or issue access method services DELETE CLUSTER statements directly.

Problem determination: Obtain integrated catalog facility (ICF) catalog and VTOC listings, details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. This documentation will assist you in determining the cause of the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 15, 32, 35.

00D70007

Explanation: The specified data set must be cataloged in an ICF catalog. It was found in a non-ICF catalog.

This reason code is issued by the following CSECTs:
DSNPSTC0 DSNPSTC TC DSNPSTC TE

System action: No action is taken with the named data set. An error code is returned and a dump is not taken.

Operator response: Notify the system programmer.

System programmer response: Delete the named data set and re-DEFINE using an ICF catalog

Problem determination: Obtain an access method series LISTCAT for the named data set's catalog types. Refer to Part 2 of *DB2 Installation Guide* for the correct catalog usage.

00D70008

Explanation: During allocation, DB2 detects that the attributes for the data set were incorrect. This data set requires the extended addressability attribute defined through DFSMS.

System action: Error indication is returned to the end user and a dump is not taken.

User response: Notify the system programmer or storage administrator.

System programmer response: To be larger than 4 GB, this data set must belong to a DFSMS data class that is defined with the extended addressability attribute. Specify EXT in the DATA SET NAME TYPE field of the DATA SET CLASS DEFINE panel of DFSMS and make sure the automatic class selection routine associates this data set with this data class.

Problem determination: Obtain the data set attribute information from the corresponding SMS data class for the named data set.

00D70009

Explanation: The specified data set was access method services user-defined. It does not have the required DB2 attributes. The data set was defined with a Control Interval (CI) size that is incompatible with the page size. A compatible CI size is either 4K or the page size. For example, if the page size is 32K, the ControlIntervalSize parameter in the Define command should be specified with either 4K or 32K. DB2 recommends the use of the page size as the Control Interval size.

System action: A 'resource not available' code is returned to the user. This reason code and the data set name are made available to the user in the SQLCA.

User response: Delete the data set that was named and redefine it with the correct CI attributes. Refer to Part 2 of *DB2 Installation Guide* for the correct data set definition attributes.

System programmer response: Ensure that the data set is defined with the compatible CI size, which is 4K or its page size.

Problem determination: Obtain an access method services LISTCAT for the named data set's attributes.

00D70010

Explanation: This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

System action: The data sharing extend is incomplete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional

information, see the description of message DSNP021I.

Problem determination: Obtain the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This reason code is issued by the following CSECTs: DSNPXTN0 DSNPNUX1 DSNPNUX2

00D70011

Explanation: The data space manager (DSM) subcomponent of DB2 has been requested to extend a table space or index space, but the table space or index space has already been extended to its maximum size. The size of a partition depends on the number of partitions, and can be 1, 2 or 4GB. If the table space or index space is not partitioned, the maximum size is 64GB (32 data sets—'pieces'—of 2 GB each). The maximum size for an NPI for a large partitioned table space is 512GB (128 data sets of 4GB each).

For the name of the data set from which the name of the table space, index space, and/or partition can be derived, see message DSNP001I or DSNP007I and/or the SQLCA. Refer to Part 2 (Volume 1) of *DB2 Administration Guide* for data set naming conventions.

This reason code is issued by the following CSECT: DSNPXTN0

System action: No extension is done. Whatever operation was in progress is terminated and uncommitted activities are backed out.

User response: If you are unable to resolve the problem yourself, notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, if the table space is partitioned and there is space in other partitions, you may be able to redefine the table space with new partitioning parameters so that the data that has overloaded this partition is directed to others. If the table space is not partitioned, you probably have more than one table residing in this table space. Define another table space, unload this one, then reload the tables into the separate spaces. (Be aware that this is a very large amount of data to move. Careful planning is recommended.)

Problem determination: If you believe the table space or index space has not yet reached maximum size, provide listings of the console, integrated catalog facility (ICF) catalog, and VTOC. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 15, 32, 35.

00D70012

Explanation: A password or security error has occurred. An attempt to access a integrated catalog facility (ICF) catalog entry for a cluster (data set) failed because of some security violation. This is probably a user error. It may be caused either by the incorrect specification of a password or the changing of the password in the DB2 catalog (via SQL ALTER) but not in the integrated catalog facility (ICF) catalog (via access method services ALTER) or vice versa.

System action: A 'resource not available' code is returned to the end user.

User response: Ensure that the correct password is being used. If you are unable to resolve the problem yourself, notify the database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, check the passwords and/or RACF authorizations.

Problem determination: Obtain output from SQL SELECT * FROM SYSIBM.SYSTABLESPACE and (if storage group related) SELECT * FROM SYSIBM.SYSTOOGROUP. Also obtain integrated catalog facility (ICF) catalog listing, details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. This documentation will assist you in determining the cause of the problem if it is not merely an incorrect password. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 14, 15, 32, 35.

00D70013

Explanation: A required integrated catalog facility (ICF) catalog does not exist or is inaccessible. An attempt to access an integrated catalog facility (ICF) catalog entry for a cluster (data set) failed. This is probably a user error.

System action: A 'resource not available' code is returned to the end user.

User response: If you are unable to resolve the problem, notify the system programmer or database administrator.

System programmer response: Do the following:

- Check that the proper catalog name was specified and is available to DB2.
- Check the associated DSNP012I message on the operator's console for the integrated catalog facility (ICF) return and reason codes.
- See the description of DSNP012I.
- Look for any related messages on the console sheet.

- Refer to the appropriate MVS publication for a description of message IDC3009I.

Problem determination: Obtain the following to help you determine the cause of the problem:

- Details of the request that resulted in this code
- Contents of the SQLCA

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 10, 14, 32, 35.

00D70014

Explanation: An attempt to extend a data set failed, because a problem was detected in media manager services.

System action: Abort the request.

User response: Notify the operator, system programmer, or database administrator.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, check the packs available to the data set. They may merely be full or the data set may have reached its maximum allowable extents. For additional information, see the description of message DSNP001I.

Problem determination: Obtain console sheet showing associated DSNP001I, DSNO007I, or DSNP011I messages and any related messages preceding them. This documentation will assist you in determining the cause of the problem. For additional information, see the description of these messages.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 4, 5, 10, 12, 14, 32, 35.

00D70015

Explanation: An attempt to update the high-used RBA for a data set failed in media manager services.

System action: Abort the request.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator (DBA), if appropriate. The DBA should be made aware of the extend problem. However, this is probably a system problem.

Problem determination: Obtain console sheet showing associated DSNP001I, DSNO007I, or DSNP011I messages and any related messages preceding them. This documentation will assist you in determining the cause of the problem. For additional information, see the description of these messages.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 4, 5, 10, 12, 14, 32, 35.

00D70016

Explanation: This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

System action: The data sharing extend is incomplete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP021I.

Problem determination: Obtain the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70017

Explanation: An error occurred while attempting to obtain information from an integrated catalog facility (ICF) catalog.

System action: The request is terminated.

System programmer response: Ensure that the proper packs and catalog are online and operating correctly. See message DSNP012I.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 4, 5, 10, 14, 32, 35.

00D70018

Explanation: This is a DB2 internal error. One of the following circumstances has occurred:

- A data set inquiry function was called for a partitioned table space or index space. Its function applies only to nonpartitioned table spaces or index spaces.
- The reset function of data space manager (DSM) was called on a table space that had been opened incorrectly.

System action: Abort the request.

Operator response: Notify the system programmer.

System programmer response: Collect the materials listed in the Problem Determination section of this message. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Request a dynamic dump. In the dump, the second parameter passed to the data set inquiry function identifies the table space or index

space. The third parameter is the table space or index space object descriptor block (OBD). The OBD indicates whether or not the table space or index space is partitioned. If it is partitioned, the calling module is in error. If it is not partitioned, the test in the data set inquiry function must be at fault.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 14, 15, 32, 35

00D70019

Explanation: The data space manager (DSM) subcomponent of DB2 could not release the extend lock it acquired against a data set during an attempt to extend that data set.

System action: The SQL request that led to the abend is terminated, and the unit of recovery that issued the request is backed out.

Operator response: Notify the system programmer.

System programmer response: Investigate the DSM messages associated with this condition (at least message DSNP015I) for clues to the problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This problem is probably the result of either: (1) an attempt by DSM to free a lock it did not hold or, (2) a problem in IRLM. The IRLM return and reason codes appear in the associated DSNP015I message. For additional information, see the description of this message.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 4, 5, 10, 14, 32, 35.

00D70020

Explanation: This is probably an internal error. An attempt to extend a data set failed because a problem was detected in media manager services during the DSM notify process.

System action: The request is terminated.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP021I.

Problem determination: Obtain the console sheet showing the associated DSNP021I message and any related messages preceding that message.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70021

Explanation: The data space manager (DSM) subcomponent of DB2 could not write a required log record.

System action: Abort the request.

Operator response: Notify the system programmer.

System programmer response: Collect the materials listed in the Problem Determination section of this message. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 33, 35.

00D70022

Explanation: The data space manager subcomponent of DB2 is unable to acquire a needed lock. The extend request can not be completed.

System action: Abort the request.

Operator response: Notify the system programmer.

System programmer response: Obtain documentation from message DSNP014I. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNP014I.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 35.

00D70023

Explanation: There is an insufficient amount of space in primary allocation to format control pages.

System action: The requested table space or index space creation is backed out.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, increase the primary allocation value in the data set that was defined directly via access method services. (This should not happen for storage group related data sets, because the DB2 interpreter ensures a sufficient setting for the primary value.)

Problem determination: Obtain integrated catalog facility (ICF) catalog and VTOC listings, details of the request that led to this code, and contents of the SQLCA. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Results of SQL

SELECT * FROM SYSIBM.SYSTABLESPACE may also be useful. Also obtain the operator's console sheet showing related messages, if any.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 15, 32, 35.

00D70024

Explanation: No data sets exist for a nonpartitioned table space or index space. Because at least one existed at create time, a serious problem might have occurred for this table space or index space. The name of the data set that DB2 expected to find for the table space or index space appears in message DSNP012I and/or in the SQLCA along with the reason code.

System action: The request is terminated.

System programmer response: Ensure that the data set and its pack are available to DB2 and that the data set has not been inadvertently deleted or migrated by any DASD operation.

If the data set name is correct, is cataloged, and appears in the VTOC, run the access method services DIAGNOSE command on the integrated catalog facility (ICF) catalog identified by the first qualifier of the data set name. The DIAGNOSE command is described in *DFSMS/MVS: Access Method Services for the Integrated Catalog*.

Problem determination: Obtain the following:

- The integrated catalog facility (ICF) catalog
- The VTOC listings
- Details of the request that led to this code
- Contents of the SQLCA
- The operator's console sheet showing related messages

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 32, 35.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70025

Explanation: An access method services request failed.

System action: Abort the request.

Operator response: Notify the system programmer or database administrator.

System programmer response: Examine messages DSNP009I and DSNP010I on the operator's console for the access method services messages they encompass. Refer to the appropriate MVS publication for

information about specific access method services messages received.

Problem determination: See the message DSNP009I description.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 32, 35.

00D70026

Explanation: This is an internal error. An attempt to extend a data set failed because a problem was detected in the DSM notify process.

System action: The data sharing extend did not complete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP022I.

Problem determination: Obtain the console sheet showing the associated DSNP022I message and any related messages preceding that message.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70027

Explanation: The secondary allocation value is 0. No physical extension is done. If this occurs in a create of a segmented table, the primary allocation of the table space is not big enough to allocate the first segment. The first segment consists of a number of pages which are defined in SEGSIZE.

System action: The request to extend the data set is terminated.

System programmer response: Notify the database administrator if appropriate. Otherwise, if you intended to allow physical extension of the data set, change its secondary value to a nonzero quantity.

Problem determination: Obtain the integrated catalog facility (ICF) catalog and VTOC listings, and (if storage group-defined) the output from SELECT * FROM SYSIBM.SYSSTOGROUP. Also obtain details of the request that resulted in this code, contents of the SQLCA, and the operator's console sheet showing related messages, if any.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 10, 12, 14, 15, 32, 35.

00D70028

Explanation: An HSM request for the recall of a migrated data set failed.

System action: The HSM recall is aborted by data space manager and control returns to the function that issued the recall request. The higher level function will not necessarily terminate processing since the data set may have already been recalled.

Operator response: If processing was terminated, notify the system programmer or database administrator.

System programmer response: If processing was terminated, investigate the reason for the HSM failure via messages issued to the MVS operator's console. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Refer to the problem determination section(s) of the associated DB2 and HSM messages which were issued to the MVS operator's console.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 1.

00D70029

Explanation: DB2 could not access a data set because the data set is on a volume that is offline.

System action: The request to access the data set is terminated.

System programmer response: Ensure that the proper volumes are online. See console message DSNP012I or DSNT500I.

Problem determination: Obtain the following logs to find the failing data set name:

- The operator's console log that contains either the related DSNP012I message with CTLGRC=00000008 CTLGRSN=xxxx0532, or, message DSNT500I with REASON 00D70029.
- The job log that contains the 00D70029 code.

Use ISPF, ISMF, or other facility to locate the volumes and device numbers where the data set resides. Vary the volume, or volumes, back online.

00D70030

Explanation: Unexpected reason code was received from some DB2 subcomponent invoked by data space manager (DSM).

Almost any DSNP module can issue this reason code.

System action: Abort the request.

Operator response: Notify the system programmer.

System programmer response: There is not much the system programmer can do here, but see register 2 in the accompanying dump for the unexpected code. Its description may provide a clue to the type of problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Obtain a listing of the SQL request that resulted in this code and a listing of the contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any. There should be at least one DSNP-prefixed message containing the '00D70030' code. Messages preceding it from other subcomponents (having other prefixes beginning with DSN) may provide additional details about the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 35.

00D70040

Explanation: An attempt to rename an existing data set failed, because a name does not conform to the naming convention.

This reason code is issued by the following CSECTs: DSNPRNM0 DSNPDLTE

System action: Error indication is returned to the end user.

User response: Notify the system programmer.

System programmer response: Notify the database administrator if appropriate.

Problem determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I or DSNP026I.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 12, 14, 15, 32, 35.

00D70041

Explanation: An attempt to rename an existing data set failed.

This reason code is issued by the following CSECT: DSNPRNM0

System action: Error indication is returned to the end user.

User response: Notify the system programmer.

System programmer response: Notify the database administrator if appropriate.

Problem determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 12, 14, 15, 32, 35.

00D70042

Explanation: An attempt to rename an existing data set failed, because the old and new names are not compatible. This problem might arise in one or both of the following situations:

1. One data set name is a DB2 page set data set name and another data set name is a non-DB2 page set data set name.
2. Both are DB2 page set data set names, but there is a mismatch in the catalog alias names, the database names, or the table space/index space names.

This reason code is issued by the following CSECT: DSNPRNM0

System action: Error indication is returned to the end user.

User response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate.

Problem determination: This problem probably arises during execution of the REORG utility with SHRLEVEL REFERENCE or CHANGE. See message DSNP027I.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 10, 14, 15, 32, 35.

00D70043

Explanation: During the define cluster for a undefined data set, DB2 detected that the specified data set requested to be defined already exists.

System action: A 'resource not available' code is returned to the end user.

User response: Delete the existing cluster and rerun the job.

00D70046

Explanation: This is an internal error. An attempt to extend a data set failed because an error is detected. The high used page number of the pageset recorded in DB2 does not match the high used control interval from the integrated catalog facility (ICF) catalog.

System action: The data sharing extend did not complete.

Operator response: Notify the system programmer or database administrator.

System programmer response: For additional information, see the description of message DSNP007I.

Problem determination: Obtain the console sheet showing the associated DSNP007I message. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D70051

Explanation: One of the following is issued on a ROSHARE OWNER database:

- A CREATE TABLESPACE statement
- A CREATE INDEX statement, or
- The REORG utility with SHRLEVEL REFERENCE or SHRLEVEL CHANGE using user-managed data sets

However, the data sets are not defined with VSAM SHAREOPTIONS(1,3).

System action: An SQLCODE -731 is returned to the end user (for CREATE TABLESPACE or INDEX) The CREATE TABLESPACE or INDEX statement or the REORG utility is not executed.

User response: Use AMS ALTER SHAREOPTIONS to alter the data set to SHAREOPTIONS(1,3) and resubmit the CREATE TABLESPACE or INDEX statement or the REORG utility.

00D70052

Explanation: An ALTER DATABASE statement is issued to convert a database to ROSHARE OWNER. But, within this database, at least one user defined data set is not defined with VSAM SHAREOPTIONS(1,3). All user-defined data sets that are within this database must be converted to SHAREOPTIONS(1,3) before the database can be altered to ROSHARE OWNER.

This reason code is issued by the following CSECT: DSNPATSO

System action: An SQLCODE -731 is returned to the end user and the ALTER DATABASE statement is not performed.

User response: Use AMS ALTER SHAREOPTIONS to alter all user-defined data sets that are within this database to SHAREOPTIONS(1,3), and resubmit the ALTER DATABASE statement.

00D70100

Explanation: A requested resource is not available. Either the data space manager (DSM) or some subcomponent that it invoked discovered that some resource is not available. The name and type of the resource and the reason it is unavailable are placed in the CT control block by the subcomponent that made the discovery. This information is made available to the end user in the SQLCA and/or messages. The reason code in the CT/SQLCA contains the identifier of the subcomponent that discovered the problem.

Almost any DSNP module can issue this reason code.

00D79999

System action: Abort the current request.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, determine what resource was unavailable (from SQLCA information) and, if it is something you can control, make it available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See the Problem Determination section in the description of the code that appears in the SQLCA or CTRURES field of the CT and/or in the description of any associated console messages. Obtain details of the request that resulted in this code, and contents of the SQLCA. Also obtain operator's console sheet showing related messages, if any.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 35.

00D79999

Explanation: A severe error has occurred. For example, an invalid data space manager (DSM) function is invoked.

Almost any data space manager (DSM) function can issue this reason code.

System action: Abort the request.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Obtain the console sheet, dump, details of the request that led to this code, and contents of the SQLCA. Use these in conjunction with the procedures in Part 2 of *DB2 Diagnosis Guide and Reference*.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 14, 32, 35.

Chapter 17. X'D9.....' codes

00D90000

Explanation: A recovery manager module received control from its FRR for retry and found an invalid retry point identifier. The name of the module in which the failure occurred appears in the SYS1.LOGREC entry showing this reason code in register 15.

System action: Standard DB2 diagnostic information is provided. The error is recorded in SYS1.LOGREC, an SVC dump is scheduled, and DB2 subsystem termination is requested. The subsystem termination reason code reflects the function for which retry was unsuccessfully attempted.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: This is a secondary subsystem error. Obtain a copy of SYS1.LOGREC and the SVC dump for this failure and for the original failure that resulted in the retry attempt.

Problem determination: Examine the SYS1.LOGREC information and the dumps from both the original failure and this second failure to determine if the recovery parameter area was damaged or if retry incorrectly restored registers for the mainline module.

00D90003

Explanation: A failure occurred while DB2 was attempting to open an object in the shared communications area (SCA).

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Operator response: Ensure the coupling facility for the SCA is available, and restart DB2.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRIT03

00D90004

Explanation: An error occurred while DB2 was attempting to create a service task.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRIT03

00D90010

Explanation: During the process of re-enabling data sharing, all members, other than the surviving member, are forced to cold start. In the process of setting up the cold start for this member, an active conditional restart control record was discovered in the BSDS. This record could not have been in the BSDS when data sharing was disabled, and this DB2 should have been inactive since data sharing was disabled; therefore, it is unclear what the conditional restart control record is requesting.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Use the change log inventory (DSNJU003) utility to cancel the active conditional restart control record in this member's BSDS.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 16.

This abend reason code is issued by the following CSECT: DSNRRGRI

00D90011

Explanation: DB2 determined that the version of the shared communications area (SCA) recorded within the SCA did not match the version of the SCA returned from MVS.

System action: Standard DB2 diagnostic information is

recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRGRI

00D90012

Explanation: An error occurred while DB2 was attempting to create a service task.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRGRI

00D90013

Explanation: The restart parameters for TRKRSITE are invalid. If TRKRSITE is YES on DSNZPARM and this DB2 subsystem has not successfully restarted in this 'Tracker Recovery cycle', DB2 requires special conditions before it can restart.

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

System programmer response: Ensure that the Conditional Restart Control Record is correct, then restart DB2. You can run the Print Log Map Utility (DSNJU004) to examine the current Conditional Restart record. The following conditions are correct:

- BACKOUT = NO
- FORWARD = NO
- Either an ENDRBA value for non-data sharing or an ENDLRSN value for data sharing. In data sharing, the ENDLRSN value must be the same for all members restarting in this 'Tracker Recovery cycle'.

To avoid a cold start or log skipping in a tracker site, ensure that STARTRBA has no specified value. You can

create or modify the Conditional Restart parameters with the Change Log Inventory Utility (DSNJU003). See *DB2 Utility Guide and Reference* for more information on these utilities.

00D90014

Explanation: The System Level Recovery restart was invalid. All members of the data sharing group must truncate their logs with the same LRSN value that was specified in the SYSPITR conditional restart parameter.

System action: DB2 startup terminates.

Operator response: Collect the SYS1.LOGREC and SVC dump, and contact the system programmer.

System programmer response: Ensure that the conditional restart control record is correct, and then restart DB2. You can run the Print Log Map utility (DSNJU004) to examine the current conditional restart record.

00D9001F

Explanation: An invalid function code was passed to a DB2 service task.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRUTT

00D90020

Explanation: During the process of re-enabling data sharing, the surviving member of the previous data sharing disable must be the first member started. An attempt was made to start a member other than the surviving member during the process of re-enabling data sharing.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Operator response: To initiate the data sharing re-enable process, start the surviving member of the previous data sharing disable first.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference*

for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRRSBS, DSNRRGRC

00D90021

Explanation: After data sharing is disabled, only the surviving member of the group can be started. An attempt was made to start a member other than the surviving member.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRSBS

00D90022

Explanation: After reading information from the BSDS of a peer member in its data sharing group, this DB2 was not able to close the peer's BSDS.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRRGRC, DSNRRINI, DSNRRSBS

00D90050

Explanation: Data sharing re-enable is cancelled.

This DB2 member was cancelled while waiting for other members of the data sharing group to complete their re-enable processing.

System action: Standard DB2 diagnostic information is

recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Operator response: To re-enable data sharing, start the surviving member again.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRGRT

00D900E0

Explanation: A DB2 functional recovery routine invoked DB2 subsystem termination because an unrecoverable error was detected.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the original problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRNTRY

00D900E1

Explanation: The operator replied 'NO' to message DSNR020I. See message DSNR020I for more information.

System action: DB2 terminates.

Problem determination: This abend reason code is issued by the following CSECT: DSNRRGRC

00D900EB

Explanation: This abend reason code appears at a member, other than the surviving member, when the surviving member is not able to complete the process of re-enabling data sharing. This member cannot continue because data sharing was not re-enabled successfully.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: Determine why the surviving member was not able to complete the data sharing re-enable.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRCRPR

00D900EC

Explanation: During the process of re-enabling data sharing, a member other than the surviving member was not able to complete its portion of the re-enabling process.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRCRPR

00D900F1

Explanation: DB2 received an error while attempting to read shared communications area (SCA) information from the coupling facility.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Correct the problem with the coupling facility, and restart DB2.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRCRPR, DSNRIT02, DSNRIT03, DSNRNTFY, DSNRRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

00D900F2

Explanation: DB2 received an error while attempting to write shared communications area (SCA) information to the coupling facility.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Correct the problem with the coupling facility, and restart DB2.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRIT02, DSNRIT03, DSNRRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

00D900F3

Explanation: DB2 received an error while attempting to read the BSDS.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Correct the problem with the BSDS, and restart DB2.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 16, 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRRGRI, DSNRRINI, DSNRSCA

00D900F4

Explanation: DB2 received an error while attempting to write to the BSDS.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Correct the problem with the BSDS, and restart DB2.

Problem determination: If you suspect an error in

DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 16, 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRNTFY, DSNRRGRT, DSNRSCA

00D900F5

Explanation: DB2 received an error while attempting to read the BSDS of another member in the data sharing group.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

System programmer response: Correct the problem with the BSDS, and restart DB2.

Problem determination: Register 4 contains the member ID of the member whose BSDS was being read.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 16, 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRRINI

00D900F7

Explanation: DB2 received an error while attempting to acquire a lock.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump might be requested. Depending on the error, DB2 might initiate subsystem termination.

Problem determination: Register 4 points to the resource that DB2 was attempting to lock.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRCRPR, DSNRIT02, DSNRIT03, DSNRRGRC, DSNRRGRH, DSNRRGRI, DSNRRSBS, DSNRSCA

00D900F8

Explanation: DB2 received an error while attempting to release a lock used to serialize portions of restart or group restart.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRIT02, DSNRIT03, DSNRRGRC, DSNRRGRH, DSNRRGRI, DSNRRGRT, DSNRRSBS, DSNRSCA

00D900F9

Explanation: DB2 received an error while attempting to notify other members in the data sharing group of a restart or group restart event.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNRCRPR, DSNRRGRI, DSNRRGRT

00D900FA

Explanation: The starting DB2 subsystem is an incompatible release of DB2 or the code does not have the proper level of SPE applied.

System action: The restart processing will abend, which will terminate the subsystem. No dumps will be taken.

System programmer response: Verify that:

- The correct load libraries are being used to start up the DB2 subsystem.
- The correct level of SPE has been applied.

Stop the DB2 subsystems that are running with a replaceable release.

This abend reason code is issued by the following CSECTs: DSNRRPRC, DSNRRSBS

00D90100

Explanation: A DB2 functional recovery routine invoked DB2 subsystem termination because an unrecoverable error was detected.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the original problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRTIMR

00D90110

Explanation: This is an internal error.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRNTFY

00D90111

Explanation: This is an internal error.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested before DB2 subsystem termination is initiated.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNRNTFY

00D92001

Explanation: The checkpoint/restart serial controller (DSNRCRSC) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRCRSC

System action: Subsystem termination is initiated. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the associated abend.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error, and follow the instructions associated with it.

Problem determination: See the original error.

00D92003

Explanation: The restart request servicer (DSNRRRQS) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a restart request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRRQS

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D92004

Explanation: The shutdown checkpoint controller (DSNRCSHT) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing a shutdown checkpoint request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRCSHT

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D92011

Explanation: An invalid URE was found during checkpoint processing. An overlay of the URE may have occurred.

This abend reason code is issued by the following CSECT: DSNRPBCW

System action: The checkpoint process will ABEND to prevent a damaged URE from being written out to the log, and the subsystem will be terminated. This is to prevent the loss or incorrect processing of a DB2 unit of recovery (UR). DB2 Restart will use the previous checkpoint and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer. Restart DB2.

System programmer response: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the URE overlay.

00D92012

Explanation: An invalid RURE was found during checkpoint processing. An overlay of the RURE may have occurred.

This abend reason code is issued by the following CSECT: DSNRPBCW

System action: The checkpoint process will abend to prevent a damaged RURE from being written out to the log, and the subsystem will be terminated. This is to prevent the loss or incorrect processing of a DB2 unit of recovery. DB2 Restart will use the previous checkpoint

and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer. Restart DB2.

System programmer response: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the RURE overlay.

00D92013

Explanation: An invalid GXID was found during checkpoint processing. An overlay of the GXID might have occurred.

System action: The checkpoint process will abnormally terminate to prevent a damaged GXID from being written out to the log, and the subsystem will be terminated. This is to prevent the loss of or incorrect processing of a DB2 unit of recovery. DB2 restart will use the previous checkpoint and apply all the DB2 log records up to the point of failure. Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator response: Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer. Restart DB2.

System programmer response: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Examine the SVCDUMP and the DB2 Trace Table in the dump to determine the cause of the GXID overlay.

00D92021

Explanation: An invalid URE was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged URE.

This abend reason code is issued by the following CSECT: DSNRPLCS

System action: The restart processing abends, which terminates the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

Operator response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Print the BSDS using the print log map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the change log inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the Begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid URE was written to the log. The restart process is then able to apply all the log records to the end of the log. For information on running DSNJU004 and DSNJU003, see *DB2 Utility Guide and Reference*.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D92022

Explanation: An invalid RURE was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged RURE.

This abend reason code is issued by the following CSECT: DSNRPLCS

System action: The restart processing will abend, which will terminate the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

Operator response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Print the BSDS using the print log map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the change log inventory (DSNJU003) utility to create a conditional restart record with the

CHKPTRBA option specifying the begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid RURE was written to the log. The restart process is then able to apply all the log records to the end of the log. For information on running the DSNJU004 and DSNJU003 utilities, refer to *DB2 Utility Guide and Reference*.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D92023

Explanation: An invalid record was read from the log during the current status rebuild phase of restart. Restart cannot process the damaged log record.

System action: The restart processing will abnormally terminate, which will terminate the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. The first 4 digits of the RBA of the invalid log record is contained in register 3 and the last 8 digits in register 4.

Operator response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Print the BSDS using the Print Log Map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the Change Log Inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid record was written to the log. The restart process then applies all the log records to the end of the log. For information on running the DSNJU004 and DSNJU003 utilities, refer to *DB2 Utility Guide and Reference*.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D92024

Explanation: During restart, the state of a logged unit of recovery and the state of the global transaction which the unit of recovery is part of are incompatible.

System action: The restart processing abnormally terminates, which terminates the subsystem. This is to prevent the loss or incorrect processing of a DB2 unit of recovery.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Problem determination: The state of the logged unit of recovery is reported in register 1 and the state of the global transaction is provided in register 2. The meanings of these values are shown below.

Unit of recovery state (in register 1):

- | | |
|---|----------------|
| 1 | inflight |
| 2 | ensure abort |
| 3 | commit indoubt |
| 4 | ensure commit |

Global Transaction State (in register 2):

- | | |
|---|----------------|
| 1 | inflight |
| 2 | ensure abort |
| 3 | commit indoubt |
| 4 | ensure commit |

Operator response: Do not attempt to restart DB2 until the error is resolved. Notify the system programmer and collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Print the BSDS using the Print Log Map (DSNJU004) utility. Find the checkpoint queue in the output listing from DSNJU004.

Next, run the Change Log Inventory (DSNJU003) utility to create a conditional restart record with the CHKPTRBA option specifying the begin checkpoint RBA found in the second entry of the checkpoint queue. Restart DB2 using the conditional restart record found. If the same failure occurs, repeat the conditional process using the next begin checkpoint RBA in the checkpoint queue.

Repeat this process, going down the checkpoint queue until DB2 restarts. This will be prior to the time when the invalid record was written to the log. The restart process then applies all the log records to the end of the log. For information on running DSNJU004 and DSNJU003, see *DB2 Utility Guide and Reference*.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D93001

Explanation: The commit/abort FRR (DSNRCAFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during must-complete processing for phase 2 of a commit-UR request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLMabend codes," on page 723.

This reason code is issued by the following CSECTs: DSNRCAFR, DSNRUC02

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D93002

Explanation: The DB2 subsystem is terminated because an unrecoverable error was detected during must-complete processing for phase 2 of a commit-UR request for an agent that is a participant in a global transaction.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLMabend codes," on page 723.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2. Notify the system programmer.

System programmer response: This is probably either an error in DB2 or in the commit of the global transaction. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D9300F

Explanation: The commit/abort secondary FRR invoked DB2 subsystem termination. This occurs only if functional recovery itself fails while processing a failure during must-complete processing for phase 2 of a commit-UR request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, “IRLM abend codes,” on page 723.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error. Standard DB2 diagnostic information is also recorded in SYS1.LOGREC for the secondary error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC for both the original and the secondary error, and the SVC dump for the original error.

Problem determination: See the original error.

00D93011

Explanation: A subcomponent of DB2 invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was requested for an agent that was modifying data. Either commit-UR or abort-UR was already in process, or the recovery structure (URE) was damaged.

This abend reason code is issued by the following CSECT: DSNRUC01

System action: Abnormal termination of the agent results, including backing out (abort-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area by reason code '00D9CCCC', is added to the SDWA variable recording area (VRA).

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If the agent were in a must-complete state (in-commit2 or in-abort), the DB2 subsystem is also terminated with reason code '00D93001'. When the subsystem is next restarted, recoverable activity for this agent (such as an ensure-abort or ensure-commit UR) is handled to complete the commit or abort process.

System programmer response: This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

Problem determination: Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether either commit-UR was invoked incorrectly or the control structure that reflects the state (ACEPROG, UREPROG) was damaged.

00D93012

Explanation: A subcomponent of DB2 invoked commit when the agent state was invalid for commit-UR invocation. Commit-UR was invoked for an agent that was only retrieving data. Either commit-UR or abort-UR was already in process, or the ACE progress state field was damaged.

This abend reason code is issued by the following CSECT: DSNRUC01

System action: Abnormal termination of the agent results, including backing out (abort-UR) of its activity to the previous point of consistency. This releases all locks held by the agent for its resources.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA variable recording area by reason code '00D9CCCC', is added to the SDWA variable recording area.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

System programmer response: This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

Problem determination: Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether either commit-UR was invoked incorrectly or the control structure (ACEPROG) was damaged.

00D93013

Explanation: The request to commit an agent that was a participant in a global transaction failed because a mismatch between the state of the agent and the state of the global transaction. State field was damaged.

System action: Abnormal termination of the agent occurs, including backing out (abort-UR) its activity to the previous point of consistency. This releases all resource locks held by the agent.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled.

Operator response: Notify the system programmer.

System programmer response: This is probably either an error in DB2 or in the commit of the global transaction. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 records on the

SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00D93100

Explanation: This reason code indicates that a DB2 allied agent does not need to participate in the Phase 2 (Continue Commit) call, because all required work has been accomplished during the Phase 1 (Prepare) call.

This reason code is generated by Recovery Manager when it is determined that a DB2 allied agent has not updated any DB2 resource since its last commit processing occurred.

System action: The "yes" vote is registered with the Commit coordinator.

00D94001

Explanation: The commit/abort FRR (DSNRCAFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during must-complete processing for an abort-UR request.

This is a DB2 subsystem termination reason code.

This reason code is issued by the following CSECTs: DSNRCAFR, DSNRUA02

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the reason code for the original error.

00D94002

Explanation: The DB2 subsystem is terminated because an unrecoverable error was detected during must-complete processing for an abort-UR request for an agent that is a participant in a global transaction.

This is a DB2 subsystem termination reason code.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination initiates.

Operator response: Print SYS1.LOGREC, and restart

DB2. Notify the system programmer.

System programmer response: This is probably either an error in DB2 or in the commit of the global transaction. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with the commit coordinator of the global transaction.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2,

00D9400F

Explanation: The commit/abort FRR invoked DB2 subsystem termination. This occurs only if functional recovery itself fails while processing a failure during must-complete processing for an abort-UR request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLMabend codes," on page 723.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error. Standard DB2 diagnostic information is also recorded in SYS1.LOGREC for the secondary error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC for both the original and the secondary error, and the SVC dump for the original error.

Problem determination: See the original error.

00D94011

Explanation: A subcomponent of DB2 invoked abort at a point when the agent state is invalid for invoking the function that aborts units of recovery. Either abort-UR or commit-UR phase 2 was already in process, or the agent structure was damaged.

Thisabend reason code is issued by the following CSECT: DSNRUA01

System action: Abnormal termination of the agent results and, because the agent is in a must-complete state, the DB2 subsystem is terminated with reason code '00D94001'. When the DB2 subsystem is restarted, recoverable activity for this agent is handled to complete the commit or abort process.

Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is scheduled. Additional information, identified in the SDWA

variable recording area by reason code '00D9AAAA7', is added to the SDWA variable recording area. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

System programmer response: This is a DB2 subsystem error. Collect the materials mentioned in the Problem Determination section of this message.

Problem determination: Examine the SYS1.LOGREC data and the DB2 trace table in the dump to establish whether commit-UR was invoked incorrectly or the control structure (ACEPROG, UREPROG) was damaged.

00D94012

Explanation: During rollback, the end of the log was read before all the expected log ranges were processed. The abend is accompanied by a DB2 abnormal subsystem termination with reason code 00D94001.

This reason code is issued by the following CSECT: DSNRUA02

System action: The agent is abnormally terminated. Because the agent is in a must-complete state, the DB2 subsystem is terminated with reason code 00D94001 and message DSNV086E. Standard DB2 diagnostic information is recorded in SYS1.LOGREC. An 04E-D94012 SVC dump is requested.

Operator response:

1. Run the print log map (DSNJU004) utility to print the content of both BSDSs.
2. Print SYS1.LOGREC.
3. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Refer to the recovery scenarios in Part 4 (Volume 1) of *DB2 Administration Guide* before restarting.

To restart DB2, you must do one of the following:

- Add the missing archive log data sets back to the BSDS with the change log inventory (DSNJU003) utility and increase the MAXARCH parameter in the DSN6LOGP member of DSNZPARM to complete the rollback, or
- Restart DB2 with a conditional restart specifying BACKOUT=NO to bypass the unit of recovery that is in-abort.

Problem determination: At the time of the abend, registers 3 and 4 contain the 6-byte relative byte address (RBA) of the beginning of this unit of recovery. DB2 must read the log back to this point to complete the ROLLBACK of this unit of recovery.

00D94014

Explanation: A savepoint request encountered an invalid request block. This is an internal error.

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested.

Operator response: Collect all relevant diagnostic materials, including SYS1.LOGREC, SVC dump, and console output. Notify the system programmer.

Problem determination: At the time of the abend, general register zero contains the address of the invalid SRPL request block.

00D95001

Explanation: The recovery manager's common FRR (DSNRCRFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during checkpoint (DSNRCPRC) processing.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECTs: DSNRCRFR, DSNRCPRC

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D95011

Explanation: The recovery manager checkpoint (DSNRPBCW) FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while performing its checkpoint functions.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRPBCW

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D96001

Explanation: The recovery manager's restart FRR invoked DB2 subsystem termination, because an unrecoverable error was detected during the restart processor (DSNRRPRC) processing.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECTs:

DSNRCRFR DSNRRAUB DSNRRCSL DSNRRCSR
DSNRRHSL DSNRRHSR DSNRRPMU DSNRRPRC

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D96011

Explanation: The restart participation FRR invoked DB2 subsystem termination, because an unrecoverable error was detected while processing log records during restart.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRPBCS

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, correct the problem, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D96021

Explanation: The DB2 subsystem was terminated during restart because a failure occurred while attempting to read the log forward MODE(DIRECT). It is accompanied by a recovery log manager abend X'04E' with a reason code describing the specific failure.

Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECTs: DSNRRHSR, DSNRRCSR

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. If possible, correct cause of original error and restart DB2. If you cannot correct the error, refer to Part 4 (Volume 1) of *DB2 Administration Guide*.

00D96022

Explanation: The restart FRR invoked abend, because, while reading the log forward during restart, the end-of-log was read before all recovery log scopes had been processed. It is followed by DB2 abnormal subsystem termination with the same reason code ('00D96022').

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRHSR

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the abend before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.

3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. If you cannot correct the error, refer to Part 4 (Volume 1) of *DB2 Administration Guide*.

Problem determination: At the time of the abend, registers 2 and 3 (as shown in the dump or in SYS1.LOGREC) contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

00D96031

Explanation: The restart FRR invoked DB2 subsystem termination, because a failure occurred while attempting to read the log backward MODE(DIRECT). It is accompanied by a recovery log manager abend X'04E' with a reason code describing the specific failure.

Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRRAUB

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the accompanying abend reason code.

00D96032

Explanation: During restart, the end of the log was read before all the expected log ranges had been processed. The abend is accompanied by a DB2 abnormal subsystem termination with the same reason code ('00D96032').

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRRAUB

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC. A 04E-D96032 SVC dump is requested. The DB2 subsystem is terminated with DSNV086E message.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Notify your system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error. Determine where the log went. Refer to Part 4 (Volume 1) of *DB2 Administration Guide* before restarting.

Problem determination: At the time of the abend, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

00D96041

Explanation: The recovery manager's restart function detected an internal error.

This abend reason code is issued by the following CSECT: DSNRXRU

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the error. For more information see message DSNL429.

Operator response: Notify the system programmer.

System programmer response: See message DSNL429 for more information.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00D98001

Explanation: The recovery manager's common FRR (DSNRCRFR) invoked DB2 subsystem termination, because an unrecoverable error was detected during indoubt-UR (DSNRRIPR, DSNRRIRD, DSNRRIUN, DSNRIPMU) processing.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT:
DSNRCRFR

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the original error.

00D98011

Explanation: The FRR for the resolve-indoubt-UR request servicer (DSNRIURS) invoked DB2 subsystem termination, because an unrecoverable error was detected processing a request.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT:
DSNRIURS

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response: Print SYS1.LOGREC, and restart DB2.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the accompanying abend reason code.

00D98021

Explanation: The resolved indoubt FRR invoked DB2 subsystem termination because of a failure while attempting to read the log MODE(DIRECT) during forward recovery. It is accompanied by a recovery log manager abend X'04E' with a reason code describing the specific failure.

Each time a portion of the log is skipped, a read direct is used to validate the beginning RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT:
DSNRRIRD

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is

requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the accompanying abend reason code.

00D98022

Explanation: Resolved indoubt invoked abend when end-of-log was reached before all ranges had been processed for forward recovery. This abend is accompanied by abnormal DB2 subsystem termination with the same reason code ('00D98022').

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT:
DSNRRIRD

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: At the time of the abend, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

00D98031

Explanation: The resolved indoubt FRR invoked DB2 subsystem termination, because a failure occurred during an attempt to read the log MODE(DIRECT) while reading the log backward. It is accompanied by a

recovery log manager abend X'04E' with a reason code describing the specific failure.

Each time a portion of the log is skipped, a read direct is used to validate the begin-scope RBA of the portion that is read.

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRRIUN

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: See the accompanying abend reason code.

00D98032

Explanation: Resolved indoubt FRR invoked abend when end-of-log was reached before all ranges had been processed for backward recovery. This abend is accompanied by abnormal DB2 subsystem termination with the same reason code ('00D98032').

This is a DB2 subsystem termination reason code. For further information, see Chapter 33, "IRLM abend codes," on page 723.

This reason code is issued by the following CSECT: DSNRRRIUN

System action: Standard DB2 diagnostic information is recorded in SYS1.LOGREC, and an SVC dump is requested for the original error before DB2 subsystem termination is initiated.

Operator response:

1. Run the print log map (DSNJU004) utility to print content of both BSDSs.
2. Print SYS1.LOGREC.
3. Follow instructions for the accompanying recovery log manager error. Use the MVS DISPLAY DUMP command to get the failure reason code from dump titles.
4. Start DB2 again.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump for the original error.

Problem determination: At the time of the abend, registers 2 and 3 contain the 6-byte relative byte address (RBA) of the last log record that was read before end-of-log was encountered.

00D99001

Explanation: An attempt to read the CHKPTRBA failed to return a valid checkpoint record. This abend is issued after the DSNR015I error message is issued.

System action: Restart is abended.

Operator response: Inform the system programmer.

System programmer response: Let the change log inventory (DSNJU003) utility select the checkpoint RBA when building the conditional restart record. If a specific checkpoint is desired, use DSN1LOGP to print out the checkpoint log records within a specified range. If manual selection of the checkpoint RBA is desired, use the print log map (DSNJU004) utility to print the checkpoint queue. Print the checkpoint queue by using the CHKPTRBA keyword.

Problem determination:

- Print the checkpoint records within the desired range using DSN1LOGP.
- Print the checkpoint queue using DSNJU004.
- Verify the checkpoint queue against the DSN1LOGP report.
- If automatic checkpoint selection was used and the checkpoint was invalid, find the valid checkpoint RBA in the DSN1LOGP report. Use this checkpoint RBA in the CRCL using the CHKPTRBA keyword.
- If an explicit checkpoint was specified and the checkpoint was invalid, let DSNJU003 automatically choose the checkpoint by not specifying a CHKPTRBA keyword.

00D99002

Explanation: Validation of the STARTRBA failed because either the end of the log was reached, or a bad log record was encountered while attempting to find the first complete log record.

System action: Restart abends.

Operator response: Inform the system programmer.

System programmer response: Check the console log for DSNJ (Log Manager) messages; these may indicate failures in the Log Manager processing, or may reveal additional useful information for diagnostic purposes. Use DSN1LOGP to find a safe STARTRBA to use for restart. If a STARTRBA is specified, the Recovery Manager will use it as a starting point. From the starting point, the Recovery Manager will attempt to find the beginning of a valid log record.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 16.

00D99003

Explanation: CSRONLY was specified in the conditional restart record. Only the DB2 status phase of restart will complete.

System action: Restart abends.

System programmer response: Use the change log inventory (DSNJU003) utility to cancel the current conditional restart record or create a new conditional restart record.

00D99004

Explanation: A log read failed because an internal error was detected by the data manager while examining the log record during DB2 restart.

This abend reason code is issued by the following CSECT: DSNRRHSL

System action: The execution unit writes a record to SYS1.LOGREC and requests a SVC dump. Restart abends.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC and SVC dump. Notify the system programmer.

System programmer response: Obtain the SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: RM standard diagnostic information is provided in "Recovery Manager Reason Codes (X'D9')". In addition, the following diagnostic information is provided in registers:

Register 0

The data manager ERQUAL that identifies the place within the data manager filter routine where the error was detected

Register 2,3

The RBA of the log record that was being read at the time of the error

Register 8

The address of *ssnm*DBM1's selection block

Register 9

The address of DSCF' selection block

00D99900

Explanation: The request to commit the unit of recovery failed because the agent is a participant in a global transaction and the global transaction is going to be backed out.

System action: The unit of recovery is not committed.

User response: The application must roll back to the previous COMMIT.

00D9AAAA

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during abort-UR.

This reason code appears only in the SDWA variable recording area (VRA) and serves only to identify data (in addition to the standard DB2 diagnostic information that is stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code. If no data is added, the reason code in the SDWA VRA is the same as that associated with the completion code.

This reason code is issued by the following CSECT: DSNRCAFR

System action: Five bytes of data preceded by code VRAHEX are stored following the EBCDIC string 'RMC-COMMIT/ABORT'.

Length Data

1 byte Retry flags

1 byte Retry id

1 byte Notification RMID

2 bytes ACE progress state (ACEPROG)

System programmer response: Use this information in conjunction with other information for the primary failure. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D9BBBB

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during begin-UR.

This reason code appears only in the SDWA variable recording area (VRA) and it serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code. If no data is added, the reason code in the SDWA VRA is the same as that associated with the completion code.

This reason code is issued by the following CSECT: DSNRUB01

System action: The following data is stored preceded by code VRAHEX.

Length Data

4 Content of ACEURE

4 URE address

00D9CCCC • 00D9EEEE

4	DSNWRCRD return code
1	Retry flags

System programmer response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D9CCCC

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during commit-UR.

This reason code appears only in the SDWA variable recording area (VRA) and serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code.

This reason code is issued by the following CSECT:
DSNRCAFR

System action: Five bytes of data preceded by code VRAHEX are stored following the EBCDIC string 'RMC-COMMIT/ABORT'.

Length	Data
1 byte	Retry id
1 byte	Notification RMID
1 byte	ACE progress state (ACEPROG)
1 bit	In flight
1 bit	In-Commit1
1 bit	Indoubt
1 bit	In-Commit2
1 bit	End-Commit
1 bit	In-Abort
1 bit	End-Abort
1 bit	(Reserved)

System programmer response: Use this information with the instructions for the specific failure. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00D9EEEE

Explanation: This reason code identifies additional data stored in the SDWA variable recording area following a failure during end-UR.

This reason code appears only in the SDWA variable recording area (VRA) and serves only to identify data (in addition to the standard DB2 diagnostic information, stored in the SDWA). This reason code is the first data item of the standard information. As such, it always appears in the VRA of an SDWA for a primary error completion/reason code.

This reason code is issued by the following CSECT:
DSNRUE01

System action: The following data is stored preceded by code VRAHEX.

Length	Data
4	URE address
4	DSNWRCRD return code

System programmer response: Use this information in conjunction with the information about the error completion code. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 18. X'E2.....' codes

00E20001

Explanation: The get variable storage function detected that input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

Register 4 contains the address of the pool header block (PHB), which contains information for the current status of the pool.

Register 7 contains the value of the caller's saved register 14.

Register 3 contains the input request length.

Register 5 contains the input request owner ID.

Offset X'1EF' in the SDWA contains a VRACAN key of X'3D', followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20002

Explanation: The free variable storage function detected that input parameters (either the pool address or the pool type) passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers

contain the indicated diagnostic information:

Register 4 contains the address of the pool header block (PHB), which contains information for the current status of the pool.

Register 7 contains the value of the caller's saved register 14.

Offset X'1EF' in the SDWA contains a VRACAN key of X'3D', followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20003

Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain storage (from GETMAIN) to expand a storage pool. However, GETMAIN indicated that sufficient storage in the private area was not available.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size. If the region size is already defined at the maximum, consider enabling the CONTSTOR system initialization parameter. For more information, see *DB2 Installation Guide*.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker. The trace information contains the requested amount of storage.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20004

Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain additional storage (from GETMAIN)

to expand a storage pool. However, the pool attributes defined at the time the pool was created indicated that the pool was already at maximum size.

Thisabend reason code is issued by the following CSECT: DSNISVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20005

Explanation: The free variable storage function detected that the address of a block being freed was invalid. That is, it did not lie within an existing storage pool.

Thisabend reason code is issued by the following CSECT: DSNISVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. Register 11 contains the address of the invalid block to be freed.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20006

Explanation: The free variable storage function detected that the block being freed was not allocated. That is, it was already free.

Thisabend reason code is issued by the following CSECT: DSNISVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. Register 11 contains the address of the free block.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20007

Explanation: The allocate variable storage pool function detected that the input parameters passed by the invoker were invalid.

Thisabend reason code is issued by the following CSECT: DSNISVPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input maximum pool size.
- Register 4 contains the input expansion segment size.
- Register 5 contains the input initial segment size.

The trace information contains the address of the invalid parameter list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20008

Explanation: The free variable storage pool function detected that the input parameter (PHB—pool header block) did not represent an existing pool.

This abend reason code is issued by the following CSECT: DSNSVPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information contains the address of the invalid PHB (pool header block).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20009

Explanation: The get fixed blocks function detected that input parameters passed by the invoker were invalid.

This abend reason code is issued by the following CSECT: DSNSFBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

Register 4 contains the address of the pool header block (PHB).

Register 7 contains the value of the caller's saved register 14.

Register 5 contains the number of blocks requested.

The invalid input parameters are also contained in the trace information.

Offset X'1EF' in the SDWA contains a VRACAN key of X'3D', followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2000A

Explanation: The get tracked storage function requested storage from the DSNSGETM function for a tracking element in order to track the storage to be returned to the invoker. However, storage for the tracking element was unavailable. The invoker's request was unconditional.

This abend reason code is issued by the following CSECT: DSNSGMN

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2000B

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, GETMAIN indicated that insufficient storage existed in the private area.

This abend reason code is issued by the following CSECT: DSNSFBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size. If the region size is already defined at the maximum, consider enabling the CONTSTOR system initialization parameter. For more information, see *DB2 Installation Guide*.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. The trace information contains the number of blocks requested.

At offset 1EF in the SDWA, there is a VRACAN key of

'3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2000C

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, the pool attributes defined at the time the pool was created indicated that the pool was already at maximum size.

This abend reason code is issued by the following CSECT: DSNSFBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. The trace information contains the number of blocks requested.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2000D

Explanation: DB2 detected that either the address of a block being freed (the only block or a block on a chain of blocks) was invalid or the block did not lie within an existing storage pool.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: The most likely cause of the problem is a storage overlay or an invalid storage request from a DB2 component. A product other than DB2 could cause the storage overlay problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 7 contains the value of the caller's saved register 14. Register 11

contains the address of the invalid block to be freed.

At offset X'1EF' in the SDWA, there is a VRACAN key of X'3D', followed by the module name of the storage manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

This abend reason code is issued by the following CSECT: DSNSFBK

00E2000E

Explanation: DB2 detected that a segment of storage within the pool on which the request was directed was invalid or contained an invalid 'free chain' of free blocks in the segment.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: The most likely cause of the problem is a storage overlay or an invalid storage request from a DB2 component. A product other than DB2 could cause the storage overlay problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. Register 11 contains the address of the block to be freed if freeing a fixed block.

At offset X'1EF' in the SDWA, there is a VRACAN key of X'3D', followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

This abend reason code is issued by the following CSECT: DSNSFBK

00E2000F

Explanation: The free fixed block(s) function detected that the only block, or the one block on the chain of blocks, being freed did not represent an allocated block; that is, it was already free.

This abend reason code is issued by the following CSECT: DSNSFBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14. Register 11 contains the address of the free block.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20010

Explanation: The allocate fixed-block pool function detected an invalid input parameter passed by its invoker.

This abend reason code is issued by the following CSECT: DSNSFPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input request block size.
- Register 4 contains the input maximum pool size.
- Register 5 contains the input expansion segment size.

The trace information also contains the address of the invalid parameter list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20011

Explanation: The free fixed-block pool function detected that the input parameter either was not a valid pool header block (PHB), or it did not represent an existing pool.

This abend reason code is issued by the following CSECT: DSNSFPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information has the address of the pool header block (PHB).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20012

Explanation: The get tracked storage from the GETMAIN function detected an invalid input parameter passed by its invoker.

This abend reason code is issued by the following CSECT: DSNSGMN

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general purpose registers contain the indicated diagnostic information:

- Register 2 contains the input parameter list address.
- Register 3 contains the input request length.
- Register 4 contains the input storage class.

The trace information has the address of the invalid parameter list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20013

Explanation: The get tracked storage from GETMAIN function was unable to obtain sufficient storage in private area to satisfy an unconditional request.

This abend reason code is issued by the following CSECT: DSNSGMN

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is

requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed. The trace information has the address of the parameter list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20014

Explanation: The free tracked storage function detected that the area requested to be freed was not valid. Either the address did not represent storage currently allocated (via the DSNSGETM function), or the storage class passed as input to DSNSFREM did not match the class assigned to the storage by DSNSGETM.

This abend reason code is issued by the following CSECT: DSNSGMN

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information has the address of the storage and the storage class.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20015

Explanation: The allocate stack function, which is always unconditional, requested storage from GETMAIN to obtain a stack segment. GETMAIN indicated that 8K bytes of private area storage in subpool 229 was not available.

This abend reason code is issued by the following CSECT: DSNSVSTK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase maximum private storage.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. There is probably a shortage of private area storage in the address space in which the failure occurred. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20016

Explanation: The get stack storage function, in order to satisfy an unconditional request for stack storage, requested storage from GETMAIN. However, GETMAIN indicated that sufficient storage in subpool 229 was not available.

This abend reason code is issued by the following CSECT: DSNSVSTK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20017

Explanation: The free stack storage function detected that the address of the area to be freed did not lie within allocated storage in the stack indicated by the requester.

This abend reason code is issued by the following CSECT: DSNSTACK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20018

Explanation: The get stack storage function detected that the amount of storage requested by the invoker was less than or equal to zero.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E20019

Explanation: The purge pool function detected that input parameters passed by the invoker were invalid.

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The following general registers contain the indicated diagnostic information:

Register 4 contains the input pool address.

Register 5 contains the input pool owner ID.

The trace information also contains the input parameters.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2001A

Explanation: ESTAE recovery can not be established, because either an unexpected error occurred, or SCB is not available.

System action: The agent is abended.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 15 contains the return code from DSN3EST0; this is the MVS ESTAE return code.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2001B

Explanation: The SETLOCK OBTAIN function issued a nonzero return code.

System action: The invoker of storage manager functions is abnormally terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2001C

Explanation: The purge stack function detected that one of the SKBs (stack block) is not valid and the SKB chain is possibly damaged.

This abend reason code is issued by the following CSECT: DSNSPURS

System action: The SKB chain is repaired and processing continues.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information contains the address of the EB for which the stack segments are to be purged.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2001D

Explanation: Either GPVT (global pool anchor) or LPVT (local pool anchor) is damaged, and no storage managed by storage manager can be accessed.

This abend reason code is issued by the following CSECT: DSNRSRUP

System action: The DB2 subsystem is abended. In some cases, the FRR is established by the caller of the storage manager (SM) subcomponent. When this is the case, the SVC dump is requested by the caller. When this is not the case, the SM requests the SVC dump.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump is requested,

but in some cases the dump request is made by the caller of storage manager, rather than by storage manager itself. Register 6 contains the address of the EB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2001E

Explanation: The get stack storage function detected that two asynchronous (unrelated) agents use the same stack storage.

This abend reason code is issued by the following CSECT: DSNSVSTK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the address of the stack segment (SKB). Register 6 contains the address of the EB. In the event of an ABEND, DSNTFRCV saves information in the VRA of the SDWA.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2001F

Explanation: In order to satisfy an unconditional request for storage, the get variable storage function needed to obtain storage (from GETMAIN) to expand a storage pool. However, GETMAIN indicated that sufficient storage in common service area (CSA) to expand the pool was not available.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase common service area (CSA) size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The common service area (CSA) portion of the dump should be printed. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the caller's saved register 14.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20020

Explanation: The get variable pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in private area was not available.

This abend reason code is issued by the following CSECT: DSNSVPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20021

Explanation: The get variable pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in common service area (CSA) was not available.

This abend reason code is issued by the following CSECT: DSNSVPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase common service area (CSA) size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20022

Explanation: In order to satisfy an unconditional request, the get fixed block(s) function needed to obtain additional storage to expand a storage pool. However, GETMAIN indicated that sufficient storage in common service area (CSA) was not available.

This abend reason code is issued by the following CSECT: DSNSFBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase common service area (CSA) size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 4 contains the address of the pool header block (PHB). Register 7 contains the value of the saved caller's register 14. The common service area (CSA) portion of the dump should be printed.

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20023

Explanation: The get fixed pool function needed to obtain storage (from GETMAIN) to create pool header block (PHB) to represent the pool, but GETMAIN indicated that sufficient storage in private area was not available.

This abend reason code is issued by the following CSECT: DSNSFPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20024

Explanation: To create a pool header block (PHB) that represents the pool, the get fixed pool function requested storage from GETMAIN. However, GETMAIN indicated that insufficient storage existed in the common service area (CSA) to satisfy the request.

This abend reason code is issued by the following CSECT: DSNSFPL

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: Increase common service area (CSA) size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is

requested. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20025

Explanation: The get tracked storage from GETMAIN function was unable to obtain sufficient storage in common service area (CSA) to satisfy an unconditional request.

This abend reason code is issued by the following CSECT: DSNSGMN

System action: The agent is abended.

System programmer response: Increase common service area (CSA) size.

Operator response: Notify the system programmer.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. The trace information has the address of the parameter list. The common service area (CSA) portion of the dump should be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20026

Explanation: Either the allocate stack storage function or the get stack storage function was unable to obtain 4KB of private area storage in subpool 229 for an all-segment table in which a record (representing a stack storage segment) was to be inserted.

This abend reason code is issued by the following CSECT: DSNSVSTK

System action: The invoker of the function is abended.

Operator response: Notify the system programmer.

System programmer response: Increase region size.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. There is probably a shortage of private area storage in the address space in which the failure occurred. Register 2 contains the ASID, in hexadecimal, of the private area to be printed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E20027

Explanation: The free variable storage function detected that unallocated storage in the block being freed has been modified.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
4	address of the pool header block (PHB)
7	value of the caller's saved register 14
11	address of the block to be freed

The block to be freed includes two parts: a four word header of control information and the block itself. The second word in the header (offset of 4) is the length of the block.

The third word in the header (offset of 8) is the address of the storage requester. The block is made up of two parts: allocated storage and two words of unallocated storage (padding area of '03').

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

00E20028

Explanation: Either the get stack, deallocate stack or release stack storage function detected that an SKB was invalid or was not represented accurately in the all-segment table.

This abend reason code is issued by the following CSECTs: DSNSVSTK, DSNSTACK

System action: The invoker is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is

requested. Register 7 contains the value of the stack segment (SKB).

00E20029

Explanation: The free variable storage function detected that although the address of the block being freed was within the specified storage pool it was not the address of the beginning of a variable block.

This abend reason code is issued by the following CSECT: DSNSVBK

System action: The agent is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
4	value of the pool header block (PHB)
7	address of the caller's saved register 14
11	address of the invalid block to be freed

At offset 1EF in the SDWA, there is a VRACAN key of '3D' (in HEX), followed by the module name of the Storage Manager invoker.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E2002A

Explanation: The SMC Recovery Stack Management function detected that the number of allowed entries in the SMC Recovery Stack has been exceeded, or the structure has been incorrectly modified.

System action: The invoker is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 6 contains the address of the current execution block (EB). This EB has a pointer to the current head stack block (SKB) that is encountering the problem.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2002B

Explanation: This abend code is used to force percolation in the case when an abend is encountered while in Storage Manager code and the Storage Manager has been called recursively.

Problem determination: Refer to the originating abend code.

00E2002C

Explanation: DB2 detected that the free chain in a data space was damaged.

This abend reason code is issued by the following CSECT: DSNSDSGM

System action: The requested function is not performed. A DB2 dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2002D

Explanation: DB2 is unable to create a data space.

This abend reason code is issued by the following CSECT: DSNSDSGM

System action: The requested function is not performed. A DB2 dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. If the error was caused by DSPSERV, the reason code from DSPSERV is saved in register 15. If the error was caused by ALESERV, the return code from ALESERV is saved in register 15. Refer to the appropriate MVS publication for the meaning of the return and reason codes.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2002E

Explanation: DB2 detected an internal error during the freeing of data space storage.

This abend reason code is issued by the following CSECT: DSNSDSFM

System action: The requested function is not performed. A DB2 dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E2002F

Explanation: DB2 detected an internal error during the freeing of data space storage.

This abend reason code is issued by the following CSECT: DSNSDSFM

System action: The requested function is not performed. A DB2 dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 3, 5.

00E20032

Explanation: DB2 detected an internal error while
processing storage. This abend reason code is issued by
the CSECT indicated in the dump title.

System action: The requested function is not
performed. A DB2 dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal
error. Refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting
the problem.

Problem determination: Diagnostic information is
recorded in SYS1.LOGREC, and a DB2 dump is
requested.

Chapter 19. X'E3.....' codes

00E30001

Explanation: A service controller internal inconsistency has been encountered. This is probably a DB2 subsystem error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abnormally terminated.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30003

Explanation: An error was returned from a data manager restore operation. This abend is issued to ensure that changes made to the catalog by a failing BIND function are backed out.

System action: The BIND function is abended. All effects of the BIND operation are rolled back. A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller code, using the data manager restore function, has detected an error while trying to undo the results of a BIND operation. The data manager return and reason code encountered can be found in the CTDMRETC and CTSIRCOD fields of the cursor table pointed to by register 7 in the SDWA.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30004

Explanation: This abend is issued by the service controller initialization module whenever an error return code is received from a database services subcomponent participating in the DB2 startup process. This abend ensures that DB2 is terminated.

System action: The database services shutdown process is initiated after an SVC dump is requested, and a record is written to the SYS1.LOGREC data set. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A list of all database services subcomponents whose initialization process has been completed may be obtained from the SVC dump requested by this abend. Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0) Module qualifier that identifies the area within DSNTSTRT at which the error was detected. The qualifier should be:
 - A (10) Error found upon return from the SCC startup initialization process
 - B (11) Error found upon return from the SCC IRLM identify process
 - C (12) Error found upon return from the buffer manager initialization process
 - D (13) Error found upon return from the data manager initialization process
 - E (14) Error found upon return from the data space manager initialization process
 - F (15) Error found upon return from the RDS initialization process or LOB Manager initialization process.
- 2 (2) Error return code from the invoked subcomponent
- 4 (4) Error reason code from the invoked subcomponent
- 8 (8) Pointer to a structure containing a character string SSCM followed by a 32-bit map representing the following information:
 - Bit 0 1 if DB2 has successfully 'signed on' to IRLM
- 10 (16) Error found upon return from the SCC startup initialization process
 - Bit 1 1 if the buffer manager subcomponent initialization process is completed
 - Bit 2 1 if the data manager subcomponent initialization process is completed

- Bit 3** 1 if the data space manager subcomponent initialization process is completed
- Bit 4** Not used
- Bit 5** 1 if the RDS subcomponent initialization process is completed
- Bit 6** Not applicable
- Bit 7** 1 if the SCC initialization process is completed
- Bit 8** 1 if the LOB Manager initialization is completed
- Bit 9 – 31** Not used

C (12) Pointer to invoked subcomponent's RMFT.

From this information the appropriate subcomponent's startup process may be identified.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30005

Explanation: A service task could not be created during the database services initialization process. This is probably a DB2 error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is possibly a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0)** Should equal X'3'
- 2 (2)** Return code from the service task creation function of the agent services manager (ASM) subcomponent
- 4 (4)** Abend reason code from the service task creation function of the agent services manager (ASM) subcomponent
- 8 (8)** Not used
- C (12)** Not used

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30006

Explanation: A service task could not be created during the database services delete process. This is probably a DB2 error.

System action: A record is written to SYS1.LOGREC,

and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is possibly a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0)** Should equal X'3'
- 2 (2)** Return code from the service task creation function of the agent services manager (ASM) subcomponent
- 4 (4)** Abend reason code from the service task creation function of the agent services manager (ASM) subcomponent
- 8 (8)** Not used
- C (12)** Not used

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30008

Explanation: DSNTSTR2 loaded an incorrect version of the system parameter CSECT DSN6SPRM while DB2 was executing. Message DSNT103I is generated before the abend occurs.

System action: DB2 is terminated.

Operator response: Notify the system programmer.

System programmer response: Restart DB2 with a -START DB2 PARM= command, where the parameter block that follows the 'PARM=' parameter specifies an MVS/XA version of the DB2 subsystem parameters.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9.

00E3000A

Explanation: A bad recovery element was detected by the database services standard ESTAE and FRR recovery routines. This is probably a DB2 subsystem error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error is detected when a module invokes the macro DSNTSFRR to disconnect a functional recovery element (FRE) from a functional recovery chain to which it is not connected. The name of the module passing the invalid FRE is the module issuing the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E3000B

Explanation: The database services section (DSN6SPRM) in the DB2 initialization parameter module (DSNZPARM) does not exist.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0) Should equal X'1'
- 2 (2) Return code from the get descriptor function of the system parameter manager (SPM) subcomponent of DB2
- 4 (4) Not applicable
- 8 (8) Not applicable
- C (12) Not applicable

First, ensure that DSNZPARM was installed correctly. Then, using the return code from SPM, determine why the descriptor is not available.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9.

00E3000C

Explanation: A database services TCB service task that cannot be reinstated has been abnormally terminated. Entries in SYS1.LOGREC that precede this entry indicate the source of the error.

System action: The executing unit is abended. A record is written to SYS1.LOGREC.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem

determination," on page 735: 1, 2, 3, 5.

00E3000D

Explanation: A failure occurred and was detected while an ESTAE functional recovery was being established.

System action: The executing unit is abended. A record is written to SYS1.LOGREC.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E3000E

Explanation: The execution unit supporting the database services checkpoint process has abended. The CSECT involved in the abend writes a record to SYS1.LOGREC and requests an SVC dump.

System action: DB2 is abended. A record is written to SYS1.LOGREC.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC, and determine the cause of the problem from the information that precedes this entry.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E3000F

Explanation: The database services functional recovery load module, DSNTF, has an unrecognizable entry point.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0) Should equal X'4'
- 2 (2) Not applicable
- 4 (4) Not applicable
- 8 (8) Not applicable
- C (12) Not applicable

The abend is generated whenever the DB2 load module DSNTFEPL is not link-edited with a load module entry point name of DSNTF. To correct this, link-edit DSNTFEPL again with the correct entry point name.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5.

00E30010

Explanation: The database services initialization process could not read the DB2 bootstrap data set (BSDS).

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably an installation error. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error can usually be traced to a VSAM error occurring while reading the BSDS. Before examining the dump, examine the operator console log and SYSLOG to determine if VSAM has encountered any errors on the BSDS.

Register 2 in the SDWA points to a structure that contains the following diagnostic information:

- 0 (0) Should equal X'2'
- 2 (2) Return code from a BSDS read request function of the recovery log manager (RLM) subcomponent
- 4 (4) Abend reason code from a BSDS read request function of the recovery log manager (RLM) subcomponent
- 8 (8) Not applicable
- C (12) Not applicable

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5, 16.

00E30013

Explanation: The value specified in the DSN6SYSP CSECT to define reserve storage is either negative or zero.

System action: DB2 is terminated.

Operator response: Notify the system programmer.

System programmer response: Reassemble DSN6SPRM and relink-edit the DSNZPARM load module. This is done by resubmitting the installation job stream, DSNTIJUZ, that built the load module named in the -START DB2 command 'PARM=' parameter.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5, 9.

00E30014

Explanation: The value specified in the DSN6SYSP CSECT to define reserve storage for a 'must complete' process is either negative or 0.

System action: DB2 is terminated.

Operator response: Notify the system programmer.

System programmer response: Reassemble DSN6SPRM and relink-edit the DSNZPARM load module. This is done by resubmitting the installation job stream, DSNTIJUZ, that built the load module named in the -START DB2 command 'PARM='

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5, 9.

00E30017

Explanation: While loading the DB2 database services function recovery and emergency shutdown modules, the Service Controller function abends with this reason code. This is because it detected a load module which was loaded with an invalid addressing capability. The abend is preceded by message DSNT107E.

System action: DB2 database services startup is terminated.

System programmer response: Refer to message DSNT107E.

Problem determination: Refer to message DSNT107E.

00E3001B

Explanation: A plan could not be executed because the system from which you are attempting to run is disabled or unknown. The system type might be unknown if the attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

System action: The plan is not allocated.

System programmer response: Refer to the SYSIBM.SYSPLSYSTEM table to determine the systems from which the plan can be executed, or correct the attach library.

00E30021

Explanation: A processing error has occurred during authorization checking.

System action: The request to allocate a plan to the authorization ID is denied.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30034

Explanation: The authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist.

System action: The request to allocate a plan to the authorization ID is denied.

User response: Verify that the correct plan name was specified. If the plan exists, then authority to execute the plan must be granted.

00E30035

Explanation: A processing error has occurred during authorization checking.

System action: The request to allocate a plan to the authorization ID is denied.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30036

Explanation: A processing error has occurred during authorization checking.

System action: The IRLM query request is denied.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30037

Explanation: An internal logic error occurred while invoking a distributed transaction manager function.

System action: DB2 writes a SYS1.LOGREC record and requests a SVC dump.

User response: Notify the system programmer.

Operator response: Collect the SYS1.LOGREC listing and the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30040

Explanation: An internal logic error occurred while the catalog access function was being invoked.

System action: The START RLIMIT command fails. The governing status prior to issuing this command continues unchanged.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of theabend, the registers contain the following information:

Register

	Contents
0	Address of the catalog access package parameter list
2	Catalog access return code
3	Catalog access reason code
4	Data manager return code
5	Data manager reason code
7	CT address

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30041

Explanation: An internal error occurred when trying to obtain a limit from the resource limit specification table.

System action: A record is written to SYST1.LOGREC, and an SVC dump is requested. The requested execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30063

Explanation: The BIND PACKAGE request caused more than 32767 records to be inserted into SYSPACKSTMT. This exceeds the SYSPACKSTMT limitation of 32767 records for a package.

Severity: 8 (error)

System action: The BIND PACKAGE subcommand fails.

User response: Break the application into smaller applications so that packages have fewer records.

00E30065

Explanation: The service controller's BIND processor detected an error in the user's database request module (DBRM) while building the SYSDBRM record.

System action: The BIND command fails.

User response: An invalid field in the DBRM was found while processing the BIND command. The DBRM might be bad. Rebuild the DBRM and reissue the BIND command.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E30066

Explanation: The service controller's BIND processor has detected an invalid release dependency mark in the cursor table.

System action: The BIND command fails.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

The service controller module DSNTBBP detected an

unknown value in the CTRELDEP field of the BIND CT. The BIND CT is pointed to by GPR7 at the time of the abend and is mapped by DSNDCT. The one byte CTRELDEP field should have been set by the RDS BIND processor (DSNXEPR) or one of the functions it invokes.

00E30067

Explanation: The BIND process program abended while attempting to use a BIND parameter. This usually indicates that the parameter list provided to the service controller BIND function is invalid (such as invalid addresses or incorrect key).

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The BIND subcommand is terminated.

User response: Notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 contains an indication of the type of parameter as follows:

00000101

Input parameter list.

00000102

Communication information block (CIB).

00000103

Invalid BIND subcommand name. Registers 3 and 4 contain the invalid subcommand name.

00000104

Subcommand information block (SIB).

00000201

DBRM member name list.

00000202

Plan-ID list.

00000203

Message block in user storage. Other register contents are as follows:

R3 R4

< 4 Simple reference
R8 = zero

>0 >4 MVCL
R8 = From address
R4 = move length

To and from lengths are equal.

0 >4 GETMAIN for user storage failed
R4 = storage length required
R8 = GETM
To fix this problem, increase your region size.

<0 >4 FREEMAIN of user storage failed
R4 = length of storage of free
R8 = address of storage to free

00000204

Message block in user storage. R8 = Message block address.

Except as indicated above, the information in the other registers is as follows:

R3 Parameter address
R4 Parameter length
R5 Parameter storage key
R8 Input parameter list address

00000205

Package-list name list.

00000206

ENABLE/DISABLE system list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 20.

00E30068

Explanation: A function invoked by a BIND subcommand has returned an unexpected error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The BIND subcommand is terminated.

User response: Notify the system programmer.

System programmer response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller code has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30069

Explanation: An attempt to allocate a cursor table (CT) failed.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller code has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30070

Explanation: An attempt was made to use the Internal Resource Lock Manager (IRLM) facilities, but the IRLM was not available. Either the IRLM had not been started by the operator, or the IRLM has encountered a problem causing it to terminate abnormally.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

User response: Notify the system programmer.

Operator response: The IRLM should be started before the DB2 subsystem is started. If this does not resolve the problem (that is, if the IRLM actually was started before DB2 was started) notify the system programmer.

System programmer response: This is probably not a DB2 problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If IRLM abended, and if you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Otherwise, ensure that the IRLM is started before the -START DB2 command is issued.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9, 18.

00E30071

Explanation: Either DB2 terminated without successfully signing off from IRLM, or another subsystem with the same SSNAME is still connected. This abend reason code accompanies message DSNT380I.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Determine if another DB2 subsystem is active. If another subsystem is not active, and IMS is not sharing the same IRLM, cancel IRLM prior to starting DB2. Regardless, notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

If the error was caused by a previously unsuccessful QUIT from the IRLM, manually stop IRLM. If IMS is using the same IRLM, refer to the IMS documentation to determine the effect of IRLM terminating while IMS is connected.

If you are running multiple versions of DB2, ensure that the SSNAME specified by the DSN6SPRM macro during the installation of the member DSNZPARM is not the same as the SSNAME in another version of DB2.

Problem determination: A previously unsuccessful sign-off from the IRLM is documented by an abend of X'00E30075' during the previous termination of DB2.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5, 9, 18.

00E30072

Explanation: An error was encountered during an IRLM lock query request.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is terminated.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, the registers contains the following information:

R2	Address of the lock request RLPL
R4	Address of the IRLM query request RLPL
R5	Address of the IRLM query RLQD
R7	CT address

Refer to Part 4, "IRLM messages and codes," on page 685 for information identifying IRLM return and reason codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 18.

00E30073

Explanation: An unrecoverable system error occurred while processing a LOCK or UNLOCK request.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requested execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller (SC) subcomponent has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 18.

00E30074

Explanation: A global out-of-storage condition was encountered by the Internal Resource Lock Manager (IRLM) during the processing of a LOCK or UNLOCK request.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably not a DB2 problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The name of the module issuing the abend is recorded in the SYS1.LOGREC entry. It is also recorded in the SVC dump as the CSECT involved in the abend. A parameter in the IRLM procedure specifies the amount of the common service area (CSA) to be used by IRLM. Do one of the following:

- Increase the CSA limit.
- Use a local IRLM (that is, an IRLM option that causes IRLM to operate from another address space).

- Using IRLM lock tracing, determine what application is acquiring so many locks that it causes the IRLM CSA limit to be exceeded.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30075

Explanation: During the normal sign-off from IRLM or during the abnormal shutdown of DB2, an AUTO-STOP of IRLM using SVC 34 abnormally terminated. Message DSNT383I is issued.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The name of the CSECT issuing the abend is found in both the SYS1.LOGREC and the SVC dump. Register 2 contains the SVC return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3, 5, 36.

00E30076

Explanation: An attempt to sign-off from IRLM failed.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller subcomponent has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend. This CSECT is found in both the SYS1.LOGREC and the SVC dump.

The request parameter list (RLPL) used during the sign-off process resides in the IRLM interface manager's communication block (DSNTLMC) from ACOM.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30077

Explanation: A database command processor encountered an error when attempting to create a cursor block (CUB) on a DB2 catalog table.

System action: An error was detected during the generation of messages to satisfy a DATABASE command. A DSNT305I message appears on the console of the requester, with the RC parameter of 12 and a REASON parameter of X'00E30089'.

Operator response: Notify the system programmer.

System programmer response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Diagnostic information may be found in the Display Command Communication Area, whose address is found in register 8, and by the Display Command subcode in register 2.

00E30078

Explanation: IRLM called the service controller IRLM interface status exit with register 0 equal to 1 in order to notify DB2 that IRLM is terminating. This is not a DB2 subsystem error.

System action: DB2 is abended when IRLM is terminated before DB2 is terminated. An entry is written to SYS1.LOGREC.

00E30079

Explanation: An error was encountered on return from the Internal Resource Lock Manager (IRLM) IDENTIFY function.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This may be an internal DB2 error or an operator procedure problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: In the SVC dump, register 2 contains the return code and register 3 contains the reason code from the identify function to the IRLM. Examine the reason code in register 3, either from the dump or system console log. A reason code of X'4004' indicates that the identify function code (51, X'33') does not exist in the IRLM SSVT. This may be due to the operator issuing a stop IRLM command followed by a start DB2 command before the IRLM has completed termination processing. The sequence of commands can be determined from the system console log.

A reason code of X'4008' indicates that the IRLM is unavailable, that is, IRLM is not started and the autostart is not requested by parameters in DSNZPARM.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E3007A

Explanation: DB2 encountered an IRLM request error indicating that IRLM is not available to take requests.

System action: DB2 terminates because it cannot complete an IRLM request.

Operator response: Notify the system programmer.

System programmer response: Look for the IRLM error code or messages to find out why IRLM is not available to take the DB2 request. Most likely, IRLM is terminating at the same time.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

Refer to the IRLM problem determination process.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E3007B

Explanation: An IRLM operation returned a non-zero return code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The application abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Check whether system activities at the time of the abend caused unexpected results from the IRLM operation. Check the system for any IRLM-related problems that can cause the operation to fail. If necessary, obtain a copy of SYS1.LOGREC, the SVC dump, and lock traces at the time of the abend. Refer to *DB2 Diagnosis Guide and Reference* for information on reporting this problem.

Problem determination: Check the system for any unusual IRLM activities or messages at the time of the abend.

00E30080

Explanation: An attempt was made to start the Internal Resource Lock Manager (IRLM) using the MGCR (SVC 34), and a nonzero return code was returned.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: Examine the SVC return code to determine whether this is a system problem or a DB2 internal problem. Obtain a copy of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2 contains the SVC return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 36.

00E30081

Explanation: An attempt was made to start the Internal Resource Lock Manager (IRLM). IRLM did not come up in the time limit specified to DB2.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. DB2 is abended.

Operator response: Notify the system programmer.

System programmer response: This problem can be circumvented. To do this, either specify a longer time limit in the IRLMSWT parameter of the DSN6SPRM assembler macro in the DSNTIJUZ job stream, or update the IRLM system wait time parameter in the DB2 installation update panel. You must also specify all other parameters contained in this version of the CSECT. Then resubmit the installation job DSNTIJUZ with the link-edit SYSIN file NAME parameter that matches the -START DB2 'PARM=' parameter. Refer to Part 2 of *DB2 Installation Guide* for additional information.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9, 36.

00E30082

Explanation: IRLM discovered a bad request parameter list (RLPL). This may occur if the RLPL storage is overlaid while an agent is suspended.

System action: The execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An IRLM request was made that IRLM could not honor immediately. IRLM called

DSNTLSUS to suspend the request. While waiting, the request parameter list (RLPL) was changed and is no longer valid. Someone may be reusing the RLPL, or the storage may have been overlaid.

Register 2 contains a pointer to the RLPL.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30083

Explanation: This agent has been selected as the victim of a deadlock or timeout.

This reason code is not used in abends.

00E30084

Explanation: Message DSNT305I appears on the console of the requester with RC=8 and REASON=E'00E30084'. This message tells the requester that an error was detected while building the database command display. Other entries in the SYS1.LOGREC help to identify the source of the error.

System action: This is a DB2 subsystem error. No SVC dump is requested because a previous dump of the failing subcomponent is expected.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30085

Explanation: An error was indicated by the RDS Authorization function. This is an internal DB2 error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abended after displaying a DSNT305I message with an RC parameter of 12 and a REASON parameter of X'00E30089'.

Operator response: Notify the system programmer.

System programmer response: This is an internal DB2 error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The error return code address of the Display Command Communication Area is found in register 8.

00E30086

Explanation: An error was indicated by the data manager (DM) subcomponent. This is probably an internal DB2 error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The command is abended after displaying a DSNT305I message with an RC parameter of 12 and a REASON parameter of X'00E30089'.

Operator response: Notify the system programmer.

System programmer response: This is probably an internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The error return code of the data manager may be found in the cursor table (CT), the address of which is found in register 7.

00E30089

Explanation: This code is used in the REASON parameter of the DSNT305I database command message to inform the requester that the execution unit supporting the database command processor has terminated. Other entries in the SYS1.LOGREC identify the source of the error.

System action: A DSNT305I message appears on the console of the requester, with an RC parameter of 12 and a REASON parameter of X'00E30089'. This is probably a DB2 subsystem error. No SVC dump is requested because a prior dump of the failing subcomponent is expected.

Operator response: Notify the system programmer.

System programmer response: See the SYS1.LOGREC for prior failure.

00E30090

Explanation: A service controller internal inconsistency has been encountered during message generation.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, register 2 contains the message number that was to be generated.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E30091

Explanation: A failure was detected during the retry process of DB2 recovery.

System action: DB2 is abended after a record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is probably an internal DB2 error. Obtain a copy of SYS1.LOGREC and the an SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This abend is issued by DSNTFRCV of the service controller (SC) subcomponent.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30092

Explanation: A retry recovery failure has been detected. This is a critical error.

System action: DB2 is abended. This is probably a DB2 subsystem error.

Operator response: Notify the system programmer.

System programmer response: Obtain a copy of the SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The service controller recovery module has detected an internal inconsistency. The problem can be determined by analyzing the CSECT involved in the abend. The name of this CSECT is found in both the SYS1.LOGREC and the SVC dump.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E30095

Explanation: DB2 is unable to acquire a modify lock because of an incompatible retained lock held by one or more other DB2 subsystems in the DB2 data sharing group. Retained locks are locks that persist across DB2 abnormal terminations.

System action: SQLCODE -904 is returned to the user. This reason code and the resource name are also returned.

System programmer response: Use the DISPLAY DATABASE command to display the DB2 member names owning the retained locks. You must restart those subsystems to remove the 'resource unavailable' condition.

00E30096

Explanation: DB2 is unable to acquire a modify lock. Lock negotiation failed because this request was involved in lock negotiation with other DB2 subsystems and the request was denied.

System action: A 'resource unavailable' condition is returned to the user. This reason code, the resource type, and the resource name are also returned.

User response: Resubmit the request.

System programmer response: Determine why the lock request failed. One possible cause of the lock request failure is if another DB2 subsystem in the DB2 data sharing group is abnormally terminating.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30097

Explanation: DB2 encountered an IRLM error indicating that IRLM detected an 'out of record list' storage condition.

The record list is a part of the coupling facility lock structured that contains the 'modify locks' (those locks that would be retained in case of a failure).

System action: DSNT500I or SQLCODE -904 is returned to the user. This reason code and the resource name are also returned.

Operator response: Notify the system programmer.

System programmer response: The coupling facility lock structure is declared too small. If this condition becomes a prevalent problem, you need to redistribute the coupling facility lock structure storage resource to make more room for the record list. You can make room for the record list in one of two ways:

- Issue a rebuild.
- Dynamically change the lock structure size.

Refer to DB2 Data Sharing: Planning and Administration for more details about these options.

00E30099

Explanation: A conversion error occurred during DB2 startup. This conversion is used to determine if conversion services are set up correctly.

System action: DB2 terminates.

User response: See message DSNT552I to resolve the problem.

00E3009A

Explanation: During DB2 startup, DB2 detected a difference between the CCSIDs recorded in the BSDS and the CCSIDs specified by the version of DSNHDECP that was loaded during startup. DB2 startup terminated to avoid potential data corruption issues. Message DSNT108I is generated before the abend occurs.

System action: Subsystem startup is terminated.

Operator response: See message DSNT108I.

System programmer response: Determine the reason for the termination of DB2 startup. See message DSNT108I.

Problem determination: See message DSNT108I.

00E3009B

Explanation: DB2 detected an invalid CCSID specification during startup. DB2 startup has terminated to avoid potential data corruption issues. Message DSNT109I is generated before the abend occurs.

System action: Subsystem startup is terminated.

Operator response: See message DSNT109I.

System programmer response: Determine the reason for the termination of DB2 startup. See message DSNT109I.

Problem determination: See message DSNT109I.

00E3009E

Explanation: The plan depends on new facilities of the release from which fall back has occurred.

System action: The allocation for the user failed.

User response: Do not use this plan until your DB2 subsystem is remigrated to the newer release.

System programmer response: Warn the user community NOT to run this plan until you have remigrated to the newer release.

00E30100

Explanation: This reason code can be returned in the following cases:

- A parallel task running on a DB2 terminates abnormally.
- An assisting DB2 terminates abnormally.

System action: The member name where the failure occurred is returned to the application as the resource name in SQLCODE -904. In a non-data-sharing

environment, the member name is blank, and the failure occurs on the local DB2.

Operator response: Enter DISPLAY GROUP from an active DB2 to see if a DB2 subsystem is down. Restart the failed DB2 subsystem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E30101

Explanation: The result of issuing a SETFRR macro indicates that this FRR is not the top FRR.

System action: A record is written to SYS1.LOGREC. An SVC dump is requested.

System programmer response: This is probably a DB2 internal error. Obtain a copy of SYS1.LOGREC and the SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00E30104

Explanation: This reason code is used by the service controller (SC) subcomponent to respond NO on a prepare-to-commit notification.

System action: If the service controller indicates that DB2 cannot commit to perform the work requested by the application since the last commit point, it responds NO on the prepare-to-commit notification (COMMIT1). This forces the commit to be changed to an abort, causing the work performed by the application since the last commit point to be backed out.

00E30105

Explanation: IRLM was informed of a link failure to a coupling facility that contains a lock table being actively used by this data sharing group.

System action: The DB2 subsystem is terminated with this reason code.

System programmer response: See IRLM message DXRxxxE to determine the root cause of the failure and the appropriate corrective action.

00E30301

Explanation: You have attempted to execute a plan that does not exist. This reason code is used by the automatic BIND function to indicate that no record exists in SYSIBM.SYSPLAN for the plan-ID you are attempting to run, so plan allocation fails.

System action: The plan is not executed.

User response: Determine if the object name was correctly specified. If so, ensure that the plan exists (by selecting from SYSIBM.SYSPLAN).

00E30302

Explanation: This reason code is used by the automatic BIND function to indicate that the plan currently being allocated is not operational. The automatic BIND for the plan failed because the plan was dependent on something that was altered or dropped. An unavailable database might also cause this problem.

System action: The autobind fails, and the plan cannot be allocated.

System programmer response: Determine what made the plan not operational. Make sure the required database is available. Issue a REBIND subcommand for the plan.

00E30303

Explanation: You have attempted to execute a package that does not exist. This reason code is used by the automatic package BIND function to indicate that no record exists in SYSIBM.SYSPACKAGE for the package-ID you are attempting to run, so package allocation fails.

System action: Package allocation fails.

User response: Determine if the object name was correctly specified. If so, ensure that the package exists (by selecting from SYSIBM.SYSPACKAGE).

00E30305

Explanation: This reason code is used by the automatic BIND function to indicate that the package currently being allocated is not operational. That upon which the package was dependent has been altered or dropped, causing the automatic BIND for the package to fail.

System action: Agent allocation fails or DROP package fails.

System programmer response: Determine what has made the package not operational. Issue a REBIND subcommand for the package.

00E30306

Explanation: This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

System action: The plan is not automatically bound.

System programmer response: Rebind the plan prior to execution.

00E30402

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30405

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30406

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30407

Explanation: This subcode is found in register 2 to clarify abend reason code X'00E30077'. See X'00E30077' for more information.

00E30700

Explanation: A resource limit as determined from the active resource limit specification table has been exceeded. The SQL statement has been terminated with an SQLCODE -905.

System action: The current SQL statement contains an SQLCODE -905.

User response: See the text for the SQLCODE -905. It will specify the resource limit that was exceeded. The SQLCODE -905 text will also include the name of the resource limit specification table that was used to derive the limit. Determine why the limit was exceeded.

Operator response: Notify the system programmer.

System programmer response: An SQL statement used too much resource space. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30800

Explanation: An attempt was made to identify to an IRLM that does not support the level of function DB2 needs. Message DSNT803I accompanies this abend reason code.

System action: Message DSNT803I is issued to the console, and DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System programmer response: DB2 Version 6 requires IRLM Version 2.1, at a maintenance level that includes

APAR PQ15290 Version 6 will not run with any earlier release of IRLM or with IRLM Version 2.1 at a lower level of maintenance. Ensure that the STEPLIB statement in your IRLM startup procedure is referencing the correct IRLM code library and that the appropriate level of maintenance has been applied.

00E30802

Explanation: DB2 was not able to identify to IRLM because another subsystem already identified to IRLM. Message DSNT811E accompanies this abend reason code.

System action: Message DSNT811E is issued to the console. DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System programmer response: IRLM Version 2.1 enforces a one to one (1:1) mapping between IRLM and DB2. Multiple DBMS subsystems can no longer use the same IRLM. Ensure that:

- Each DB2 subsystem is associated with its own IRLM subsystem.
- The correct IRLM procedure name and subsystem name are specified in the DB2 system parameters.

00E30803

Explanation: An error occurred in one of the DB2-supplied exits to IRLM. This abend reason code is issued only in a DB2 sharing data environment and indicates an internal error in DB2 or IRLM.

System action: A record is written to SYS1.LOGREC and an SVC dump is initiated. DB2 terminates abnormally.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30805

Explanation: DB2 could not activate one of the exits used with IRLM for data sharing. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is initiated. DB2 terminates abnormally.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E30806

Explanation: IRLM could not successfully join its IRLM data sharing group. Message DSNT800I accompanies this abend reason code.

System action: Message DSNT800I is issued to the console, and DB2 abnormally terminates with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System programmer response: Some possible reasons why IRLM could not join its data sharing group are:

- The lock structure is not properly defined in the active MVS CFRM administrative policy. The lock structure name is a concatenation of the DB2 data sharing group name and the string 'LOCK1', separated by an underscore (_). For example, if the DB2 data sharing group name is DSNCAT, DSNCAT_LOCK1 would be the lock structure name. Ensure that the lock structure is properly defined in the active MVS CFRM policy. The name of the lock structure that IRLM attempted to access is given in message DSNT800I. IRLM issues message DXR138E to indicate that the lock structure definition could not be accessed in the active MVS CFRM policy.
- IRLM could not connect the lock structure. The reason for the connect failure is given in IRLM message DXR135E.
- IRLM could not join its data sharing group. The reason for the join failure is given in IRLM message DXR134E.
- IRLM joined the wrong group. The set of IRLMs that are connected to a given lock structure must all be members of the same group.

Ensure that the GROUP parameter is correctly specified in the IRLM startup procedure. If you give an incorrect group name, IRLM connects the lock structure, and then times out waiting for responses from other connectors. IRLM issues message DXR133I for the timeout.

00E30807

Explanation: DB2 failed on the IRLM Identify request because no lock structure name was specified. Message DSNT810E accompanies this abend reason code.

System action: Message DSNT810E is issued to the console, and DB2 terminates abnormally with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System programmer response: This condition occurs if you are not running DB2 in data sharing mode, but the associated IRLM is running with global scope (SCOPE=GLOBAL in the IRLM startup procedure). If you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL. Conversely, if you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL.

00E30808

Explanation: DB2 issued an IRLM PURGE request to purge retained locks, but the PURGE request was not successful. This abend reason code accompanies message DSNT807I.

System action: A record is written to SYS1.LOGREC and an SVC dump is initiated. The DB2 restart process is terminated.

System programmer response: The IRLM return and reason codes are in the SYS1.LOGREC record.

00E30809

Explanation: DB2 failed on the IRLM Identify request because IRLM did not return the lock structure version ID. Message DSNT809I accompanies this abend reason code.

System action: Message DSNT809I is issued to the console, and DB2 abnormally terminates with this reason code. A record is written to SYS1.LOGREC. No SVC dump is taken.

System programmer response: This condition occurs if you are running DB2 in data sharing mode, but the associated IRLM is running with local scope (SCOPE=LOCAL in the IRLM startup procedure). If you are running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=GLOBAL. Conversely, if you are not running DB2 in data sharing mode, ensure that the associated IRLM startup procedure specifies SCOPE=LOCAL.

Chapter 20. X'E4.....' codes

Many of the utilities codes ask you to determine the failing environment. This means that you should determine the following things:

- The address space in which the failure occurred
- The utility that was running
- Whether it was a restart of a utility that failed previously
- Whether the job step invocation was through the DSNUTILB program
- Whether a -DISPLAY or -TERM UTILITY command was involved.

To assist you in determining the problem, register 2 might contain a secondary reason code. This secondary reason code might be an IBM internal reason code; therefore, it might not be documented in this manual.

When DB2 resources are unavailable to utilities, message DSNT500I are issued along with the utility reason code. Refer to message DSNT500I for the correct action.

00E40000

Explanation: A function of DB2 was invoked and attempted to establish a functional recovery environment. The functional recovery element (FRE) that was created was not the first one.

This abend reason code is issued by the following CSECTs: DSNUGCKW DSNUGCUR

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested. The execution unit is abended.

Operator response: Notify the system programmer.

Problem determination: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E40001

Explanation: No cursor table was present at entry to database services portion of utility.

This abend reason code is issued by the following CSECT: DSNUGRAR

System action: The utility job step that caused the function to be requested is abended. Utility processing is not initiated.

System programmer response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40002

Explanation: The caller of the database services portion of the utility was in the wrong protect key.

This abend reason code is issued by the following CSECTs: DSNUGBAC, DSNUGRAR

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

If a JOBLIB or STEPLIB is being used in the batch utility job, check that all application program libraries included in the concatenation are authorized.

Check that the batch utility program DSNUTILB was included in the MVS program properties table during the installation of DB2. The entry for DSNUTILB in the MVS program properties table was provided by MVS. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40003

Explanation: An error occurred while getting FRBPARM from application storage.

00E40004 • 00E40006

This abend reason code is issued by the following CSECT: DSNUGRAR

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

System programmer response: Determine the failing environment, in particular whether invocation was through program DSNUTILB. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If the environment was DSNUTILB, the problem could be internal.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40004

Explanation: An error occurred while getting FRB from application storage.

This abend reason code is issued by the following CSECT: DSNUGRAR

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

System programmer response: Determine the failing environment. In particular, determine whether invocation was through program DSNUTILB. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If the environment was DSNUTILB, the problem could be internal.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40005

Explanation: A nonzero reason code was returned from MVS sort.

This abend reason code is issued by the following CSECT: DSNUGSOR

System action: Any error message generated by sort in conjunction with the nonzero reason code is directed to the device/data set identified by the UTPRINT DD statement in the utility job step.

Error message DSNU044I, that contains the nonzero reason code, is directed to the device/data set identified by the SYSPRINT DD statement in the utility job step.

User response: Determine the cause of the error. If the error can be corrected, the utility may be restarted from

the beginning of the sort phase by using the 'RESTART(PHASE)' parameter. If the error prevents the utility from completing, the -TERM command should be issued to remove the stopped utility from the system. The -TERM UTILITY should seldom be used when the stopped utility is REORG.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this may not be necessary).

Problem determination: This abend is accompanied by the utility message DSNU044I, that contains the sort reason code and an SVC dump. In most cases, the error messages from SORT that are sent to the device/data set identified by the UTPRINT DD statement identify the problem. The dump may not be needed. If SORT is unable to open the UTPRINT data set, only the message and abend are provided. In this case, correct the problem associated with the UTPRINT DD statement, and restart the job with the RESTART(PHASE) option.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40006

Explanation: An error was detected while manipulating the utility-in-progress bits of the database exception table (DBET). The error might occur due to one of the following conditions:

- The SYSIBM.SYSUTIL table and the DBET are out of sync.
- The utility-in-progress condition was not properly reset after execution of a prior utility.
- A resource unavailable condition exists.

System action: Utility processing is abended. This abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User response: If applicable, correct the resource unavailable condition identified by the DSNT500I message. For an explanation of resource types, see "Resource types" on page 738. Either restart the utility from the last commit point or terminate the utility and submit it again.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Consult the system programmer to diagnose the problem.

System programmer response: Use the -DISPLAY UTILITY command to display the status of any utilities in progress. Determine if another utility is active on the same table space. Use the -DISPLAY DATABASE command to determine if the table space has a

utility-in-progress condition set on.

The utility-in-progress bit is turned on only for table spaces. If a utility is run against an index, the utility-in-progress bit is turned on for the appropriate table space.

A utility-in-progress condition set without a corresponding entry for an active or stopped utility in the SYSUTIL table is an inconsistent condition caused by a prior error. To resolve this, issue a -START DATABASE command specifying the proper table space with the ACCESS(FORCE) parameter. This causes the utility-in-progress status to be cleared.

If the problem cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If the condition cannot be corrected, determine the failing environment.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61, 72.

00E40007

Explanation: The COPY utility function is unable to open the table space as directed. The failure can occur because the table space is currently not available. The failure can also be an internal error.

This abend reason code is issued by the following CSECTs: DSNUBAID DSNUBASI

System action: If the table space is currently not available, a DSNT500I RESOURCE UNAVAILABLE message is directed to the device or data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User response: If the abend was accompanied by a DSNT500I message, look up DSNT500I in *DB2 Messages* to determine the cause of the resource unavailability. You can restart the utility when the resource becomes available, or you can terminate the utility job step and resubmit the job at a later time.

If a DSNT500I message was not issued, an internal processing error occurred. Provide the system programmer with dumps and messages for fault analysis.

Operator response: After the environmental information is determined, an operator with SYSOPR authority can terminate the utility job step and free the resources, but this might not be necessary.

System programmer response: If a DSNT500I message preceded the abend, follow the procedures outlined under that message number in *DB2 Messages* for Problem Determination. Otherwise, determine the failing environment.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40009

Explanation: An error was detected while attempting to access the target object (table space or index space).

This abend reason code is issued by the following CSECTs: DSNUGACC, DSNUGAGS, DSNUGUTC, DSNURLOG

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. The DSNT500I message might be preceded by other related messages on the console. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4000A

Explanation: An error has been detected while force closing a page set.

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: This is an internal error. Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4000C

Explanation: This is an internal control error. The utility subcomponent that manages the function control flow associated with DB2 database services has been requested to perform a function that it does not recognize.

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: To determine how much of the requested function within the job step was completed, examine the data set/device identified by SYSPRINT. Consult the system programmer to diagnose the problem. Determine whether the utility job step should be terminated in order to release resources.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4000D

Explanation: An error was detected while scanning or updating table SYSIBM.SYSUTIL.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4000E

Explanation: An error was detected while attempting to create a cursor block (CUB).

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4000F

Explanation: An error was detected while checking or setting the state of the database exception table (DBET). This abend might be accompanied by message DSNT500I.

System action: Utilities processing is abended. An SDUMP might be requested.

User response: Correct the 'resource unavailable' condition identified by message DSNT500I. Either restart the utility from the last commit point or terminate the utility and restart it from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem.

If the condition cannot be corrected, determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40010

Explanation: A request to IRLM on behalf of a DB2 utility to lock a page or an entire table space has failed. This is either an internal DB2 or an IRLM problem. The error occurred in the database services address space.

System action: The utility job is abended. An SVC dump is requested (with the address of the IRLM parameter list, RLPL, in register 4). The utility is placed in the stopped state.

User response: Consult the system programmer to diagnose the problem. Determine if the utility should be terminated.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

System programmer response: Check the IRLM return and reason codes in the RLPL. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40011

Explanation: An attempt to extend the error range information in the database allocation table (DBAT) failed.

System action: The I/O error that did not get recorded in the DBAT table was reported in error message DSNU086E, that was directed to the device/data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User response: The system programmer should be notified and given the relevant environmental information. Subsequent to its correction, the stopped utility can be restarted using the RESTART option, or it can be terminated and resubmitted at a later time.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40012

Explanation: An error was detected while attempting to find a database descriptor block (DBD) address.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61, 46.

00E40013

Explanation: An error was detected while creating a ECB exit for -STOP DB2.

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40014

Explanation: An error was detected from the terminate thread function.

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40015

Explanation: A RECOVER utility was initiated with the ERROR RANGE option specified. The request was rejected when it was determined that there was not a sufficient number of alternate tracks for the pages in the error range to be recovered.

System action: The abend was issued in the database services address space. The dumps requested are dependent upon the JCL of the utility job step. The utility job step is abended. The utility is placed in the 'stopped' state.

User response: Recovery can be accomplished by resubmitting the RECOVER utility without the ERROR RANGE option. Recovery can be by data set or the table space as a whole.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources (this might not be necessary).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40016

Explanation: A Recover utility was initiated with the ERROR RANGE option specified. An error was detected by the media manager while processing a MMCNVT macro invocation. This is an internal error within either DB2 or the media manager.

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to free resources if that should prove necessary (this might not be necessary).

System programmer response: The MMCNVT macro converts a VSAM RBA to its physical track address (CCHHR). At the time of abend, the following registers contain relevant information:

- R2** Address of media manager interface block (MMIB).
- R3** Address of field containing VSAM RBA to be converted.
- R4** Address of area to receive CCHHR.
- R5** MMCNVT places UCB address here.
- R8** Return code from media manager. If you suspect an error in media manager, refer to *z/OS DFSMSdfp Diagnosis Reference*.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40017

Explanation: An error was detected from terminate identify.

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40018

Explanation: Either an error was detected during the execution of a restarted utility or a condition was detected that might have required restart of a utility. A message is issued prior to this abend code to indicate the type of error.

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Check messages issued prior to this abend code to determine the cause of the error. Correct the error, and restart the job.

Problem determination: This abend is forced to allow restart of the utility when work data sets are used and the disposition is (MOD,DELETE,CATLG).

00E4001A

Explanation: An error was detected while using SVC 99 to retrieve information on the DD statements supplied.

This abend reason code is issued by the following CSECT: DSNUGCDD

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E4001B

Explanation: A DB2 utility has attempted to allocate a data set to the generic unit name SYSALLDA, but the allocation has failed. This dynamic allocation was attempted because the utility had been requested to perform sorts in parallel, a DFSPARM data set was present in the job JCL, the DFSPARM data set was allocated to SYSIN, and no SORTDEVT specification was supplied in the utility control statement.

System action: Utility processing is abended.

User response: If the failing utility was REORG, and the UNLOAD phase had completed, restart the utility after doing one of the following:

- Delete the DFSPARM data set from the job JCL.
- Create a DASD data set containing the DFSORT control statements you wish to use and change the job JCL to point to that data set instead of SYSIN.

If the failing utility was not REORG, or if it was REORG and the UNLOAD phase had not completed, use the -TERM command to terminate the utility. Then resubmit the job after doing one of the following:

- Delete the DFSPARM data set from the job JCL.
- Create a DASD data set containing the DFSORT control statements you wish to use and change the job JCL to point to that data set instead of SYSIN.
- Use the SORTDEVT keyword in the utility control statement to specify a generic device unit name (such as SYSDA) that can be used to do the dynamic allocation.

00E4001C

Explanation: An error was detected while attempting to map externals to a specific file object descriptor (OBD).

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, “Problem determination,” on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason

code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E4001D

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSSYNONYMS table.

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, “Problem determination,” on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E4001E

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSTABLES table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E4001F

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSINDEXES table.

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40020

Explanation: An error was detected while attempting to RARQ to the database storage.

This abend reason code is issued by the following CSECT: DSNUGPRE

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40021

Explanation: Utility processing was performing an AUTHORIZATION CHECK for the utility user and specified object, when an error was detected. A necessary resource for the check was not available.

This abend reason code is issued by the following CSECTs: DSNUGMAP, DSNUKINE

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Make the resource available and either -TERM the utility and resubmit it, or resubmit the utility with the RESTART parameter. Refer to message DSNT500I in *DB2 Messages*. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This abend is accompanied by the message DSNT500I, that identifies the unavailable resource. The message is written to the SYSPRINT data set.

00E40022

Explanation: An error was detected while attempting to read a row from the SYSIBM.SYSUTIL table.

This abend reason code is issued by the following CSECT: DSNUGSUU

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40023

Explanation: The internal protocols required for utility update of table the SYSIBM.SYSUTIL have been violated. Utility modifications to SYSIBM.SYSUTIL were not committed.

This abend reason code is issued by the following CSECTs: DSNUGSRI, DSNUGSRX

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 47.

00E40024

Explanation: Internal protocols required for utility serialization were violated. Specifically, utility serialization cleanup was not invoked upon completion of utility processing.

This abend reason code is issued by the following CSECT: DSNUGUCA

System action: The utility job step is terminated, placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 47.

00E40025

Explanation: Utility processing attempted to allocate resources for this utility job step. The allocate protocol has returned a nonzero return code.

This abend reason code is issued by the following CSECT: DSNUGUCA

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I.

An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility, but this might not be necessary.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40027

Explanation: An error has been detected while attempting to update a row of the SYSIBM.SYSUTIL table.

This abend reason code is issued by the following CSECT: DSNUGSUU

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40028

Explanation: An error has been detected while attempting to COMMIT.

This abend reason code is issued by the following CSECTs: DSNUGUCA, DSNUGAGS

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40029

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSUTIL table.

This abend reason code is issued by the following CSECTs: DSNUGUCA, DSNUGAGS

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4002A

Explanation: During utility restart processing, a record in the SYSUTILX checkpoint/restart area was not recognized. The utility might not be restartable.

System action: Utility processing is abended.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error. Collect the following diagnostic items listed in the section entitled "Diagnostic Items for Problem Determination": 1, 2, 4, 30, 31, 46, 49.

00E4002B

Explanation: The utility check pending protocol detected invalid parameters for the setting or resetting of the check pending state.

This abend reason code is issued by the following CSECT: DSNUGCKP

System action: The utility job is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E4002D

Explanation: This abend is issued as a result of an error other than the 'resource unavailable' condition that was encountered while attempting to update a DB2 catalog for the setting or resetting of the check pending state.

This abend reason code is issued by the following CSECT: DSNUGCKP

System action: An SVC dump is requested, the error flag in the DBA table is set on for the table space for which the check pending state is being set or reset, and processing continues.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Determine the reason for the catalog access error. This abend is accompanied by console message DSNU972I. See the problem determination for this message for a description of how processing is affected by this error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E4002E

Explanation: During utility serialization or utility restart, an attempt to either read or retrieve from SYSUTIL or SYSUTILX has failed.

System action: DB2 abends the utility job.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 69.

00E40030

Explanation: A -DISPLAY UTILITY or -TERM UTILITY command has failed in the command subsystem.

This abend reason code is issued by the following CSECT: DSNUGCCC

System action: Command processing is terminated. For -TERM UTILITY, all previous actions taken by the command are backed out.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error is accompanied by additional messages and/or SVC dumps that identify the failure in the utility command subsystem. Refer to this manual under those messages and/or codes for additional problem determination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40033

Explanation: Internal control blocks were scanned for internal IDs representing the SYSIBM.SYSUTIL table. No corresponding ID was found.

This abend reason code is issued by the following CSECTs:

DSNUGAGS DSNUGDIS DSNUGSRI DSNUGTER

System action: The utility job step is terminated,

placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the TERM UTILITY command to release the resources claimed by the stopped utility, but this might not be necessary.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 47.

00E40034

Explanation: The utility message generator was unable to obtain the requested storage. The available storage used to buffer messages produced by the database memory is full and a request to obtain more storage from subpool 229 failed.

This abend reason code is issued by the following CSECT: DSNUGMSG

System action: Utility processing abends. No SYSABEND dump or SVC dump is requested.

User response: This abend occurs due to a system resource limit. It might be necessary to modify the utility control statement.

If the abend occurs as a result of the LOAD utility, attempt to restart the job. If failure recurs, it might be necessary to change the discard limit or correct the situation that caused many error messages to be produced.

If the abend occurs as a result of the REPAIR utility, change the beginning page number to the last page number printed plus one, or change the number of pages to be dumped to a smaller number. Resubmit the job.

If the abend occurs as a result of the REBUILD INDEX utility, the unique index might have to be dropped and recreated as a nonunique index. If a unique index is required and the data contains a large number of duplicates, the duplicates must be reduced before attempting to rebuild the index again.

Problem determination: Refer to the prior error messages to determine how to correct the problem.

00E40035

Explanation: The -START ACCESS FORCE command was issued when DSNDB01.SYSUTILX was in a pending state, which prohibits further processing. The pending state was either copy or recovery pending.

This abend reason code is issued by the following CSECT: DSNUGTER

System action: Utility processing is abended.

User response: Notify the system programmer so that the pending condition can be resolved.

System programmer response: Issue a -DISPLAY DATABASE command to determine the state of DSNDB01.SYSUTILX. If the state is copy pending, do a full image copy. If the state is recovery pending, use the RECOVER utility to recover DSNDB01.SYSUTILX.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40040

Explanation: An error was returned from the DSNILREQ protocol during page level locking. This abend code is accompanied by message DSNT500I that explains the 'resource unavailable' condition.

This abend reason code is issued by the following CSECTs: DSNUCBFW, DSNUCBRP.

System action: Utility processing is abended and the utility is placed in a stopped state.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Then, either restart the utility from the last commit point or terminate the utility and restart it from the beginning.

System programmer response: If the conditions identified in the DSNT500I message can not be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Refer to the description for message DSNT500I.

Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

00E40045

Explanation: A failure has occurred during an attempt to free storage.

This abend reason code is issued by the following CSECTs: DSNUGSTB, DSNUGSTA

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can terminate the utility job step and free the resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40051

Explanation: Invalid OTYPE was passed to DSNUGMAP.

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can terminate the utility job step and free up any resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40053

Explanation: An invalid OBID of zero was found by the module that maps external object names to OBIDs.

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

Operator response: An operator with SYSOPR authority can terminate the utility job step and free any resources (this might not be necessary). However, this should not be done until after the diagnostic environment has been established.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: OBIDs are extracted from the DB2 catalog. The OBID for a table space is found in the SYSIBM.SYSTABLESPACE table. The OBID for a table is found in the SYSIBM.SYSTABLES table. The OBID

for a index is found in the SYSIBM.SYSINDEXES table. If the object exists, the OBID cannot be zero.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40070

Explanation: A utility data set could not be opened. The abend was issued to place the utility in the stopped state for review and correction.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: Utility error message DSNU036I or DSNU037I was issued. to identify the DD statement associated with the DCB that could not be opened. If neither message was issued, the SYSPRINT DD statement was omitted. The utility job step is placed in the stopped state.

User response: If the ddname is one you submitted, review and correct it. Then resubmit the job. If the ddname is one the system provided, consult the system programmer. If neither message was issued, verify that the SYSPRINT DD statement exists.

Operator response: An operator with SYSOPR authority can terminate the utility to release the held resources, but this may not be necessary.

System programmer response: Correct the JCL, and resubmit the job.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40071

Explanation: An I/O error was encountered on a required OS/VS data set. An abend was issued to place the utility in a stopped state for review and correction. Resubmit the utility.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: One of two utility error messages (DSNU032E or DSNU040I) is sent to the data set/device associated with the SYSPRINT DD statement of the utility job step. The error message identifies the error and the data set in error.

The utility is stopped at the beginning of the phase that used the OS/VS data set.

User response: If the utility message was DSNU032E, the job can be restarted if an undamaged output data set is provided. Obtain an undamaged output data set, and restart the utility job step with the RESTART(PHASE) option. The job cannot be restarted if an unload data set, during the RELOAD phase of

either the LOAD or REORG, is used as input instead of output.

If utility message was DSNU040I, determine the problem as described in Problem Determination. Then either resubmit the utility job using the RESTART option, or -TERM the utility job step.

Operator response: An operator with SYSOPR authority can terminate the utility and release any held resources (this might not be necessary).

Problem determination: Problem determination depends upon which error message was directed to the data set/device identified by the SYSPRINT DD statement.

If DSNU032E was issued, an I/O error was encountered on a required utility work data set. The message describes the error and the data set in error.

If DSNU040I was issued, an error has occurred during BSAM access to the data set defined by the DD statement specified in the message. The DECB provided as a hexadecimal string contains the ECB in the first four bytes. The first byte of the ECB contains status bits that indicate the cause of the error.

There might be an IOS message on the MVS console SYSLOG indicating the type of I/O error that occurred. If an IOS message was issued, follow the problem determination directions for the message. Refer to the appropriate MVS publication for the meaning of the status bits.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40072

Explanation: An error was encountered while processing a BSAM data set.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: A message identifying the error might have been sent to the data set/device associated with the SYSPRINT DD statement of the utility job step. If no prior message was produced, a dump was requested. The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: If a message was produced to identify the error, refer to that message description for the proper action. If no message can be found, then notify the system programmer.

Operator response: Notify the user or system programmer.

System programmer response: Review the job output and failing environment. If a message was produced to identify the error, correct the error and resubmit or

restart the job. If no message was produced, then a dump should have been requested. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Problem determination depends upon which error message, if any, was directed to the data set/device identified by the SYSPRINT DD statement. If a message was produced, it describes the type of error and data set involved. Refer to the message description for information on what action to take. If no message was produced, then this might be an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40073

Explanation: An internal error was encountered while processing a BSAM data set. The utility in progress issued an internal read to a BSAM data set after end-of-file was returned for the data set.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: The utility job step is terminated, placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E40074

Explanation: An internal error was encountered while processing a BSAM data set. The utility in progress issued an internal point to a BSAM data set which is opened for write. Point is only valid for data sets opened for read.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: The utility job step is terminated, placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 17, 32.

00E40075

Explanation: An end-of-data (EOD) has been encountered while attempting to reposition an input data set during the restart of a utility.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: Processing is abnormally terminated. A system dump is requested.

User response: Review the JCL and ensure that the input data set is correct. Further analysis might be necessary.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 61, 32.

00E40079

Explanation: A utility work data set has a block size that is too small to accommodate the data to be written. An abend is issued to place the utility job step in a stopped state. This allows the error to be reviewed and corrected, and the job step to be resubmitted.

This abend reason code is issued by the following CSECT: DSNUGSDA

System action: Utility error message DSNU038I is directed to the device/data set identified by the SYSPRINT DD statement. The utility job step is placed in the stopped state.

User response: Delete the data set in error. Change the JCL so that the block size for the data set with the ddname nominated in error message DSNU038I is at least the indicated block size. Resubmit the utility job step with RESTART(PHASE) option.

Problem determination: Utility error message DSNU038I is directed to the device/data set identified by the SYSPRINT DD statement. It gives the name of DD statement that defines the data set with the inadequate block size and gives the minimum block size in bytes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40080

Explanation: An error has been detected during utility termination cleanup. The DSNXKACC CLOSEALL protocol has returned an error.

This abend reason code is issued by the following CSECT: DSNUGUCA

System action: The utility job step is placed in the stopped state.

Problem determination: This abend code might be accompanied by a DSNT500I error message that might indicate a correctable problem.

If the DSNT500I message has not been issued or if the problem can not be corrected, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40081

Explanation: The REORG utility has completed the UNLOAD phase while processing in a shared mode and has attempted to change to an exclusive mode for the RELOAD and subsequent phases. Utility processing has detected an internal error.

This abend reason code is issued by the following CSECT: DSNUGSRX

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 47.

00E40082

Explanation: An error has been detected by utility serialization protocols. Protocols were issued in the wrong order.

This is an internal error and cannot be corrected by the user.

This abend reason code is issued by the following CSECT: DSNUGSRX

System action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

User response: The -TERM UTIL command can be issued to free resources held by the failing utility.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40083

Explanation: An error was detected by utility serialization protocols. Required parameters are missing or contain invalid values.

This is an internal error and cannot be corrected by the user.

This abend reason code is issued by the following CSECT: DSNUGASO

System action: Utility processing is abnormally terminated and the utility is placed in a stopped state. An SDUMP is requested.

User response: Issue the -TERM UTIL command to free resources held by the failing utility.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40085

Explanation: A utility serialization LOCK or UNLOCK request has received an error from the IRLM. Either message DSNU099I is issued prior to this abend code to provide information about the error or message DSN1002I is issued if the problem occurred while running the START DATABASE ACCESS(FORCE) command.

This abend reason code is issued by the following CSECTs:

DSNUGDIS DSNUGSRI DSNUGSRX DSNILSTS

System action: Either the utility job step is terminated and the utility is placed in a stopped state or the START DATABASE command abnormally terminates.

User response: Notify the system programmer. An attempt can be made to restart the utility or rerun the START DATABASE command.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command if the user does not wish to attempt to restart the utility. For the START DATABASE command, rerun the command.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting

the problem. For the START DATABASE command, no response is needed.

00E40090

Explanation: Utility processing is unable to invoke the designated utility, because an internal error has occurred. The specified utility is not recognized by the utility job controller.

This abend reason code is issued by the following CSECTs:

DSNUGUTC DSNUGDFL DSNUGSRI

System action: The utility job step is terminated, placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40091

Explanation: Utility access path creation was invoked specifying an incorrect OBID.

This abend reason code is issued by the following CSECT: DSNUGACC

System action: The utility job step is terminated, placing the utility in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40096

Explanation: Utility access path creation has detected an invalid OBID. The specified value is too small, too large, or does not exist in the subsystem.

This abend reason code is issued by the following CSECT: DSNUGACC

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E400A0

Explanation: An error was detected while the internal structure to access the tables of a table space was being built. The table space had no tables.

This abend reason code is issued by the following CSECT: DSNUGACC

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E400AF

Explanation: A DSNUGDAL macro invocation has returned a nonzero return code. An attempt to modify a DBD by setting the OBDIFIB bit on was unsuccessful.

This abend reason code is issued by the following CSECTs: DSNUGFIB, DSNURFIB

System action: Processing is abended.

User response: This abend might be caused by an unavailable resource. Check for a DSNT500I message being issued prior to the abend. A dump will be suppressed in this case. If no 'resource unavailable' condition is indicated, notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E400B0

Explanation: Utilities invocation of CREATE THREAD has ended abnormally.

This abend reason code is issued by the following CSECTs: DSNUGBAC, DSNUGUTC

System action: The utility job step is terminated. No record of the utility job step remains in the system.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E400C0

Explanation: A -STOP DB2 MODE(FORCE) command has been entered while a utility was executing, or a -STOP DB2 MODE(QUIESCE) command has been entered while a utility with multiple input statements was executing and the current input statement execution has completed.

This abend reason code is issued by the following CSECTs: DSNUGPPE, DSNUGUTC

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the reason that the -STOP DB2 command was issued. After DB2 has been started again, the utility job can be restarted.

00E400C1

Explanation: DB2 failed while attempting to latch or unlatch an index page. This is an internal error.

System action: The utility job step that caused the

function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend reason code is issued by the following CSECTs:

DSNUSIDX	DSNURFBI	DSNUCBRL	DSNUKGET
DSNUKIFK	DSNURBXA	DSNURBXC	DSNURBXZ
DSNURBXE			

00E400C2

Explanation: DB2 received an unexpected return code from MVS. This is an internal error.

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E400C3

Explanation: An error was detected during the restart of a utility that uses a TEMPLATE name specification to dynamically allocate the data sets. The data sets that need to be reused for restart were not found.

System action: Utility processing is abended.

User response: Examine the JCL and ensure that the TEMPLATE control statement specifies the correct disposition for the data sets. Further analysis might be needed.

Problem determination: This abend is forced to allow restart of the utility when work data sets are used and the disposition is not MOD, DELETE, and CATLG (for example, not

DISP=(MOD,DELETE,CATLG)

).

| 00E400E0

| **Explanation:** An attempt to modify the catalog information was unsuccessful.

| **System action:** Utilities processing is abended. The

| abend might be accompanied by message DSNT500I.
| An SDUMP might be taken.

| **User response:** Correct the 'resource unavailable'
| condition that was identified by the DSNT500I
| message. Terminate the utility and start it again from
| the beginning.

| If DSNT500I was not issued, register 2 contains a
| secondary DB2 reason code that gives more
| information about the problem. If the secondary reason
| code is not documented here, it is an internal IBM
| code. Notify the System Programmer.

| **Problem determination:** Refer to Part 2 of *DB2
| Diagnosis Guide and Reference* for information on
| identifying and reporting the problem.

| Collect the following diagnostic items listed in
| Appendix C, "Problem determination," on page 735: 1,
| 3, 4, 5, 32, 46.

00E40100

Explanation: DB2 failed during execution of the
DSNBGETP macro.

System action: The utility job step that caused the
function to be requested is abended. The utility job is
placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing
environment. Refer to Part 2 of *DB2 Diagnosis Guide and
Reference* for information on identifying and reporting
the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
5, 32, 46, 60, 61.

00E40101

Explanation: DB2 failed during execution of the
DSNBSETW macro.

System action: The utility job step that caused the
function to be requested is abended. The utility job is
placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing
environment. Refer to Part 2 of *DB2 Diagnosis Guide and
Reference* for information on identifying and reporting
the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
5, 32, 46, 60, 61.

00E40102

Explanation: The data manager subcomponent of DB2
failed during execution of the DSNICCOB macro.

System action: The utility job step that caused the
function to be requested is abended. The utility job is
placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing
environment. Refer to Part 2 of *DB2 Diagnosis Guide and
Reference* for information on identifying and reporting
the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
5, 32, 46, 60, 61.

00E40103

Explanation: The data manager subcomponent of DB2
failed during execution of the DSNICCUB macro.

System action: Utility processing is abended. The
abend might be accompanied by message DSNT500I.
An SDUMP might be taken.

User response: Correct the 'resource unavailable'
condition identified by the DSNT500I message. Either
restart the utility from the last commit point or
terminate the utility and start it again from the
beginning.

If DSNT500I was not issued, register 2 contains a
secondary DB2 reason code that gives more
information about the problem. If the secondary reason
code is not documented in this manual, it is an internal
IBM code.

Problem determination: If the condition cannot be
corrected, determine the failing environment. Refer to
Part 2 of *DB2 Diagnosis Guide and Reference* for
information on identifying and reporting the problem.

Collect the following diagnostic items listed in
Appendix C, "Problem determination," on page 735: 1,
5, 32, 46, 60, 61.

00E40104

Explanation: The data manager subcomponent of DB2
failed during execution of the DSNIDISP macro.

System action: The utility job step that caused the
function to be requested is abended. The utility job is
placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing
environment. Refer to Part 2 of *DB2 Diagnosis Guide and
Reference* for information on identifying and reporting
the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40105

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIDLET macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40106

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNILRDO macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40107

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIISRT macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40108

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNINEXH macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40109

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIPGER macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010A

Explanation: DB2 failed during execution of the DSNIPSCB macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010B

Explanation: DB2 failed during execution of the DSNIPZOP macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010C

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIREPL macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010D

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISETH macro.

System action: Utility processing is abended. The

abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010E

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNISRCF macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4010F

Explanation: The data manager subcomponent of DB2 failed during execution of the DSNIRBA macro.

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or

terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40110

Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.

System action: The utility job is abnormally terminated. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility or terminate the utility and submit it again.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 32, 46, 61.

00E40111

Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPXTND macro.

This abend reason code is issued by the following CSECT: DSNUCBFW

System action: The utility job is abended. DSM provides diagnostic information.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40112

Explanation: DSNUGMAP, a utilities program, failed.

This abend reason code is issued by the following CSECT: DSNUCBFW

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40113

Explanation: The data space manager subcomponent of DB2 failed during execution of the reset of an index space or table space page set.

This abend reason code is issued by the following CSECTs:

DSNUCLRS DSNUCRVA DSNUCTER

System action: The utility job is abnormally terminated. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message and either restart the utility or terminate the utility and submit it again. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment, and if you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNT500I in this manual for a 'resource unavailable' condition.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 32, 46, 61.

00E40114

Explanation: DB2 failed during execution of DSNICLPS.

This abend reason code is issued by the following CSECTs:

DSNUCLRS DSNUCRVA DSNUGUIP

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40115

Explanation: The data manager subcomponent of DB2 failed during execution of DSNIUSTP.

This abend reason code is issued by the following CSECTs:

DSNUCLVE DSNUCRVA DSNURBXA DSNURBXC

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40116

Explanation: Either DSN3SYNC or DSN3ABRT failed.

This abend reason code is issued by the following CSECTs:

DSNUBCL0 DSNUCRVA DSNUCRV0

System action: The utility job step that caused the

function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40117

Explanation: DSNURBXB, a utilities module, failed.

This abend reason code is issued by the following CSECT: DSNUCRVI

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40118

Explanation: The data space manager subcomponent of DB2 failed during execution of the DSNPGNPO macro.

This abend reason code is issued by the following CSECT: DSNUCRVA

System action: The utility job is abended. The DSM provides any required diagnostic information, such as messages, dumps, or log records.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

00E40119

Explanation: This abend reason code is issued in these instances:

- During recovery, a full image copy was not found for the DB2 directory or the DB2 catalog table space.
- The MERGECOPY utility did not recognize a record from the SYSIBM.SYSCOPY catalog table.

This abend reason code is issued by the following CSECT: DSNUBCL0

System action: The utility job is abended.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: When the recovery of the DB2 catalog or directory table space is requested, make sure that a full image copy has been taken first. If the MERGECOPY utility abended, either issue a select statement or run the REPORT utility to check the SYSIBM.SYSCOPY table for invalid rows.

00E4011A

Explanation: An error occurred in the RECOVER utility while applying log with log RBA=0.

This abend reason code is issued by the following CSECTs: DSNUCLVL, DSNUCRVL

System action: The utility job is abended.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Make sure the SYSLGRNX table space is not empty before applying the log.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 53, 60.

00E4011B

Explanation: The data manager subcomponent of DB2 failed during the execution of DSNIHDFM.

This abend reason code is issued by the following CSECTs: DSNUCRVA, DSNUCLVE

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility or terminate the utility and execute it from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more

information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E4011C

Explanation: The log manager subcomponent of DB2 failed during execution of the DSNJLGR macro.

This abend reason code is issued by the following CSECTs: DSNULOG1, DSNUGLGR

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

System programmer response: Register 2 contains a secondary reason code. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 6, 16, 32, 33, 53, 60, 61.

00E4011D

Explanation: DB2 detected an error during execution of the DSNIDDRN macro. This is an internal error.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 31, 32, 47, 50.

00E4011F

Explanation: The RECOVER utility is unable to clear the group buffer pool pending status.

System action: The RECOVER utility abends with this code.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNUCARS

00E40120

Explanation: A delete of SYSLGRNX information failed during -TERM UTILITY command processing for a REORG utility in the RELOAD phase.

This abend reason code is issued by the following CSECT: DSNUBCOP

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40121

Explanation: A RDJFCB macro invocation returned a nonzero return code.

This abend reason code is issued by the following CSECT: DSNUBCKB

System action: Processing is abended.

User response: This is probably a user error. A DD statement might be missing or specified incorrectly. If the DD statements appear to be correct, there might be

another cause of the error and you should notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The DD statement referred to by the COPYDDN Utility keyword might be missing or specified incorrectly. If COPYDDN was not specified, a DD statement with a default name equal to SYSCOPY must be present in the job step.

00E40122

Explanation: A IEFAB4UV invocation returned a nonzero return code.

This abend reason code is issued by the following CSECT: DSNUBCKB

System action: Processing is abnormally terminated.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E40123

Explanation: The RECOVER TABLESPACE utility cannot access the SYSIBM.SYSVOLUMES catalog table to process a concurrent copy produced by the DFDSS DUMP command.

System action: The RECOVER TABLESPACE utility abends.

System programmer response: Resolve the access problem to the SYSVOLUMES catalog table. Then restart the RECOVER TABLESPACE utility.

Problem determination: See the console for additional diagnostic messages.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNUCADE.

00E40124

Explanation: A down level internal control block was detected.

System action: The utility job step that requested the

function is abended. The abend is accompanied by message DSNU424I.

User response: Refer to the APAR mentioned in message DSNU424I.

System programmer response: Refer to the APAR mentioned in message DSNU424I.

Problem determination: Refer to the APAR mentioned in message DSNU424I.

This abend reason code is issued by the following CSECT: DSNUBARR

00E40125

Explanation: The RECOVER utility was recovering an indexspace with index versioning active. The utility issued the DSNDBIXD macro which calls the Index Manager subcomponent. An error occurred while the Index Manager was building an internal control block.

System action: The RECOVER INDEX/INDEXSPACE utility abends.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40126

Explanation: The RECOVER utility was recovering an indexspace with index versioning active. The utility issued the DSNDDIDPB macro which calls the Index Manager subcomponent. An error occurred while the Index Manager was building the Index Descriptor Page.

System action: The RECOVER INDEX/INDEXSPACE utility abends.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40163

Explanation: An error was detected during activity history recording insert of SYSIBM.SYSLGRNG or SYSLGRNX.

This abend reason code is issued by the following CSECT: DSNUAHR2

System action: Processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40164

Explanation: An error was detected during activity history recording update of SYSIBM.SYSLGRNG or SYSLGRNX.

This abend reason code is issued by the following CSECT: DSNUAHR2

System action: Processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40165

Explanation: An error was detected during an execution unit switch while performing application history recording or drop processing.

This abend reason code is issued by the following CSECTs: DSNUAHR1, DSNUADP1

System action: Processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40166

Explanation: A delete of SYSIBM.SYSLGRNX information failed during DROP processing.

This abend reason code is issued by the following CSECT: DSNUADP2

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40167

Explanation: A delete of SYSIBM.SYSCOPY information failed during DROP processing.

This abend reason code is issued by the following CSECT: DSNUADP1

System action: Processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40168

Explanation: The buffer manager (BM) subcomponent of DB2 failed during the execution of the DSNBPFPP macro.

This abend reason code is issued by the following CSECT: DSNUCRVA

System action: The utility job step that caused the function to be requested is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is a DB2 subsystem internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40170

Explanation: The COPY or RECOVER utility was executing in PARALLEL mode. An error occurred in the data transport mechanism while data was being transferred between the batch and the online DB2 address spaces.

System action: The COPY or RECOVER utility abends.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40189

Explanation: An error was detected while inserting records from SYSIBM.SYSCOPY.

This abend reason code is issued by the following CSECT: DSNUBINS

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point, or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be

corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40190

Explanation: An error was detected while scanning the SYSIBM.SYSCOPY catalog table.

This abend reason code is issued by the following CSECTs: DSNUMDEL DSNUBAUS

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40191

Explanation: An error was detected while deleting records from SYSIBM.SYSCOPY.

This abend reason code is issued by the following CSECT: DSNUMDEL

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be requested.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40192

Explanation: An invalid call to DSNULOG1 was detected when a partial recovery function in DSNULOG1 was invoked. The passed parameter is not a TOCOPY or TORBA to SYSCOPY, SYSUTILX, or DSNDB01.

This abend reason code is issued by the following CSECTs: DSNULOG1 DSNUBAUS

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

00E40193

Explanation: An error was detected while a utility was attempting to retrieve catalog table information. This is an internal error.

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E40194

Explanation: This is an internal error. An error was detected running the COPY utility with the SHRLEVEL CHANGE option.

System action: The utility job step that requested the function is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32,

This abend reason code is issued by the following CSECT: DSNUBAID

00E40195

Explanation: This is an internal error. An error was detected running the COPY utility with the SHRLEVEL CHANGE option.

System action: The utility job step that requested the function is abended. The utility job is placed in the stopped state.

User response: Notify the system programmer.

System programmer response: Determine the failing environment.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32,

This abend reason code is issued by the following CSECT: DSNUBAID

| 00E40196

| **Explanation:** DB2 detected an error while reading the catalog history tables.

| **System action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

| **User response:** Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

| If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

| **Problem determination:** If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

| Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

| 00E40197

| **Explanation:** DB2 detected an error while deleting rows from the catalog history table.

| **System action:** Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

| **User response:** Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

| If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

| **Problem determination:** If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

| Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40201

Explanation: RUNSTATS was unable to reposition and continue processing after a COMMIT.

This abend reason code is issued by the following CSECTs: DSNUSIDX, DSNUSTBL

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40202

Explanation: An error was detected while scanning a table space or index during RUNSTATS processing.

This abend reason code is issued by the following CSECTs: DSNUSIDX, DSNUSTBL

System action: Utilities processing is abended.

User response: If message DSNT500I was issued, assure that the indicated resource is available and resubmit the job, otherwise notify the system programmer.

System programmer response: If message DSNT500I was issued, refer to the description of the message in *DB2 Messages*, otherwise, this is an internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40203

Explanation: An error was detected in a parameter list passed to the RUNSTATS message-formatting routine.

This abend reason code is issued by the following CSECT: DSNUSMSG

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61,

00E40204

Explanation: An error was detected while attempting to locate the PB0 control block for a table space partition.

This abend reason code is issued by the following CSECT: DSNUSTBL

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61,

00E40205

Explanation: An error was returned from COMMIT or ABORT processing during RUNSTATS.

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40206

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSCOLUMNS or
| SYSIBM.SYSCOLUMNS_HIST catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40207

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSINDEXES or
| SYSIBM.SYSINDEXES_HIST Catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40208

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSINDEXPART or
| SYSIBM.SYSINDEXPART_HIST Catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40209

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSTABLEPART or
| SYSIBM.SYSTABLEPART_HIST Catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40210

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSTABLES or
| SYSIBM.SYSTABLES_HIST Catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message,

terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40211

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSTABLESPACE Catalog table.

This abend reason code is issued by the following CSECTs: DSNUSCT6, DSNUSUTS

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40212

Explanation: A 'resource unavailable' condition was detected while attempting to access a catalog table during RUNSTATS processing.

This abend reason code is issued by the following CSECT: DSNUSVAL

System action: Utility processing is abended. The abend will be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message and

restart the utility. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment and If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNT500I in this manual. See the secondary reason code from register 2, also in this manual. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40213

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSCOLDIST or
| SYSIBM.SYSCOLDIST_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40214

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSTABSTATS or
| SYSIBM.SYSTABSTATS_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a

secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40215

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSINDEXSTATS or
| SYSIBM.SYSINDEXSTATS_HIST catalog table.

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40216

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPC DSNUSACO

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason

code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40217

Explanation: An error was detected while updating the statistics in the SYSIBM.SYSCOLDISTSTATS catalog table.

This abend reason code is issued by the following CSECTs: DSNUSUPD DSNUSACD

System action: Utilities processing is abended. Message DSNT500I might accompany this abend. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message, terminate the utility, and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40218

| **Explanation:** DB2 detected an error while updating
| the statistics in the SYSIBM.SYSLOBSTATS or
| SYSIBM.SYSLOBSTATS_HIST Catalog table.

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition that is identified by the DSNT500I message, terminate the utility, and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented here, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 32, 46.

00E40220

Explanation: An error was detected while accessing the SYSIBM.SYSTOGROUP catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40221

Explanation: An error was detected while accessing the SYSIBM.SYSTABLEPART catalog table.

This abend reason code is issued by the following CSECTs: DSNUTSSA, DSNUKINP

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40222

Explanation: An error was detected while accessing the SYSIBM.SYSINDEXPART catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40223

Explanation: An error was detected while accessing the SYSIBM.SYSTABLESPACE catalog table.

This abend reason code is issued by the following CSECTs: DSNUTSSA, DSNUKINP

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40224

Explanation: An error was detected while accessing the SYSIBM.SYSINDEXES catalog table during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System action: Utility processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40225

Explanation: An error has been detected by DSNPSCAT during STOSPACE processing.

This abend reason code is issued by the following CSECT: DSNUTSSA

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40300

Explanation: An error occurred in END INDEX LOAD processing following a sequence of index entry loads.

This abend reason code is issued by the following CSECTs: DSNURBXA, DSNURBXC

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40301

Explanation: An error was encountered while attempting to obtain the high used RBA for the data sets associated with the table space being reorganized.

This abend reason code is issued by the following CSECT: DSNURFIT

System action: Processing abnormally terminates.

Operator response: Notify the system programmer.

System programmer response: Determine the reason the high used RBA could not be obtained, correct the situation, and restart the utility.

Problem determination: The data sets associated with the table space being reorganized must be opened in order to obtain the high used RBA. Ensure that the data sets are available and can be opened by the utility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40302

Explanation: An error occurred while attempting to force a page set closed.

This abend reason code is issued by the following CSECTs:

DSNURBXA DSNURBXC DSNURCLP DSNURBXC

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40303

Explanation: An attempt was made to access the SYSIBM.SYSINDEXES catalog table to retrieve the NAME, CREATOR, TBNAME and TBcreator columns. An error was returned from the DSNXKACC protocol used to access SYSIBM.SYSINDEXES.

This abend reason code is issued by the following CSECTs: DSNUGIXN, DSNUKINT

System action: The utility job is abended. Unless a 'resource unavailable' condition was indicated, a SYSABEND dump of batch storage is requested.

User response: If a 'resource unavailable' message was issued, refer to the description for that message. If the unavailable resource becomes available, the utility step is restartable.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This might be an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40304

Explanation: An error occurred during key/RID pair delete processing for a nonclustering index.

This abend reason code is issued by the following CSECT: DSNURBXA

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 60, 32, 46, 61, 5.

00E40305

Explanation: An error occurred during the reset of an index space or table space page set or page set partition.

This abend reason code is issued by the following CSECTs: DSNURBXC, DSNUGRST

System action: The utility job is abended. The abend may be accompanied by message DSNT500I. The DSNT500I may be preceded by other related messages on the console. An SDUMP may be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message and either restart the utility or terminate the utility and submit it again. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment, and if you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNT500I in this manual. See the secondary reason code from register 2.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40306

Explanation: An error occurred during a locate or create PSCB for a table space or index space page set.

This abend reason code is issued by the following CSECTs: DSNURBXC, DSNURBXC

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40307

Explanation: An error occurred during the creation of a dynamic cursor block (CUB) for a table space or index space page set.

00E40308 • 00E4030B

Thisabend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40308

Explanation: An error occurred while attempting to allocate or deallocate storage for the table space record buffer.

Thisabend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40309

Explanation: An error occurred during the construction of an index entry. The error occurred while reading the table space record, while extracting the key from the table space record, or while connecting the entry into the index.

Thisabend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4030A

Explanation: A mismatch was found between the total number of keys processed during the current phase and the total number of keys expected to be processed in this phase.

System action: The utility job is abnormally terminated, and all target objects are placed in rebuild pending state. Message DSNU255I was issued earlier to report both the keys processed and the keys expected. A dump is requested.

User response: TERM the utility and re-access the indexes by running REPAIR utility to reset the rebuild pending states on indexes. Run the CHECK INDEX utility to determine if any of the affected indexes are inconsistent. Inconsistent indexes may be recovered by the REBUILD INDEX or RECOVER utility.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If working data set was manipulated by user during restart process, make sure it was handled properly.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E4030B

Explanation: A mismatch was found between the total number of records processed during the current phase and the total number of records expected to be processed in this phase.

System action: The utility job is abnormally terminated. Message DSNU254I was issued earlier to report the records that were processed and the records that were expected. A dump is requested.

User response: Notify the System Programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Make sure that the unload data set was handled correctly.

Collect the following diagnostic items: listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E4030C

Explanation: An internal error occurred while building the dictionary.

This abend reason code is issued by the following CSECTs: DSNUDCTI DSNUDCTB DSNUDCTC DSNUDCTV DSNURBDC DSNURPDC DSNURWBF

System action: The utility is stopped.

Operator response: If necessary, an operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items: listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E4030D

Explanation: A LOAD or REORG utility detected an index that was potentially in a physically inconsistent state, which prohibited the LOAD or REORG utility from completing its processing for that index.

System action: The utility job is abended. No SYSABEND dump or SVC dump is requested.

User response: If the abend occurred during REORG utility processing, all indexes that were not built must be rebuilt using the DB2 Rebuild Index utility. To determine which indexes did not complete processing, use the DB2 -DISPLAY DATABASE command with the SPACENAM and RESTRICT options. Indexes that have not completed processing are in a 'RBDP' (rebuild pending) or 'PSRBD' (page set rebuild pending) state. Terminate the failed REORG utility using the DB2 -TERM UTIL command. Submit a job to rebuild the inconsistent indexes using the DB2 REBUILD or RECOVER Index utility.

If the abend occurred during LOAD utility processing, the data might need to be rebuilt if one or more of the indexes not built is unique. In that case, rebuilding the indexes without first rebuilding the data could cause error messages for duplicate keys to be issued during the REBUILD utility processing.

Problem determination: Message DSNU548I is issued before this abend and specifies which index was in a 'PSRDB' (page set rebuild pending) state. The LOAD or REORG utility could not process an index in such a state and abnormally terminated. 'PSRDB' is set for secondary indexes of a partitioned table space and indicates that the index might be physically inconsistent. This occurs when a DB2 utility physically alters such an index during utility processing (that is, during the build process for that index). If the utility is

unable to complete that process, the index is left in the 'PSRDB' state and must be rebuilt before DB2 can use it.

00E4030E

Explanation: In REORG with SHRLEVEL CHANGE, during processing of the log, a log record is inconsistent with the table that maps between old and new RIDs. Specifically, one of these is true:

- The log record implies that before an update, the data record was a pointer data record, but the mapping table implies that the data record was a regular or overflow data record.
- The log record implies that before an update, the data record was a regular or overflow data record, but the mapping table implies that the data record was a pointer data record.

This abend reason code is issued by the following CSECT: DSNURLXL

System action: The utility job step that caused the function to be requested abends. The utility job is placed in the stopped state.

System programmer response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, either 2 or 4 (depending on whether the ABEND is issued from DSNUTILA or DSNUTILB), 5, 32, 37, 47, 50, 64, 66, 72, 86, 87.

00E4030F

Explanation: After the last iteration of log processing, one or more index keys in the shadow copy are not unique.

REORG with SHRLEVEL CHANGE operates as follows:

1. Unloads data from the original copy of the area (table space or partition) being reorganized
2. Reloads into a shadow copy of that area
3. Iteratively applies the log (which records applications' writing of the original copy) to the shadow copy so that the shadow copy and the original copy contain the same data

If the table space has any unique indexes, those indexes will enforce uniqueness of the relevant index keys in the original copy. Those index keys should also be unique in the shadow copy.

This abend reason code is issued by the following CSECT: DSNURLOG.

System action: The utility job step that caused the function to be requested abends. The utility job is placed in the stopped state.

System programmer response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, either 2 or 4 (depending on whether the ABEND is issued from DSNUTILA or DSNUTILB), 5, 32, 37, 47, 50, 64, 66, 72, 86, 87.

00E40310

Explanation: An error occurred during the restart of a LOAD or REORG utility execution. An appropriate error message is issued.

System action: The utility is abended.

User response: Respond to the error message issued prior to the abend by making the correction in the input as indicated. Then restart the LOAD or REORG utility execution.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40311

Explanation: An error occurred during commit processing.

System action: The utility is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40312

Explanation: An error occurred during abort processing.

System action: The utility is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Reference for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40313

Explanation: An error occurred while the first or next key entry was being retrieved from an index.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40314

Explanation: An error occurred while repositioning the cursor block (CUB) to the last index entry that was retrieved.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40315

Explanation: An error occurred while repositioning the main cursor block (CUB). The error occurred at the location defined by the record identifier (RID) of the last table space record that was retrieved.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40316

Explanation: An error occurred while the first or next record entry was being retrieved from a table space.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40317

Explanation: An object descriptor block (OBD) could not be found for the OBID associated with the object descriptor.

'nnnn' is the CSECT name identifier given in VRARRK5 of the VRA in the SDWA. DSNUnnnn is the full CSECT name given in the dump title.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40318

Explanation: An error occurred while preparing for or ending a series of data record loads or while attempting a data record load.

System action: The utility job is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40319

Explanation: An error occurred while retrieving information from the SYSIBM.SYSTABLES catalog table.

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4031A

Explanation: One or more broken pages were detected in the shadow data set while copying pages for the inline copy during REORG TABLESPACE SHRLEVEL(CHANGE). Message DSNU518I in the job output identifies each broken page.

System action: The utility job is abended. An SDUMP of the ssnDBM1 address space is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error. Collect the following diagnostic items listed in the section entitled "Problem Determination" on page X-5: 1, 2, 5, 32,, 37, 47, 50, 64, 66, 72, 86, 87.

00E4031B

Explanation: For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming.

The original name of a data set is in the form catname.DSNDBx.dbname.psname. I0001.Annn. The shadow name of a data set is in the form catname.DSNDBx.dbname.psname. S0001.Annn. The temporary name of a data set is in the form catname.DSNDBx.dbname.psname. T0001.Annn. REORG uses such data sets for indexes as well as data.

00E4031C

To exchange the names of the original and shadow data sets, REORG performs the following renaming:

- 1 In the switch phase, it renames the original data set from the original name to the temporary name
- 2 In the switch phase, it renames the shadow data set from the shadow name to the original name
- 3 In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for DB2-managed data sets.

This abend code means that during the switch phase of REORG, one of these errors was detected:

- 1 On rename 1, a data set with a temporary name already exists.
- 2 On rename 2, a data set with an original name already exists.

These error conditions can arise for a DB2-managed or user-managed data set.

Message DSNU360I also appears, with the name of the data set and with a context code of 1, or 2.

This abend reason code is issued by the following CSECT: DSNURRNM.

System action: The utility job step that caused the function to be requested abends. The utility job is placed in the stopped state.

User response: Take one of the following actions:

- Delete the data set and then restart the utility.
- TERM the utility. Delete the data set before trying to execute REORG again with SHRLEVEL REFERENCE or CHANGE.

00E4031C

Explanation: For the area (table space or partition) being reorganized, REORG with SHRLEVEL REFERENCE or CHANGE unloads data from the original data sets and reloads data into shadow data sets. REORG then exchanges the names of the original and shadow data sets, using temporary names during the renaming.

The original name of a data set is in the form catname.DSNDBX.dbname.pname. I0001.Annn. The shadow name of a data set is in the form catname.DSNDBX.dbname.pname. S0001.Annn. The temporary name of a data set is in the form catname.DSNDBX.dbname.pname. T0001.Annn. REORG uses such data sets for indexes as well as data.

To exchange the names of the original and shadow data

sets, REORG performs the following renaming:

- 1 In the switch phase, it renames the original data set from the original name to the temporary name
- 2 In the switch phase, it renames the shadow data set from the shadow name to the original name
- 3 In the utilterm phase, it renames the original data set from the temporary name to the shadow name (for user-managed data sets). It deletes the temporary for DB2-managed data sets.

If a -TERM UTILITY is issued after any renaming, the -TERM UTILITY undoes the renaming that the REORG performed by renaming:

- 4 The original data set from the shadow name to the temporary name
- 5 The shadow data set from the original name to the shadow name
- 6 The original data set from the temporary name to the original name

During REORG, or during -TERM UTILITY, an attempt to rename a data set failed due to a system problem. This error condition can arise for a DB2-managed or user-managed data set.

Message DSNP027I also appears, with the old and new names of the data set and with other information.

System action: The job step that caused the function to be requested abends. The utility job or the -TERM UTILITY command is placed in the stopped state.

User response: If this condition arises during renaming 1, 2, or 3, and you can correct the problem. Choose between these actions:

- Correct the problem and then RESTART the utility.
- TERM the utility.

If this condition arises during renaming 1, 2, or 3, and you cannot correct the problem, TERM the utility and notify the system programmer.

If this condition arises during renaming 4, 5, or 6, notify the system programmer.

System programmer response: This is an internal error. Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 4, 5, 10, 12, 32. Also, collect the information that appears with message DSNP027I.

00E40320

Explanation: A failure occurred while attempting to restart the RELOAD phase of the LOAD or REORG utility.

This abend reason code is issued by the following CSECT: DSNURWUC

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40321

Explanation: An error occurred while retrieving information from the SYSIBM.SYSCOLUMNS catalog table.

This abend reason code is issued by the following CSECTs:

DSNUKINE DSNUROFL DSNUCBRK

System action: The utility job is abended. A SYSABEND dump of batch storage is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40322

Explanation: An error occurred while attempting to add an entry to an index.

This abend reason code is issued by the following CSECT: DSNURBXA

System action: Processing of the index for which the error occurred is terminated. The index is internally identified as an unavailable resource. A utility error message identifies the index for which the error occurred. An SVC dump of the database services storage is requested but will be suppressed if a

previous 'resource unavailable' message has been issued to document the condition. The processing of index entries for other indexes proceeds.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40323

Explanation: An error occurred during the execution of a LOAD or REORG utility. Prior to this abend, error messages identifying the specific problem were issued. The abend is issued so that work data sets, which will be needed if the utility is restarted, are saved.

This abend reason code is issued by the following CSECTs:

DSNURELD DSNURWBF DSNURBXD DSNURVIX
DSNURENF

System action: Utility processing is abended. No SYSABEND dump or SVC dump is requested.

User response: Respond to the error messages issued prior to the abend. Correct the input and either -TERM the utility and resubmit it or resubmit the utility with the RESTART parameter. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: When work data sets are used and the disposition is MOD, DELETE, and CATLG, (DISP=(MOD,DELETE,CATLG)), this abend still allows you to restart the utility. Refer to the prior error messages to determine how to correct the problem.

00E40324

Explanation: An error occurred during the construction of an index entry. The error occurred while extracting the key from the table space.

This abend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and*

00E40325 • 00E40335

Reference for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E40325

Explanation: An error occurred during the construction of an index. The error occurred while loading the index entries into the index page set.

This abend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E40326

Explanation: An error occurred during the construction of an index. The error occurred during sort.

This abend reason code is issued by the following CSECT: DSNURBXB

System action: The utility job is abended. A SYSABEND dump of batch storage and an SVC dump of the database services storage are requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 60, 61.

00E40333

Explanation: An error occurred while attempting a forced write of RELOAD phase data buffers.

This abend reason code is issued by the following CSECT: DSNURFIS

System action: RELOAD phase processing is terminated. An SDUMP of the *ssnm*DBM1 address space is requested.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40334

Explanation: LOAD or REORG utility processing was attempting to retrieve COLUMN information from the SYSIBM.SYSFIELDS catalog table when an error was detected.

This abend reason code is issued by the following CSECTs: DSNURFIT, DSNURWIS, DSNUBACI, DSNUBAFI

System action: Utility processing is abended. An SDUMP is requested unless this abend is accompanied by a DSNT500I message written to the SYSPRINT data set.

User response: Notify the system programmer.

System programmer response: Correct the indicated error, if possible, and resubmit the terminated utility job with the RESTART parameter. If the problem can not be corrected, and if you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If this abend is due to an unavailable resource, message DSNT500I provides sufficient problem determination and correction information. Register 2 contains a secondary reason code that might provide additional information.

00E40335

Explanation: An error has been detected while attempting to read a row from the SYSIBM.SYSRELS table.

This abend reason code is issued by the following CSECT: DSNUGRLN

System action: The utility job is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 32, 60, 61.

00E40336

Explanation: LOAD or REORG utility used the DSNXIFPS protocol to invoke a field procedure for encode or decode and an error code was returned that indicates a DB2 internal error.

This abend reason code is issued by the following CSECTs: DSNURFBR, DSNURWBG

System action: Utility processing is abended. An SDUMP is requested.

User response: Notify the system programmer.

Problem determination: This is an internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40340

Explanation: The LOAD or REPAIR utility used the DSNXVCCR protocol to invoke a conversion routine for a date/time data type. An error code was returned that indicates a DB2 internal error.

This abend reason code is issued by the following CSECTs:

DSNURWBG DSNURWUT DSNUCBRK

System action: The utility job is abended. An SDUMP of the *ssnm*DBM1 address space is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40341

Explanation: A failure occurred during reset processing for a LOAD REPLACE or LOAD PART REPLACE utility.

System action: The utility job is abended. An SDUMP of the *ssnm*DBM1 address space is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40343

Explanation: The LOAD or REORG utility used the DSNJCKLO protocol to obtain the current log RBA. An error code was returned that indicates a DB2 internal error.

System action: The utility job is abended. An SDUMP of the *ssnm*DBM1 address space is requested.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40345

Explanation: The subtask performing an MVS sort terminated abnormally.

This abend reason code is issued by the following CSECTs: DSNUREKY, DSNURELD, DSNURBXD

System action: Any error message generated by sort in conjunction with the abend is directed to the device/data set identified by the UTPRINT DD statement in the utility job step.

User response: Determine the cause of the error. If the error can be corrected, the utility can be restarted from the beginning of the reload phase by using the 'RESTART(PHASE)' parameter. If the error prevents the utility from completing, the -TERM command should be issued to remove the stopped utility from the system.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

Problem determination: This error can be caused by abend 00E40005 and error message DSNU044I issued from the subtask. If this is the case, correct the error causing the subtask to abend. In most cases, the error messages from SORT that are sent to the device/data set identified by the UTPRINT DD statement identify the problem. The dump might not be needed. If SORT is unable to open the UTPRINT data set, only the message and abend are provided. In this case, correct the problem associated with the UTPRINT DD statement, and restart the job with the RESTART(PHASE) option.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40346

Explanation: The LOAD or REORG subtask creating a COPY data set terminated abnormally.

System action: Any error message generated by the subtask in conjunction with the abend is directed to the device and data set identified by the SYSPRINT DD statement in the utility job step.

User response: Determine the cause of the error. If you can correct the error, restart the utility from the beginning of the reload phase by using the 'RESTART(PHASE)' parameter. If the error prevents the utility from completing, issue the -TERM command to remove the stopped utility from the system.

Operator response: An operator with SYSOPR authority can issue the -TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

Problem determination: This error can be caused by out of space situations on the data sets identified by the COPYDDN and RECOVERYDDN keywords. If this is the case, correct the data set allocations and restart the job with the RESTART(PHASE) option.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40347

Explanation: This utility's main task is abending because one of its subtasks terminated abnormally. The subtask itself issues an abend before this one is issued.

System action: Any error message generated by the subtask in conjunction with the abend is directed to the device and data set identified by the SYSPRINT DD statement in the utility job step.

User response: Determine the cause of the error in the subtask. If you can correct the error, restart the utility from the beginning of the phase by using the 'RESTART(PHASE)' parameter. If the error prevents the utility from completing, issue the TERM UTILITY command to remove the stopped utility from the system.

Operator response: An operator with SYSOPR authority can issue the TERM UTILITY command to release the resources claimed by the stopped utility (this might not be necessary).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60.

00E40350

Explanation: An error has been returned from LOB MANAGER insert.

System action: Utilities processing is abended.

User response: Register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5, 32, 46.

00E40351

Explanation: LOAD RESUME YES for a table space containing a table with CLOB, BLOB or DBCLOB columns cannot be restarted in the RELOAD phase with the "RESTART(PHASE)" parameter.

System action: Utilities processing is abended.

User response: The utility can be restarted or terminated:

- To restart the utility, specify the "RESTART" parameter to restart at the last commit point.
- To terminate, use the -TERM command to terminate the utility, then run the CHECK LOB utility to identify any LOBs in the LOB table space that are not associated with a row in the base table.

00E40353

Explanation: An error was detected while reorganizing a LOB table space.

This abend reason code is issued by the following CSECTs: DSNURLOB

System action: Utilities processing is abended.

User response: Register 2 contains a secondary DB2 reason code that will give more information about the problem. Notify the system programmer.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in: 1, 2, 4, 5, 32, 46.

| 00E40355

| **Explanation:** An error was detected while unloading
| or reorganizing a table space. A seclabel column was
| found to be in error.

| **System action:** Utilities processing is abended.

| **User response:** Register 2 contains a secondary DB2
| reason code that will give more information about the
| problem. Notify the system programmer.

| **Problem determination:** Collect the following

diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, and 61.

00E40401

Explanation: An error has been detected while scanning for a specified key in REPAIR by KEY processing.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E40403

Explanation: An error has been detected while scanning for the requested RECORD during REPAIR by record processing.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E40404

Explanation: An error has been returned from the get-page function, DSNBGETP.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E40405

Explanation: An error has been returned from the open-piece function, DSNBOPPP.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E40406

Explanation: An error has been returned from the replace-page function, DSNBRELP.

This abend reason code is issued by the following CSECT: DSNUCBRP

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5, 32, 46, 60, 61.

00E40410

Explanation: The data manager protocol DSNISETR returned an error.

This abend reason code is issued by the following CSECTs: DSNUCDEL, DSNURLAP

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

00E40411

Explanation: An error has been returned from a DSNIDLET protocol during REPAIR DELETE processing.

This abend reason code is issued by the following CSECT: DSNUCDEL

System action: Utilities processing is abended.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

00E40413

Explanation: An error has been detected by the REPAIR utility. Specifically, the DSNINOTC protocol has returned an error.

This abend reason code is issued by the following CSECTs:

DSNUCBRP DSNUCBRR DSNUCDEL

System action: The utility job step is placed in the stopped state.

Problem determination: This abend code may be accompanied by a DSNT500 error message that may indicate a correctable problem. If the DSNT500 message has not been issued or if the problem can not be corrected, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40414

Explanation: An error was detected while trying to determine the highest member ID in the data sharing environment. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNUPREC, DSNUCALA, DSNUAHR2.

System action: Utilities processing is abended.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40415

Explanation: An error was detected while trying to determine the member name for the data sharing member ID. This is an internal error.

This abend reason code is issued by the following CSECTs: DSNUPREC, DSNUPLGR, DSNUCALA

System action: Utilities processing is abended.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E40500

Explanation: An error was returned by the reset function, DSNPRSPS or DSNPREST.

This abend reason code is issued by the following CSECT: DSNUGTER

System action: Utilities processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This abend might be accompanied by one or more DSN messages to the operator's console. The DSN messages might indicate a user error that can be corrected. If DSN messages do not accompany this message, the likely cause of the abend is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E40600

Explanation: There was a utility abend on the batch side of DB2. This abend can be issued by either the CATMAINT or the REPAIR DBD utility. The utility terminates and all work up to the time of abend is backed out.

System action: The execution unit driving this function proceeds normally. A user dump is requested.

Operator response: Notify the system programmer, request the user dump, and print the SYS1.LOGREC, and the BSDS.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: SYSOUT might contain the record being processed at the time of abnormal termination.

The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the error message
5	Address of the load table

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 61.

00E40601

Explanation: There was a utility abend in the DB2 database services address space (*ssmmDBM1*).

This abend can be issued by either the CATMAINT or the REPAIR DBD utility. The utility terminates and all work up to the time of abend is backed out.

System action: The execution unit driving this function proceeds normally.

Operator response: Notify the system programmer, request the SVC dump, and print the SYS1.LOGREC, and the BSDS.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The following general purpose registers (GPRs) contain the indicated diagnostic information:

GPR	Content
2	Address of the error message
7	Address of CT

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5

00E40609

Explanation: A DBD was encountered which is noncontiguous in the EDM pool due to prior operations and the DBD is currently accessed by users. The utility requires the DBD to be contiguous in the EDM pool.

This abend reason code is issued by the following CSECT: DSNUECMI

System action: The utility that detected this condition returns "RESOURCE NOT AVAILABLE" to its invoker.

User response: Allow all SQL access to this database to cease; this will allow the DBD to be flushed from the EDM pool. After all users have finished accessing the database, invoke the utility again. A contiguous DBD will be brought into the EDM pool.

00E40702

Explanation: An error has been detected by CHECK DATA utility during table scanning processing. The data manager protocol DSNISRCF has returned an error.

This abend reason code is issued by the following CSECT: DSNUKSCT

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40703

Explanation: An error has been detected by CHECK DATA utility during table scanning processing. The data manager protocol DSNINXTR has returned an error.

This abend code is issued by the following CSECT: DSNUKSCT

System action: Utility processing is abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40704

Explanation: The CHECK DATA utility detected an error during table scanning processing or delete processing. The data manager protocol DSNISETR returned an error.

This abend reason code is issued by the following CSECTs:

DSNUKSCT DSNUKRDN DSNUKRDY

System action: Utility processing abends.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40705

Explanation: The data manager protocol DSNIEXTK returned an error.

This abend reason code is issued by the following CSECTs: DSNUKSCT, DSNUKICK, DSNURLXL

System action: Utility processing abends.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40706

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKSET returned an error.

This abend reason code is issued by the following CSECTs: DSNUKIFK, DSNUKNFK

System action: Utility processing abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40707

Explanation: The CHECK DATA utility detected an error while processing primary keys matching. The data manager protocol DSNKNEX returned an error.

This abend reason code is issued by the following CSECT: DSNUKIFK

System action: Utility processing abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 5.

00E40708

Explanation: The CHECK DATA utility detected an error while positioning records for cascade delete processing. The data manager protocol DSNISSETD returned an error.

This abend reason code is issued by the following CSECT: DSNUKRDY

System action: Utility processing abended.

User response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E40709

Explanation: An error has been detected by the CHECK DATA utility during positioning of records for cascade delete processing. The data manager protocol DSNINEXD has returned an error.

This abend reason code is issued by the following CSECT: DSNUKRDY

System action: Utilities processing is abended.

User response: Correct the error condition identified by the DSNT500I message, terminate the utility and restart it from the beginning.

Operator response: Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E4070A

Explanation: The CHECK DATA utility detected an error during insert records processing. The data manager protocol DSNISRT returned an error.

This abend reason code is issued by the following CSECTs: DSNUKRDN DSNUKRDY

System action: Utility processing abended.

User response: Review the definition of the exception tables involved to determine if the following conditions are causing the error:

- The exception table has referential constraints.
- The exception table has unique indexes.
- The exception table "table-name2" is identical with "table-name1" in the FOR EXCEPTION keyword.

If none of these is the cause, notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If the errors listed in the User Response section are not the cause, this is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E4070D

Explanation: An error was detected while attempting to update the EPOCH column of SYSIBM.SYSTABLEPART table.

This abend reason code is issued by the following CSECT: DSNUGUEN

System action: Utilities processing is abended. The abend might be accompanied by message DSNT500I. An SDUMP might be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message. Either restart the utility from the last commit point or terminate the utility and start it again from the beginning. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that gives more information about the problem. If the secondary reason code is not documented in this manual, it is an internal IBM code.

Problem determination: If the condition cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4070F

Explanation: An error was detected during the execution of a restarted utility. A message is issued prior to this abend code to indicate the type of error.

This abend reason code is issued by the following CSECT: DSNUK001

System action: Utility processing is abended.

User response: Check messages issued prior to this abend code to determine the cause of the error. Correct the error, and restart the job.

Problem determination: This abend is forced to allow restart of the utility when work data sets are used and the disposition is (MOD,DELETE,CATLG).

00E40900

Explanation: The DIAGNOSE utility forced an ABEND. The specified instance of the specified utility TRACEID or message, from the DIAGNOSE ABEND utility input statement, was encountered during utility processing while DIAGNOSE mode was on.

This abend reason code is issued by the following CSECT: DSNUGABN

System action: The utility is abended as requested.

User response: Continue with the diagnosis procedure in progress.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The ABEND option of the DIAGNOSE utility was invoked to force an abend on a particular instance of a specified utility TRACEID or message. The instance of that TRACEID or message was encountered during utility processing while DIAGNOSE mode was active and an abend was forced to occur at that point.

00E40901

Explanation: The DIAGNOSE utility failed while attempting to set the batch utility address space nonswappable.

This abend reason code is issued by the following CSECT: DSNUDIAG

System action: Utility processing is abended.

User response: Terminate the utility and restart it from the beginning. If the problem persists, wait until fewer applications are running on the system before resubmitting the job.

System programmer response: Determine the environment for the SYSEVENT TRANSWAP failure. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on

identifying and reporting the problem.

Problem determination: The DIAGNOSE utility attempted to set the batch utility address space nonswappable by issuing a SYSEVENT TRANSWAP operation. The operation failed to set the address space nonswappable.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 61.

00E40902

Explanation: A bad parameter has been detected for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWTC

System action: Utilities processing is abended. An SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40903

Explanation: An error has been detected while creating the service task for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWTC

System action: Utilities processing is abended. An SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40904

Explanation: An error has been detected during the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWTC

System action: Utilities processing is abended. An SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40905

Explanation: An error has been detected while deleting the service task for the DIAGNOSE WAIT function.

This abend reason code is issued by the following CSECT: DSNUDWTC

System action: Utilities processing is abended. An SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40906

Explanation: An error has been detected while issuing a WTOR message.

This abend reason code is issued by the following CSECT: DSNUDWTC

System action: Utilities processing is abended. An SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60,

00E40907

Explanation: An error has been detected while attempting to map externals to a specific database descriptor (DBD).

This abend reason code is issued by the following CSECT: DSNUGMAP

System action: Utilities processing is abended. The abend may be accompanied by message DSNT500I. An SDUMP may be taken.

User response: Correct the 'resource unavailable' condition identified by the DSNT500I message and either restart the utility from the last commit point or terminate the utility and start it again from the beginning. If DSNT500I was not issued, register 2 contains a secondary DB2 reason code that will give more information about the problem.

Operator response: Notify the system programmer.

System programmer response: If the condition identified cannot be corrected, determine the failing environment. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: See message DSNT500I in this manual. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes. See the secondary reason code from register 2, also in this manual. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60.

00E41000

Explanation: An internal error has occurred. A utility general service was called incorrectly.

This abend reason code is issued by the following CSECTs: DSNUGDYN, DSNUGTDS

System action: The utility job step is placed in the stopped state.

User response: The general services DSNUGDYN and DSNUGTDS can be bypassed by not using TEMPLATE dynamic allocation.

Operator response: None

System programmer response: This abend should never occur. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 32, 46, 60, 61.

00E4D5D2

Explanation: This abend is placed at logic points that will occur only through a programming error.

System action: Utility processing abends. No SYSABEND dump or SVC dump is requested.

User response: Any 00E4D5D2 is an APARable situation. The abend module and offset will identify the code location in error.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 21. X'E5.....' codes

00E50001

Explanation: A latch acquisition request violates latch deadlock prevention protocols. If the request was unconditional, the execution unit owns a latch at a level equal to or greater than the level of the requested latch. If the request was conditional, the execution unit already owns a latch at the requested level. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: See Problem Determination.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer of the abend.

System programmer response: Collect the necessary diagnostic material. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This abend is issued by the in-line expansions of the latch acquisition macros DSNVLTHS and DSNVLTHX.

At the time of the abend, diagnostic information has been placed in general registers 2 through 5.

Register

	Contents
2	Latch class number (1-32).
3	Address of the latch.
4, 5	Latch class name (1 to 8 characters, left-justified).

Registers 2-12 of the invoking module were saved in the save area pointed to by register 13 at the time the error was detected.

It is the responsibility of the requesting resource manager to have functional recovery in place before requesting a latch. It is expected that a record will be written to SYS1.LOGREC and a DB2 SVC dump will be requested. Examine SYS1.LOGREC and, if available, the SVC dump to determine the subcomponent and module requesting the latch.

00E50002

Explanation: A release latch request was issued for a latch not held by the requesting execution unit. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: See Problem Determination.

System action: The requesting execution unit is abended.

System programmer response: Collect the necessary diagnostic material. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Operator response: Notify the system programmer of the abend.

Problem determination: This abend is issued from within the in-line expansions of the latch release macros DSNVUNLS and DSNVUNLX and from module DSNVXUL0.

At the time of the abend, diagnostic information is placed in general registers 2 through 5.

If the abend is issued from the in-line expansion macros, then the registers are set as follows:

Register

	Contents
2	Latch class number (1-32)
3	Address of the latch
4, 5	Latch class name (1-8 characters, left justified)

If the abend is issued from DSNVXUL0, then the registers are set as follows:

Register

	Contents
2	Latch class number (1-32)
3	Address of the latch
4	Address of the holder of the latch
5	First waiter for the latch

Registers 2-12 of the abending module were saved in the save area pointed to by register 13 at the time the error was detected.

It is the responsibility of the requesting resource manager to have functional recovery in place while holding a latch. A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested. Examine SYS1.LOGREC and, if available, the SVC dump to determine the subcomponent and module requesting the latch.

| 00E50003

| **Explanation:** An execution unit that is requesting a latch already owns that latch. This is a DB2 subsystem error.

| **System action:** The requesting execution unit is abended.

- | **Operator response:** Notify the system programmer.
- | **System programmer response:** Collect the necessary diagnostic materials. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.
- | **Problem determination:** A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.
- | Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50004

Explanation: An error was found while attempting to resume a waiter after a latch was released. This abend is issued when the next resource options block (ROB) to be resumed is the same as the immediately previous ROB. That is, the ROBCHNA of a ROB points to itself.

This abend reason code is issued by the following CSECT: DSNVXUL0

System action: The current execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50005

Explanation: A resource options block (ROB) which was to be added to a latch waiter chain was discovered to be on the chain already. The same ROB cannot be on the same latch waiter chain twice. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs:

DSNVSLT0 DSNVSUL0 DSNVXLT0

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register three contains the address of the ROB

which would have been added to the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50006

Explanation: An execution unit which, according to tracking information, is currently suspended on a latch waiter chain issued a request to acquire a latch. A single execution unit cannot be doing both at the same time. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVSLT0, DSNVXLT0, and any CSECT that issues the DSNVLTHS or DSNVLTHX latch acquisition macros.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50007

Explanation: An execution unit which, according to tracking information, is currently suspended on a latch waiter chain issued a request to test or to release a latch. A single execution unit cannot be doing both at the same time. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVLTT0, DSNVSUL0, DSNVXUL0, and any CSECT that issues the DSNVUNLS or DSNVUNLX latch release macros.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2,

refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50008

Explanation: A latch manager module detected that an execution unit requesting latch manager service pointed to an invalid execution block (EB). This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs:

DSNVLT0 DSNVSLT0 DSNVSUL0 DSNVXLT0
DSNVXUL0

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50009

Explanation: A latch manager module detected an invalid resource options block (ROB) while processing a request for service. This is probably a DB2 subsystem error.

This may be either an abend reason code or a DB2 subsystem termination code.

This reason code is issued by the following CSECTs:

DSNVLFRR DSNVLT0 DSNVSLT0 DSNVSUL0
DSNVXLT0 DSNVXUL0

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50012

Explanation: A caller in TCB mode requested the SRB redispatch function. SRB redispatch can only be requested by SRB-mode callers. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNVSDC0

System action: The requesting task is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic material. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine in DSNVSDC0 creates diagnostic material, an entry in SYS1.LOGREC and a DB2 SVC dump is requested. These must be examined to determine the task and resource manager which made the illegal request.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50013

Explanation: A DB2 execution unit has been abended. This abend code must ultimately be issued by resource managers when the CANCEL exit is driven as a result of a suspend request.

This abend reason code is issued by the following CSECTs:

DSNVEUS1 DSNVEUS3 DSNVASTM DSNVCST0
DSNV DST0 DSNVFEB DSNVSLT0 DSNVSUL0
DSNVXLT0

System action: The agent cancel processing continues.

Operator response: Notify the system programmer only if the abend results in the termination of the DB2 subsystem.

System programmer response: This reason code may be issued as a result of any connected TCB abend, or

operator -STOP DB2 MODE(FORCE) command. No further action is required.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If DB2 abends, examine the SVC dump to determine the suspended resource manager and the state of the failing subcomponent. For example, the ACEMC (must complete) bit should be off.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50014

Explanation: Either the execution block (EB) or the agent services global communication area (VGCA) was invalid. The error was detected when the agent services resume function attempted to resume a TCB in an address space other than the primary of the resume requester. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVRSRB

System action: The error is percolated (passed) to the recovery routine for the TCB that was to have been resumed.

Operator response: Notify the system programmer.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An entry is written to SYS1.LOGREC, and a DB2 dump is requested by the FRR DSNVSRR. Examine the SVC dump and determine the resource manager module requesting the resume operation. Register 3 contains the SRB address. Register 5 contains the EB address. If the VGCA is invalid, its address is in register 8. The EB in question is that of the target TCB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50015

Explanation: The MVS control block (either RB or STSV - SRB Status Save Area) that was the intended object of a resume request was invalid. The RB or STSV address was obtained from the DB2 EB (execution block) at offset X'1C'. This is a subsystem error.

This abend reason code is issued by the following CSECTs:

DSNVSR	DSNVRSRB	DSNVSDC0
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System action: If the CSECT that abends is DSNVRSRB, the error is percolated (passed) to the recovery routine for the TCB that was to have been resumed. If the CSECT that abends is DSNVSR, the error is percolated to the DB2 SRB recovery task DSNVRCT. Ultimately, the subsystem may be terminated abnormally. If the CSECT that abends is DSNVSDC0, the error will be retried one time and, if unsuccessful, the DB2 subsystem is terminated with a 00E50054 reason code.

Operator response: Notify the system programmer.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry and a DB2 SVC dump are requested by the FRR DSNVSRR and by the recovery routine in DSNVSDC0. Register 6 contains the target EB address.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E5001A

Explanation: A CANCEL THREAD command caused the thread to be terminated. A dump is provided for diagnostic purposes as a result of the CANCEL command DUMP keyword.

System action: DB2 writes a SYS1.LOGREC record and requests an SVC dump. The execution unit abends.

Operator response: Notify the system programmer.

System programmer response: The command might have been used to terminate a thread that was in a state where no processing was occurring and the thread could not continue.

If you suspect an internal DB2 error, obtain a copy of the SYS1.LOGREC listing and the SVC dump. Determine the failing environment (DB2, IMS, CICS, or TSO).

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

The module that was suspended while waiting for

some action to be taken is the module that issued the abend.

00E50029

Explanation: The Agent Services function which establishes the DB2 tasking structure abends with this reason code following the detection of a load module which was loaded without the 31-bit addressing capability. The abend is preceded by message DSNV029.

This abend reason code is issued by the following CSECT: DSNVASIM

System action: Subsystem start-up is terminated.

System programmer response: See message DSNV029I.

00E50030

Explanation: A request was made to initialize an already-initialized DB2 address space. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVASIM

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Examine the SVC dump and determine the resource manager module (contents of register 14 in save area pointed to by register 13) that invoked DSNVASIM. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 6 contains the address of the EB. Field EBPASCE contains the ASCE address of the address space to be initialized.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50031

Explanation: An agent termination request was issued from a secondary execution unit for an agent created with APLOPT=1. This is an invalid use of the terminate allied agent function.

This abend reason code is issued by the following CSECT: DSNVTRTH

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Determine the resource manager module that invoked DSNVTRTH. Register 14, in the save area pointed to by register 13, contains the return address of the invoking module. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: A record is written to SYS1.LOGREC, and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50032

Explanation: An agent services manager functional request was issued with an invalid specification of the ACE operand. This is an invalid use of the requested service.

This abend reason code is issued by the following CSECTs:

DSNVTRTH	DSNVDISC	DSNVCONN
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System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Verify that the ACE control block is a valid allied agent. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A record is written to SYS1.LOGREC, and an SVC dump is requested. Register 1 at entry to the module normally contains the ACE address. However, if register 1 at entry to DSNVTRTH is zero, then the address at register 6 is the ACE address to be terminated. That address points to the EBROB which, in turn, points to the ROBACE.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50035

Explanation: During the processing of a request to perform system agent allocation, a resource manager returned a nonzero return code from an allocation notification. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVIALC

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The error is recorded on SYS1.LOGREC, and an SVC dump is requested. Register 7 contains the nonzero allocation return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50036

Explanation: A request was made to perform system agent allocation for an agent that had already been allocated.

This abend reason code is issued by the following CSECT: DSNVIALC

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The error is recorded on SYS1.LOGREC, and an SVC dump is requested. The fullword address at register 6, which points to the EBROB, should have been zero. That address points to the ROBACE which, in turn, points to the ACERAL.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50040

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a terminate allied agent request at the thread, sign on, or identify level. The FRR (DSNVTFRR) covering module DSNVTRTH was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50041

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a terminate agent structure request. The FRR (DSNVTFRR) covering module DSNVFACE was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50042

Explanation: An execution unit which, according to tracking information, is currently suspended on a latch waiter chain is in the agent termination process. This may indicate that a latch manager request is still incomplete or has not been serviced properly. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: DSNVFACE, DSNVTEB

System action: The current execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address of the latch upon which the execution unit is supposedly waiting and general register two contains the address of the resource options block (ROB) which was put on the latch waiter chain.

A record is written to SYS1.LOGREC and a DB2 SVC dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50044

Explanation: A terminate agent request was issued for an agent with an active unit of recovery (URE). This is an invalid use of the terminate allied agent service and is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVTRTH

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The error is recorded on SYS1.LOGREC, and an SVC dump is requested. Register 1 at entry to the module contains the ACE address of the agent to be terminated. The ACEURE field should have been zero.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50045

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a create allied agent service request at the thread, sign on, or identify level. The FRR (DSNVCFR) covering module DSNVCRTH was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50046

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a create agent structure request. The FRR (DSNVCFR) covering module DSNVGACE was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50047

Explanation: DB2 subsystem termination was invoked following an unrecoverable error while processing a Format EB RMRQ request. The FRR (DSNVCFR) covering module DSNVFEB was unable to recover. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and

the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50050

Explanation: The MVS cross-memory lock (CML) of the system services address space was held by the invoking resource manager execution unit during invocation of the cancel, suspend, resume, or SRB redispach functions. This violates the entry protocols for these functions.

This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

System action: The requesting execution unit is abended.

Because resource manager serialization cannot be maintained without the use of this lock, normal recovery is not possible for this abend. The recovery routine terminates the DB2 subsystem through invocation of the agent services subsystem termination protocol.

An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA, indicating that synchronization services was responsible for DB2 subsystem termination.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Internal protocols specify that no MVS locks may be held at DSNVSR or DSNVSDC0 invocation. Determine the invoking resource manager, the function requested, and the current owner (ASCB) of the CML lock at the time of the error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50051

Explanation: The resource manager requesting the resume function specified the TCTL=YES option while executing in TCB mode. This violates the entry protocols for this function. This is a subsystem error.

This abend reason code is issued by the following CSECT: DSNVSR

System action: Mainline processing is abended with an '04E' abend code and this reason code.

Because this error is an internal resource manager protocol violation, normal recovery is not possible for this abend. The recovery routine terminates the DB2 subsystem through invocation of the agent services subsystem termination protocol. An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for DB2 subsystem termination.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Internal protocol documentation specifies that the TCTL=YES option is valid only for resource managers executing in SRB mode at time of invocation. Determine the invoking resource manager at time of error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50052

Explanation: The MVS cross-memory lock (CML) of the system services address space could not be released during termination processing of the cancel, suspend, resume, or SRB redispach functions.

This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

System action: Mainline processing is abended with an '04E' abend code and this reason code.

Because resource manager serialization can no longer be maintained without the use of this lock, normal recovery is not possible for this abend. The recovery routine terminates the DB2 subsystem through invocation of the agent services subsystem termination function.

An '00E50054' recovery reason code is placed in the SDWACOMU field of the SDWA indicating that synchronization services was responsible for DB2 subsystem termination.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: For this abend to occur, the CML lock must have been successfully obtained at some point during mainline processing. Determine the invoking resource manager, the function requested, and the current owner (ASCB) of the CML lock at the time of the error. Diagnostic information for this error may be obtained through the SYS1.LOGREC and DB2 SVC dump materials provided.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 7.

00E50054

Explanation: The DB2 subsystem is abended by the synchronization services recovery routine when an unrecoverable error is encountered during recovery processing for the suspend, cancel, resume, or SRB redispach functions. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated. This reason code is associated with an '04F' abend code indicating that synchronization services was responsible for termination.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the system termination message DSNV086E. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

One of the following conditions was encountered during recovery processing for the requested function:

- Unable to complete resume processing for an SRB mode execution unit that was suspended at time of error.
- Errors were encountered during primary recovery processing causing entry to the secondary recovery routine.
- Recovery initiated retry to mainline Suspend/Resume code caused retry recursion entry into the functional recovery routine.
- Unable to obtain or release the cross-memory lock (CML) of the system services address space either during mainline processing or during functional recovery processing (for example, reason code '00E50051' or '00E50052').

- The invoking resource manager requested the TCTL=YES option of the resume function while executing in TCB mode (for example, reason code '00E50051').

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50055

Explanation: The synchronization services functional recovery routine was unable to successfully complete resume processing for a suspended TCB mode execution unit. The resume processing was requested by the cancel or resume functions. This reason code is placed in the SDWACOMU field of an SDWA.

System action: Because the suspended TCB mode execution unit must not be permitted to remain in a suspended state, the recovery routine invokes the MVS CALLRTM (TYPE=ABTERM) service to abend the execution unit with an '04F' completion code. Depending upon which execution unit was terminated, the DB2 subsystem might abnormally terminate.

Operator response: Notify the system programmer, and restart DB2 if necessary.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Scan the MVS system log and the contents of SYS1.LOGREC for DB2 abends occurring immediately before the abend of the execution unit. Follow the failure analysis procedures for the specific abends. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 7.

00E50059

Explanation: When preparing to resume an SRB, the target EB (execution block) was validated by checking the EB identifier code in the first halfword of the control block. The identifier code was in error.

This abend reason code is issued by the following CSECTs: DSNVSR, DSNVSDC0

System action: If the CSECT detecting the error is DSNVSR, the error is percolated (passed) to the DB2 SRB recovery task DSNVRCT. Ultimately, DB2 is terminated abnormally.

If the CSECT detecting the error is DSNVSDC0, the code detecting the error will be retried once. If validation fails, the DB2 subsystem is terminated

abnormally with a 00E50054 reason code.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: A LOGREC entry and a DB2 dump are requested by the FRR DSNVSRR and by the recovery routine in DSNVSDC0. Register 6 contains the address of the invalid EB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50062

Explanation: An application request (RARQ) was issued to a resource access list (RAL). At the time of the request, the RAL had the RAL suppress (RALSUPPR) flag on, and the function vector list entry (FVLE) that was accessed (through FRBFVLE) did not have FVLEBIT0 on. This is not allowed. That is, the FVLE function is not allowed during RAL suppress.

This error may indicate that an IMS/VS or CICS caller had completed Commit Phase 1 and that the next request was not Commit Phase 2, Abort, or Terminate with the Commit or Abort option. This abend is the result of an internal system problem, possibly the DB2 attachment facility or the requesting IMS/VS or CICS subsystem.

This abend reason code is issued by the following macro: DSNARARQ

System action: The allied task requesting the RARQ is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routines of the module invoking the DSNARARQ macro should have requested SYS1.LOGREC recording and either an SVC or application dump (or both.) The FRB contains the FRBRALE and FRBFVLE entries. It also contains the pointers to the RAL and to the execution block address (FRBEB). Register 3 contains the address of the RAL from FRBRAL. Register 4 contains the address of the RALE as located by the FRBRAL pointer (and as indexed by FRBRALE). Register 6 contains the address of the EB from FRBEB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 22, 23, 24, 25, 26.

00E50063

Explanation: A resource access request (RARQ) was issued to a function vector list entry (FVLE) that is valid but unauthorized for this allied user at this time. This abend occurs if a request is issued out of sequence. For example, two consecutive CREATE THREAD requests would give this result. This abend also occurs if a request is issued that is never authorized for the caller. For example, it occurs if a BATCH protocol user issues a PREPARE request. A program call (PC) is issued to module DSN3ABND, which issues the X'04E' abend with this reason code.

This abend reason code is issued by the following CSECT: DSN3ABND

System action: The task issuing the RARQ is abended. However, DB2 recovery may translate this abend to a return code 256 with this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is a user error. The issuer of the RARQ was not authorized to use the requested function at this time. The following diagnostic information is available:

- An entry in the DB2 trace table is made for entry to module DSN3ABND. The items traced are the RALE and the FVLE of the intended DSNARARQ request. To determine the sequence of DSNARARQ requests, examine the previous trace table entries for the same execution block (EB).
- An application dump is requested with DB2-supplied control blocks. This includes the FRB associated with the intended DSNARARQ request. Fields FRBRALE and FRBFVLE contains the indexes for the intended request.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5.

00E50065

Explanation: RMRQ linkage was requested, specifying a function code that is undefined in the resource manager function table (RMFT) of the designated resource manager.

This abend reason code is issued by the following CSECT: DSNVRMEL

System action: The execution unit under which RMRQ was requested is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine of the abended resource manager module requested SYS1.LOGREC recording and a DB2 SVC dump. Register 14 points to the resource manager module that requested linkage to the undefined function.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50069

Explanation: This abend code is issued during recovery processing for the suspend function when executing in SRB mode under the recovery routine established by the MVS SRBSTAT(SAVE) service. Because the recovery routine established by this service is the only routine in the FRR stack at the time of error, normal RTM percolation to the invoking resource manager recovery routine is not possible.

After recovery processing for the initial mainline error has successfully completed, the RTM environment is exited through retry to a routine that restores the original FRR stack. This routine then issues an '04E' abend with this reason code. This causes entry into the original recovery routine established during suspend initialization.

This abend reason code is issued by the following CSECTs: DSNVSRR, DSNVSDC0

System action: After this abend is intercepted by the original suspend recovery routine, a SYS1.LOGREC entry and DB2 SVC dump are requested to document the original error. The original recovery reason code is placed in the SDWACOMU field of the SDWA indicating the actions performed during recovery processing of the initial error. Control is then returned to the invoking resource manager's recovery routine through RTM percolation.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Because this abend is used only to permit the transfer of the initial recovery reason code to the invoking resource manager's recovery routine, no further recovery actions are required for this abend. Diagnostic information for the initial error encountered during mainline processing may be obtained through the SYS1.LOGREC and SVC dump materials provided.

00E50070

Explanation: This abend reason code is issued in response to a delete service task request specifying purge. Additionally, any service task not deleted by the owning resource manager at subsystem shutdown is abended with this reason code.

System action: This abend usually occurs through MVS CALLRTM and, in certain cases, is issued by the service task dispatcher executing under the TCB being abended. The service task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: If the service task is abended with a completion code of X'04F', no DB2 SVC dump is taken. Some resource managers have elected to terminate their service tasks with the purge option. Consequently, the abend may or may not be an actual error. At the time of the abend, register 6 points to the execution block (EB) of the execution unit that was active when the abend occurred. The EBSQH field in turn contains a pointer to the service queue header associated with the abending service task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50071

Explanation: This abend reason code is issued following a cancel return from the resume service during an attempt to notify the create service task requester. Because the requester has been terminated, the newly created service task must be terminated.

System action: The service task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, register 6 points to the execution block (EB) assigned to the service task dispatcher. The EBSQH field, in turn, contains a pointer to the service queue header

associated with the abending service task. From the SQH, determine the requesting resource manager. Prior SYS1.LOGREC entries may indicate why the requester was terminated.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50072

Explanation: This abend reason code is issued following an unanticipated cancel return from DSNVSR for an execution unit not expected to be canceled. This code is also a subsystem termination reason code if the abend was issued by module DSNVCST0.

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: At the time of the abend, register 6 points to the execution block (EB) associated with the abending execution unit.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50073

Explanation: Execution unit switch processing detected an invalid execution block (EB) or an invalid resource options block (ROB). This is probably a DB2 subsystem error.

System action: The current execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address which should have pointed to a valid control block but did not.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50074

Explanation: This abend reason code is issued in response to a nonzero return code from ATTACH during an attempt to create a service task.

System action: The ATTACH is retried. If a failure occurs again, DB2 is terminated.

Operator response: Notify the system programmer, and restart DB2 if necessary.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 2, in the SDWA, contains the return code from the ATTACH request.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50075

Explanation: On an execution unit switch request, an invalid service queue header (SQH) and/or service task identifier (STID) was specified. Alternately, the specified or implicit address space may be invalid. This is an internal DB2 protocol error.

System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50076

Explanation: A request was made for an execution unit switch to a service task currently undergoing delete processing. This is an internal DB2 protocol error.

System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Using the SYS1.LOGREC

entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch. A resource manager should not request deletion of a service task and then attempt to execute under the same task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50077

Explanation: A deadlock condition was encountered. A request was made to either delete or synchronously execute a service task already participating in a chain of service tasks leading to the current request. This is an internal subsystem protocol error.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the function. If the recording FRR is EUS1FRRE, then the deadlock was detected by the execution unit switch service. Otherwise, the error was found during a delete service task request.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50078

Explanation: A request was received to create a service task, but the service task controller is terminating. This code is also a subsystem termination reason code if the abend was issued by module DSNVCST0.

System action: The requesting execution unit is terminated. The entire subsystem may also be terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Using the SYS1.LOGREC entry and associated SVC dump, determine the resource manager requesting the creation of a service task. DB2 was probably already terminating when this error was encountered. New service tasks cannot be

created during subsystem termination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50079

Explanation: An invalid address space (ASCE) was specified as the target of an execution unit switch request. This can occur if the target is an allied address space or if the address space was concurrently undergoing termination.

This abend code may also be issued when a passed agent services control block is determined to be invalid.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Using the SYS1.LOGREC entry and the associated SVC dump, determine the resource manager module that requested the execution unit switch, suspend, resume, cancel, or SRB dispatch function. Using register 6 as a pointer to the execution block (EB), verify that the agent services control blocks — execution block (EB) and resource options block (ROB) — are valid.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50080

Explanation: An execution unit (SRB or TCB) processor determined that the current MVS Functional Recovery Routine (FRR) stack contained one or more entries for FRR's which should not exist. This check is made at the conclusion of a resource manager function executing under the SRB or TCB.

This error reason code is issued by the following CSECTs: DSNVEUS2, DSNVEUS3.

System action: An SVC dump is requested specifying an abend code of X'04E' and this reason code. The extraneous FRR entries are deleted from the stack. Execution continues. The application is not notified.

Operator response: Notify the system programmer of the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: MVS console data is logged and the SVC dump is taken. No record is written to SYS1.LOGREC.

One or more resource manager functions created an FRR which was not deleted. Examine the current FRR stack in the PSA of the active CPU. The only valid stack entries are those established by DB2 and MVS Dump Services and, if DSNVEUS2, an entry established by that module. The format of the FRR stack is provided as data area FRRS in the appropriate MVS debugging guides.

00E50081

Explanation: A TCB execution unit processor determined that the list of active ESTAE exits associated with the TCB contained one or more entries for ESTAEs which should not be active. This check is made at the conclusion of a resource manager function executing under the TCB.

This error reason code is issued by the following CSECT: DSNVEUS3.

System action: An SVC dump is requested specifying an abend code of X'04E' and this reason code. The extraneous ESTAE entries are deleted. Execution continues. The application is not notified.

Operator response: Notify the system programmer of the SVC dump.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: MVS console is logged and the SVC dump is taken. No record is written to SYS1.LOGREC.

One or more resource manager functions created an ESTAE exit which was not deleted. Locate the TCB requesting the dump (It will be a DB2 service task in the home address space at the time the dump was requested.) Field TCBSTABB points to a chain of STAE Control Blocks (SCB) for active exits. The only valid SCBs are for the ESTAE exit established (with a token) by DSNVEUS3 and an ESTAI exit established when the task was created. SCBs are located in LSQA. The SCB format is provided as a data area in the appropriate MVS debugging guides.

00E50094

Explanation: The macro service to get a resource options block (ROB) determined that a ROB taken from the ROB cache was not formatted properly. This can occur if the queue which controls the ROB cache was overlaid, if the ROB itself was overlaid, or if there is a programming error in DB2.

This abend reason code is issued by the following CSECTs: Any CSECT which invokes the get ROB service may use this abend reason code.

System action: The requesting execution unit is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register zero, which should appear in the SYS1.LOGREC entry for this abend, contains the address which should have pointed to a ROB but apparently did not.

Use the SYS1.LOGREC entry and the associated dump to examine the area which should have been a ROB. It may also be helpful to examine the chain of ROB in the cache. This chain is anchored in the DB2 DSNVDGCA control block.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50095

Explanation: The macro service to release a resource options block (ROB) determined that a ROB passed to it for release was not formatted properly and did not, in fact, appear to be a ROB at all. This can occur as a result of a storage overlay or if there is a programming error in DB2.

This abend reason code is issued by the following CSECTs: Any CSECT which invokes the release ROB service may use this abend reason code.

System action: The requesting execution unit is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register zero, which should appear in the SYS1.LOGREC entry for this abend, contains the address which should have pointed to a ROB but apparently did not.

Use the SYS1.LOGREC entry and the associated dump to examine the area which should have been a ROB.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50096

Explanation: A request was made to suspend an execution unit but the resource options block (ROB) which is required for this request is invalid. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: Any CSECT that requests suspension is subject to this abend since it is issued by the in-line expansion of the macro used to make the request.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the necessary diagnostic materials. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address which should have pointed to a valid ROB but did not.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50097

Explanation: A request was made to resume an execution unit but the resource options block (ROB) which is required for this request is invalid. This is probably a DB2 subsystem error.

This abend reason code is issued by the following CSECTs: Any CSECT that requests the resume service is subject to this abend since it is issued by the in-line expansion of the macro used to make the request.

System action: The requesting execution unit is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the address which should have pointed to a valid ROB but did not.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50098

Explanation: A request was made to resume an execution unit but a non-zero return code was received from the IEAMSCHD service attempting to schedule a client or enclave SRB.

System action: The requesting execution unit is abended.

User response: Notify the system programmer and rerun the application.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of the abend, general register zero contains the return code from IEAMSCHD.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNVSR DSNVEUS1

00E50100

Explanation: The ASCE could not be found during recover stack processing. This is an internal subsystem error.

This abend reason code is issued by the following macro: DSNVRSTK

System action: The requesting recovery routine is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Using register 6 as the address of the execution block (EB), check that field EBPASCE contains a valid ASCE address. Also determine the recovery module invoking the macro from the information provided by the SYS1.LOGREC entry and the associated SVC dump.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50101

Explanation: The agent cancel function was unable to establish an ESTAE while preparing to cancel all active allied agents during processing of the -STOP DB2 MODE(FORCE) command.

This abend reason code is issued by the following CSECT: DSNVAGCL

System action: The abend is passed on to a subsystem support subcomponent (SSS) ESTAE. Probably, DB2 is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: The inability to establish an ESTAE is normally due to insufficient free space in the local system queue area (LSQA) for an ESTAE control block (SCB). If necessary, increase the size of the system services address space.

Problem determination: Review the associated SVC dump for usage and free areas in the LSQA subpools belonging to the system services address space.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50102

Explanation: An unrecoverable error occurred while canceling all active agents during processing of the -STOP DB2 MODE(FORCE) command. This is a subsystem termination reason code.

System action: The subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Review the SYS1.LOGREC entries for failures immediately preceding subsystem termination. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50105

Explanation: This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 84.

00E50106

Explanation: This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 84.

00E50107

Explanation: This is an internal error.

This abend reason code is issued by the following CSECT: DSNVAI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 84.

00E50500

Explanation: An MVS LOCAL or CML lock could not be obtained during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATRM

System action: The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry is requested. Reason code '00E50504' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of subsystem termination at the time of error.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 1, 5.

00E50501

Explanation: An MVS local or CML lock could not be released during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATRM

System action: The execution unit is abended. The error is recorded on SYS1.LOGREC. DB2 subsystem termination is completed under a different execution unit if possible.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry is requested. Reason code '00E50504' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5.

00E50502

Explanation: An MVS LOCAL lock could not be obtained during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATR4

System action: The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry is requested. Reason code '00E50502' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of the subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5.

00E50503

Explanation: An MVS LOCAL lock could not be released during DB2 subsystem abnormal termination processing.

This abend reason code is issued by the following CSECT: DSNVATR4

System action: The execution unit is abended. The error is recorded on SYS1.LOGREC, and abnormal DB2 subsystem termination is completed under a different execution unit if possible.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry is requested. Reason code '00E50503' is placed in the SDWA variable recording area (VRA). The VRA data contains information about the status of the subsystem termination at the time of error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 5.

00E50504

Explanation: This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA) by the subsystem termination processor. The code identifies additional information provided in the VRA for abends encountered in module DSNVATRM.

This abend reason code is issued by the following CSECT: DSNVATRR

System action: Recording of the error encountered during subsystem termination continues.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: For information about finding the SDWA refer to Part 2 of *DB2 Diagnosis Guide and Reference*

00E50505

Explanation: This reason code is used to define the format of the information recorded in the SDWA variable recording area (VRA). The code identifies additional information provided in the VRA for abends encountered in module DSNVATR4.

This abend reason code is issued by the following CSECT: DSNVATRR

System action: Recording of the error encountered during subsystem termination continues.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E50701

Explanation: A failure occurred during Commit Phase 1. This abend is used to effect abort, deallocation, and end-UR processing.

This abend reason code is issued by the following CSECTs: DSNVEUS2, DSNVEUS3

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Standard DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the abend. Register 6 contains the address of the active EB when the commit failed. The DB2 global trace table contains an entry for the commit-UR function exit. The entry contains return and reason codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50702

Explanation: An error occurred while processing in SRB mode which could not be recovered.

System action: The DB2 subsystem abnormally terminates with this reason code.

Operator response: Notify the system programmer and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the original failure was requested by the recovery routine for DSNVEUS2 and a record written to SYS1.LOGREC. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50703

Explanation: This subsystem termination reason code is used following an error while attempting to resume a suspended execution unit. The successful completion of resume processing was indoubt.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50704

Explanation: An error occurred in the DB2 Service Task Controller which could not be recovered.

System action: The subsystem terminates with this reason code. Additionally, if no SDWA was provided to the recovery routine, a subsystem termination dump is requested.

Operator response: Notify the system programmer and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If an SDWA was available, a DB2 dump of the original failure was requested and should be analyzed to determine the nature of the original error. If no SDWA was available, the standard MVS SVC dump taken by subsystem termination must be analyzed. The Service Task Controller is the first descendent TCB of the job step TCB in the failing home address space. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50705

Explanation: A subsystem termination was requested for one of the following reasons:

1. An agent was flagged as executing in 'must complete' mode,
2. An execution unit holds a latch,
3. An agent is marked as being on a latch waiter queue, when none of these conditions should be true. Additionally, the subsystem termination may have been preceded by an abend with this reason code.

This termination reason code is issued by the following CSECTs:

DSNVEOT1 DSNVEUS2 DSNVEUS3

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to the accompanying abend code to determine the failure while in 'must complete' state. Refer to "DB2 abend completion codes (X'04E' and X'04F)" on page 5 for information about X'04F' and X'04E' abend completion codes.

If subsystem termination was requested by module DSNVEUS2, a standard MVS SVC dump will be generated.

The 'must complete' indicator is bit ACEMC. Latch-held indicators are in field EBLTCHLD. Latch waiter status information is in field EBLWSI.

Usually these conditions occur as the result of a prior failure where the associated recovery routine did not perform correct resource cleanup. The condition may also occur if a resource manager function does not release all latches and/or reset the 'must complete' bit before returning control to either DSNVEUS2 or DSNVEUS3.

00E50706

Explanation: Either an unrecoverable error occurred while processing an End-of-Task condition on a DB2 service task or an asynchronous service task terminated for reasons other than an explicit "Delete Service Task" request. An abend with this reason code is requested if the latter situation occurs.

System action: The subsystem terminates with this reason code. Additionally, if no SDWA was provided to the recovery routine, a subsystem termination dump is requested.

Operator response: Notify the system programmer of the failure and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If an SDWA was available, a DB2 dump of the original failure was requested and should be analyzed to determine the nature of the original error. If no SDWA was available, the standard MVS SVC dump taken by subsystem termination must be analyzed. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50707

Explanation: An ESTAE could not be established to protect a service task, the service task controller, or the recovery control task. This is a subsystem termination reason code.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Review the usage and the free areas in the LSQA subpools of the two DB2 address spaces. If necessary, increase the private area size of the failing address space. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: If subsystem termination was requested by module DSNVRCT, a standard MVS SVC dump was requested. If insufficient private storage is the cause of the problem, other DB2 resource managers may have abended. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E50708

Explanation: An abend occurred while connecting an allied agent to the System Services address space. The connection must complete so that the allied agent can be terminated.

System action: The DB2 subsystem terminates with this reason code.

Operator response: Notify the system programmer of the failure and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50709

Explanation: Subsystem termination was requested following a failure in a service task, the service task controller, or the recovery control task that could not be recovered by the ESTAE of the failing task.

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. Determine the registers and the failing task at the time of the error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50710

Explanation: An abend occurred while disconnecting an allied agent from its home address space. The disconnect function is required before the agent can be connected to the Systems Services address space and then terminated.

System action: The DB2 subsystem terminates with this reason code.

Operator response: Notify the system programmer of the failure and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50711

Explanation: An error occurred in a latch manager function and the status of one or more execution units waiting for a latch is indoubt. The latch manager functional recovery routine could not determine whether all waiting execution units had been resumed.

System action: The DB2 subsystem terminates with this reason code.

Operator response: Notify the system programmer of the failure and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries looking for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the original error was requested and a record entered into SYS1.LOGREC. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

00E50712

Explanation: An error occurred in a latch manager function attempting to terminate the holder of a DB2 latch. The holder's TCB has been set nondispatchable by MVS and a CALLRTM to terminate this TCB has failed.

System action: The DB2 subsystem terminates with this reason code.

Operator response: Notify the system programmer of the failure and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the error is

requested and a record entered into SYS1.LOGREC. Register 3 at time of error contains the latch-holder's TCB address in the home address space and register 4 contains the return code from CALLRTM. Refer to "DB2 abend completion codes (X'04E' and X'04F)" on page 5 for information about X'04E' and X'04F' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E50713

Explanation: The agent services recovery control task was entered in the suspend CANCEL exit. Subsystem termination was requested with this reason code.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. It may be necessary to analyze the MVS SVC dump requested by the subsystem termination processor. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An MVS SVC dump was requested by the subsystem termination processor. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E50715

Explanation: Subsystem termination was requested following an unrecoverable error in a DB2 SRB mode execution unit.

System action: The SRB-related task was abended as a result of SRB to TCB percolation. The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original

error. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50717

Explanation: The subsystem was terminated, because resource manager ESTAE exits could not be purged for the default service task.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If an abend preceded the subsystem termination request, DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E50719

Explanation: A failure occurred in a service task, the service task controller, or the recovery control task and was not recovered by the ESTAE of the failing task. No SDWA was provided to the ESTAE exit. This is a subsystem termination reason code.

System action: The DB2 subsystem is abended.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. Register 3 contains the abend code of the original error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Module DSNVSTAI was unable to generate a standard DB2 SYS1.LOGREC entry and SVC dump, because system diagnostic work area (SDWA) was not provided by the recovery termination management (RTM) facility of MVS. An MVS SVC dump was requested by system termination. To

determine the location of the error, examine the RB structure of the failing TCB.

DB2 diagnostic information may have been obtained by other recovery routines if an abend preceded the subsystem termination request. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E50725

Explanation: Subsystem termination was requested because of an unrecovered error in a DB2 scheduled SRB-mode execution unit.

System action: The SRB-related task DSNVRCT was abended. due to SRB to TCB percolation. The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem termination. If necessary, analyze the MVS SVC dump requested by subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials obtained as a result of abends occurring prior to subsystem termination. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

An MVS SVC dump was requested by system termination. To determine the location of the error, examine the RB structure of the failing TCB. Register 1 contains the original SRB abend code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E50727

Explanation: A secondary failure occurred during agent services functional recovery processing. This is a subsystem termination reason code.

System action: The DB2 subsystem abnormally terminates.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Scan the SYS1.LOGREC entries for one or more DB2 abends occurring immediately prior to the subsystem

termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. Determine the functional recovery routine that failed and the registers at the time of the error.

Problem determination: DB2 diagnostic information may be obtained through SYS1.LOGREC and SVC dump materials generated at the time of the original error. If the subsystem termination request was issued by module DSNVEUS2, an MVS SVC dump was requested. Refer to *DB2 Messages* for information about X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E50730

Explanation: A thread being processed through thread deallocation was found to still have an outstanding unit of recovery and is marked as being inflight. This is a subsystem termination reason code.

System action: The DB2 subsystem is terminated with this reason code.

Operator response: Contact the system programmer.

System programmer response: Scan the SYS1.LOGREC entries and associated console listing for one or more DB2 abends prior to subsystem termination. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A DB2 dump of the error is requested and a record is entered into SYS1.LOGREC. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNVIALC

Chapter 22. X'E6.....' IFIabend codes

This section contains Instrumentation Facilityabend codes.

00E60008

Explanation: This reason code is used to indicate that MVS and DB2 dispatching units do not match. There is an internal DB2 dispatching unit problem which should not occur.

System action: The function being traced is abended. The DB2 subsystem remains operational and the functional recovery of TRACE will retry if possible.

Problem determination: The problem is either the ASID of EB primary (EBPASCE->ASCE->ASID) did not match the EPAR ASID, or the ASID of the EB home (EBHASCE->ASCE->ASID) did not match the MVS home dispatching unit (PSAAOLD->ASCB->ASID), or the PSATOLD did not match the EBEXU field. Analyze the dump and previous SYS1.LOGREC entries do isolate the cause of the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E60086

Explanation: An internal logic problem occurred trying to obtain the MVS CML lock.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E60087

Explanation: An internal error occurred attempting to free the MVS CML lock.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This error is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E60088

Explanation: An internal logic problem occurred on a READS request. The event is being traced asynchronously, which is not allowed.

System action: The request is abended.

Operator response: Notify the system programmer.

System programmer response: Request the SYS1.LOGREC and SVC dump. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is an internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E60100 through 00E60199

| **Explanation:** The reason codes 00E60100 through
| 00E60199 are used by the instrumentation facility
| component (IFC) when a trace event occurs for which
| IBM service personnel have requested a dump using
| the DSN1DMP utility.

System action: The abending agent might be retried or terminated, depending upon the serviceability dump request.

Problem determination: Theabend is issued on the occurrence of a specified trace event. A SVC dump is taken to the SUS1.DUMPxx data set. Problem determination methods depend on the condition that IBM service personnel are attempting to trap.

00E60886

Explanation: This reason code is used to indicate that an invalid IAMQ function was passed to module DSNWVZXT. This problem should not occur.

System action: The function requested is abended. The DB2 subsystem remains operational and the functional recovery will retry if possible.

Problem determination: The IAMQ function requested does not match a function handled by

DSNWZXT. Analyze the dump and previous SYS1.LOGREC entries to isolate the cause of the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E60887

Explanation: The reason code is set by the Instrumentation Statistics Facility FRR routine when an abend condition occurs during statistics gathering. The reason code only appears in the VRA data of SYS1.LOGREC to indicate the WWAB block exists in the variable recording area following the standard DB2 information.

System action: Depending on the number of errors the Instrumentation Statistics Facility may be turned off. The FRR will attempt a retry to RTM to keep the DB2 subsystem operational.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Normally the standard SYS1.LOGREC entries provide the necessary information to isolate the failing module. The WWAB control block in the variable recording area provides the resource manager RMID last called (WWABRMID) and the RMID of which resource manager Instrumentation Statistics Facility called when the failure occurred (WWABFRMS). If WWABFRMS is binary zero, then the error occurred in the Instrumentation Statistics Facility.

00E60888

Explanation: The reason code is set by the Instrumentation Accounting Facility FRR routine when an abend condition occurs during the accounting function. The reason code only appears in the VRA data of SYS1.LOGREC to indicate the WWAB block exists in the variable recording area following the standard DB2 information.

System action: Depending on the number of errors the Instrumentation Accounting Facility may be turned off. The FRR will attempt a retry to RTM to keep the DB2 subsystem operational.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Normally the SYS1.LOGREC

standard entries provide the necessary information to isolate the failing module. The WWAB control block in the variable recording area provides the resource manager RMID last called (WWABRMID) and the RMID of which resource manager Instrumentation Statistics Facility called when the failure occurred (WWABFRMS). If WWABFRMS is binary zero, then the error occurred in the Instrumentation Accounting Facility.

00E60889

Explanation: An internal error has occurred on an IFI request. The reason code only appears in the variable recording area (VRA) data of SYS1.LOGREC to indicate the FRR tracking (FRT) area exists in the VRA following the standard DB2 information.

System action: The IFI request abnormally terminates.

Problem determination: The recovery routine for the CSECT that issues this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E60B01

Explanation: An installation field procedure wrote beyond the end of the output buffer.

System action: The execution unit requests an SVC dump, and terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: Correct the field procedure. See the Field Procedures in Appendix B (Volume 2) of *DB2 Administration Guide*.

Problem determination: At the time of abend the register contents are:

- | | |
|-----------|---|
| R2 | The first 4 characters of the field procedure name |
| R3 | The second 4 characters of the field procedure name |

00E60B02

Explanation: Invalid data was returned from the edit procedure. The data is invalid for one or more of these reasons:

- The first byte or the last byte of the input record was modified by the exit.
- The length of the edited data is greater than the maximum allowed for this row, or less than one.
- The exit returned a row that overran the output area.

System action: An execution unit requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E60B03

Explanation: An internal inconsistency was detected by DB2 during data propagation processing.

System action: An execution unit requests an SVC dump. The execution unit then terminates abnormally.

Operator response: Notify the system programmer.

Problem determination: At the time of abend, register 2 points to the error message. Collect the following diagnostic items listed in the section entitled "Problem Determination": 1, 2, 5.

00E60B04

Explanation: During the retrieval of captured table data in preparation for propagation to IMS, an invalid data type was found. This data type is not supported for propagation from DB2 to IMS. Since the invalid data type cannot be returned to the Data Propagator (DPROP) exit routine, processing is terminated abnormally. This is an internal DB2 error.

System action: An execution unit requests an SVC dump, and terminates abnormally.

Operator response: Notify the system programmer.

System programmer response: The current SQL statement performed an INSERT, UPDATE, or DELETE, for a DB2 table that was defined with DATA CAPTURE CHANGES. The captured data changes are reflected in the DB2 log.

Check the captured table data information returned to DPROP for propagation to determine which data type is invalid.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 23. X'E6.....' IFI reason codes

This section contains Instrumentation Facility Interface (IFI) reason codes. The first number is the return code that DB2 places in either the IFCARC1 field of the IFI Communication Area (IFCA). The second number, the number after the slash, is the reason code that DB2 places in IFCARC2 or IFCAGRSN field. See Appendix E (Volume 2) of *DB2 Administration Guide* for information about IFI.

00000004/00E60800

Explanation: The command was completed, but the return area was not large enough to accommodate all the output messages. The return area contains the last complete message segment that fit. The IFCABM field in the IFCA indicates the number of bytes moved to the return area. The IFCABNM field in the IFCA indicates the number of bytes which were not moved because the return area was too small.

User response: Allocate more storage for the return area, if desired, and reissue the request.

00000004/00E60801

Explanation: The command was partially completed, but an internal error was encountered. Check the return area for a message.

User response: Dependent upon the message in the return area.

00000004/00E60802

Explanation: The instrumentation facility request was partially completed, but the return area was not large enough to accommodate all the output. The return area contains the last complete record that fit. The IFCABM field in the IFCA indicates the number of bytes moved to the return area for the READS or READA request. The IFCABNM field in the IFCA indicates the number of bytes that could not fit in the return area.

User response: Allocate more return area storage and reissue the request.

00000004/00E60803

Explanation: No data was returned from the READA request because none was available. Either the OPn storage buffer was empty or the application program had already retrieved all the trace records.

00000004/00E60804

Explanation: No data was returned from the READS or READA request, or no data was returned for at least one of the requested IFCIDs on a READS request for

multiple IFCIDs. This can happen for one of these reasons:

- The destination OPx value specified in the IFCA was not active for a READA request.
- The qualification information specified did not match a process for a READS request.
- No information was available for a READS request.
- The user return area on a READS or READA request was too small to receive even a single record.

User response: If the OPn destination was not active, then activate the OPn destination or issue the request using an OPn destination that is active.

If the IFCABNM field (number of bytes not moved) is nonzero, then the user return area is too small. Increase the size of the user return area, and resubmit the request.

00000004/00E60805

Explanation: The request for information resulted in an abend.

User response: Dependent upon the abend code in the log record. Refer to the IFCABM field in the IFCA (the number of bytes moved to the return area) to determine if partial information was returned.

Problem determination: See EREP log record in SYS1.LOGREC. See the Environmental Record Editing and Printing program (EREP) User's Guide and Reference for instructions on how to print SYS1.LOGREC.

00000004/00E60806

Explanation: The request for information resulted in an abend, perhaps because one of the parameters on the call was invalid. If a SYSUDUMP or SYSABEND DD statement is present in your JCL, you will receive an abend dump.

User response: Dependent upon the abend code.

Problem determination: See abend code in abend dump or EREP log record in SYS1.LOGREC. Examine the parameter list. Among other possible causes, the high-order bit of the last parameter must be on in order to indicate the end of the parameter list. See the Environmental Record Editing and Printing program

(EREP) User's Guide and Reference for instructions on how to print SYS1.LOGREC.

00000004/00E60807

Explanation: The request for information resulted in an abend, possibly because either the ACE token passed was invalid or became invalid during processing. In this case, no SDUMP is taken and control returns to the application program.

User response: If your application program does not pass a token, you can reissue the previous IFI request from the application program.

Problem determination: If the application program passes an ACE token, the token is probably invalid.

00000004/00E60808

Explanation: The request for information resulted in an abend. Perhaps a DB2 structure became invalid while your application program was using it.

User response: To reduce the chance of this occurring, issue requests from a task with a higher priority than DB2 and its users. Certain requests (for example, a READS for IFCIDs 0147 and 0148) are more likely to encounter this type of problem. The request may be reissued. No SDUMP is taken and control is returned to the application program.

00000004/00E60809

Explanation: An IFI READS request for the IDCID 129 record was only partially successful. The request attempted to obtain CIs that have yet to be written. All available complete CIs were returned.

User response: No response is needed. All available CI's were returned.

Problem determination: Examine the WQALLRBA and WQALLNUM fields of the READS request. $(WQALLRBA + (WQALLNUM * 4KB)) > \text{ending RBA of the last complete CI in the log.}$

00000004/00E6080A

Explanation: On a READS request for IFCID 316, the request was partially successful. The return area was not big enough to accommodate all the output. The return area contains up to the last record that fits.

User response: Allocate more return area storage and reissue the request.

00000004/00E6080B

Explanation: On a READS request for IFCID 317, no data was returned because a matching statement was not found.

User response: Ensure that the statement identifier for

a currently cached statement is provided and reissue the request.

00000004/00E6080C

Explanation: On a READS request for IFCID 316, no data was returned because no statements matched the qualification criteria. This reason code can occur when WQALFLTR = X'02' and no cached statements exceed the threshold specified in WQALFVAL. This reason code can also occur if the dynamic statement cached but no statements have yet been inserted into the cache.

User response: Adjust the qualification criteria and reissue the request.

00000004/00E60810

Explanation: A READS request for IFCID 0254 was partially successful. The return area was not large enough to accommodate all output. The return area contains as many complete records as can fit.

User response: Allocate more return area storage and reissue the request.

00000004/00E60811

| **Explanation:** On a READS request for IFCID 0254, no
| data was returned because no qualified datasets or
| group buffer pools were connected.

User response: Ensure that the qualified datasets or group buffer pools are connected, and reissue the request.

00000004/00E60812

Explanation: On a READS request for IFCID 0306, log records are returned. The end-of-scope log point has been reached and no position is held in the log. The end-of-scope log point is returned in field QW0306ES, and the number of records is returned in field QW0306CT from the QW0306 section.

User response: A WQALMODT request to terminate the log position might be necessary to release held resources, or a WQALMODF request after a pause to initiate a first call.

00000004/00E60813

Explanation: On a READS request for IFCID 0306, no data is returned because no log records were found that met the criteria. No position is held in the log. The end-of-scope log point is returned in field QW0306ES and zero is returned in field QW0306CT from the QW0306 section.

User response: If this is caused by a WQALMODN call, issue a WQALMODF call after a pause to initiate a first call. However, there is still no guarantee that log

records will be returned that meet the criteria.

00000004/00E60814

Explanation: On a READS request for IFCID 0306, a WQALMODT call was invoked to terminate log position when no position is held in the log.

00000004/00E60815

Explanation: On a READA or READS request for multiple members of a data sharing group, the return area was not large enough to hold all the data returned from other members. This reason code is returned in field IFCAGRSN of the IFCA.

User response: Increase the size of the return area.

00000004/00E60816

Explanation: On a READA or READS request for multiple members of a data sharing group, no data was returned from other members of the data sharing group. This reason code is returned in field IFCAGRSN of the IFCA.

00000008/00E60820

Explanation: The command request did not complete normally. Check the IFCABM field in the IFCA to see if any message segments have been returned. There are many reasons for this condition, including:

- Command authorization failure
- Command processorabend
- Command syntax error
- Command output limit being exceeded.

Problem determination: To determine the reason for the failure, analyze the message or messages that are returned.

00000008/00E60821

Explanation: The request was not processed because a specified IFCID is not valid for the READS or WRITE function.

User response: Remove or replace the invalid IFCID.

Problem determination: Check the IFCA diagnostic area (IFCAD) for the IFCID in error.

00000008/00E60823

Explanation: The WRITE request was not processed because the IFCID specified was not active.

User response: Activate the IFCID or reissue the request with a different IFCID.

00000008/00E60824

Explanation: An authorization failure occurred. On a READA request, the ownership token specified did not match the owner of an active trace, or on either a READA or READS request the user did not have the correct monitor authority.

User response: Reissue the request with the correct ownership token for the desired OPn destination or obtain the appropriate monitor authority, as needed.

Problem determination: Examine the specified ownership token and the monitor authority of the user.

00000008/00E60825

Explanation: Stack storage was not available for copying the output area.

00000008/00E60826

Explanation: On a READA request, the destination specified did not match a valid destination.

User response: Reissue the request using a valid destination.

00000008/00E60827

Explanation: On a READA request, the destination specified did not have an instrumentation facility buffer assigned. The application program must start a trace to the destination specified before attempting a READA request.

User response: Start a trace to the desired destination, and reissue the request.

00000008/00E60828

Explanation: On a READS request for IFCID 149 or 150, IRLM was not able to return all the data that was applicable to the queried agent or resource. IRLM can return a maximum of 32KB of lock data about a given agent or resource. If IRLM notifies DB2 that more than 32KB of lock data is applicable for a given agent or resource, then DB2 does not request the information from IRLM. No data is returned, and reason code 00E60828 is issued by IFI.

User response: The READS request for IFCID 149 OR 150 continues to return code 00E60828 until less than 32KB of lock data is applicable to the given agent or resource that the READS request for IFCID 149 or 150 is querying. You can continue to issue READS requests for IFCID 149 or 150 with no guarantee that the volume of lock data has decreased.

00000008/00E60829

Explanation: On a READS request, an unexpected return code was received from IRLM.

00000008/00E60830

Explanation: An unexpected return code was received on a READS request.

User response: Reissue the request. If the condition persists, contact your IBM support center and tell them the message you are encountering.

00000008/00E60831

Explanation: A number of abends have occurred while processing IFI requests resulting in the disabling of all IFI request and MONITOR trace processing.

User response: Issue a -START TRACE to clear the condition. This condition may not be cleared by issuing the -START TRACE command via instrumentation facility interface COMMAND function.

Problem determination: Obtain a copy of the system or terminal log. If a dump was produced, have it printed. Print a copy of the contents of SYS1.LOGREC for the time period involved. Forward these items along with a copy of the system log to the systems programmer.

00000008/00E60832

Explanation: The IFCID specified on a READS was not active.

User response: Issue a -START TRACE for monitor class 1.

00000008/00E60833

Explanation: A request for storage from the log-read storage pool has failed due to exhaustion of available storage or four log-read read requests are already holding storage from the pool.

User response: Allow other active READS requests for IFCID 129 to finish and then reissue the request.

Problem determination: Examine the activity of READS requests for IFCID 129. If requests for more than 64 CIs are active at the same time, storage problems may occur.

00000008/00E60834

Explanation: An unexpected return code was received from log manager macro DSNJOLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of

WQALLRBA and WQALLNUM fields.

00000008/00E60835

Explanation: An unexpected return code was received from Log Manager Macro DSNJLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of WQALLRBA and WQALLNUM fields.

00000008/00E60836

Explanation: An unexpected return code was received from log manager macro DSNJCLGR.

User response: Reissue the request. If the problem persists, contact your IBM service representative.

Problem determination: Examine the validity of WQALLRBA and WQALLNUM fields.

00000008/00E60837

Explanation: On an IFI READS request for IFCID 1 or 2, storage was not available to satisfy the request.

User response: Reissue the request. This condition is only temporary and should be extremely rare. If this condition persists, contact your IBM support representative, and tell them the message you are encountering.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00000008/00E60838

Explanation: On a READS request for IFCID 0254, a resource was unavailable while attempting to collect statistics for a specific group buffer pool.

User response: Reissue the request. If the problem persists, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The group buffer pool name and the reason code returned from the internal macro are saved in fields IFCAGBPN and IFCAR0B.

00000008/00E60839

Explanation: On a READS request for IFCID 149 or 150, IRLM was not able to return all the data that was available to the queried agent or resource. IRLM can return a maximum of 32KB of lock data about an agent or resource. If IRLM notifies DB2 that more than 32KB of lock data is available for that agent or resource, DB2 requests the information from IRLM, but returns up to 32KB of information to the application and IFI issues this reason code.

Problem determination:

00000008/00E6083A

Explanation: On a READS request for IFCID 316 or IFCID 317 no data was returned because Dynamic Statement Caching is not active on this DB2 system.

User response: The Dynamic Statement Cache must be activated through a system initialization parameter before READS requests can be processed for IFCID 316 or 317.

0000000C/00E60840

Explanation: An invalid function was specified. The function specified does not match one of the IFI supported functions.

User response: Correct the function field of the DSNWLI call so that it is a left-justified, 8-character field containing WRITE, READA, READS, or COMMAND.

0000000C/00E60841

Explanation: The IFCA was specified incorrectly. The return code and reason code will be placed at the correct offset in the erroneous IFCA. The IFCA length might be invalid, or the IFCA eye-catcher (IFCAID) might be missing.

User response: Examine the length of the IFCA and the eye-catcher field of the IFCA. Correct any mistakes.

Problem determination: See the return and reason codes placed at the correct offset in the erroneous IFCA.

0000000C/00E60842

Explanation: The return area was specified incorrectly. The length might be invalid. The length of the return area must be a fullword. The valid range for the return area length on IFI READS requests is X'000000064' to X'7FFFFFFF'. The valid range for the return area length on all other IFI requests is X'000000064' to X'00100000'.

User response: Respecify the return area length to conform to the valid range.

0000000C/00E60843

Explanation: The IFCID area was specified incorrectly. The length might be invalid. The valid range is from X'0006' to X'0044'.

User response: Respecify the IFCID area length field to conform to the valid range.

Problem determination: Examine the length field of the IFCID area.

0000000C/00E60844

Explanation: The qualification area was specified incorrectly. The length might be invalid, or the WQAL eye-catcher (WQALEYE) might be missing.

User response: Correct any incorrect specification of the qualification area length and eye-catcher fields.

Problem determination: Examine the length and eye-catcher fields of the qualification area.

0000000C/00E60845

Explanation: An IFCID specified for a READS or a WRITE request was invalid.

User response: Replace the errant IFCID with a valid one or remove it from the request.

Problem determination: Check the IFCA diagnostic area for the IFCID in error.

0000000C/00E60846

Explanation: The output area was specified incorrectly.

User response: Correct either the output area length or the output area parameter on the DSNWLI call, depending on which one is in error.

Problem determination: The length might be invalid; the valid range is from X'000A' to X'1000'. Also, the output area parameter on the DSNWLI call may have been specified as zero. The output area parameter must point to a valid output area.

0000000C/00E60847

Explanation: The buffer information area was specified incorrectly.

User response: Check that the buffer information area has an eye-catcher value of 'WBUF' and a length value equal to the length of 'WBUF' and correct any invalid values.

Problem determination: The length might be invalid, or the 'WBUF' eye-catcher might be missing.

0000000C/00E60849

Explanation: The parameters are specified incorrectly on the IFI command request.

User response: If the selective dump function is not being used, check that the parameters are specified correctly on the IFI request. If the selective dump function is being used, notify the system programmer.

Problem determination: If the selective dump function is not being used, check that the parameters are correctly specified on the command request. Among other possible causes, the high-order bit of the last parameter must be on in order to indicate the end of the parameter list. For assembler users, this can be done by using the VL option on the call. Another possible cause is the sixth parameter is specified on the IFI request. The sixth parameter is reserved for the selective dump function.

0000000C/00E60850

Explanation: An invalid WQALLTYP value was specified on a READS request.

User response: Correct the invalid WQALLTYP value and reissue the request.

Problem determination: Examine the validity of the WQALLTYP field. It must be 'CI'.

0000000C/00E60851

Explanation: An invalid WQALLMOD value was specified on a READS request.

User response: Correct the invalid WQALLMOD value and reissue the request.

Problem determination: Examine the validity of the WQALLMOD field. It must be 'F' or 'R'.

0000000C/00E60852

Explanation: An invalid WQALLRBA value was specified on a READS request. The starting CI log RBA must end in X'000'.

User response: Correct the invalid WQALLRBA value and reissue the request.

Problem determination: Examine the validity of the WQALLRBA field. It must end in X'000'.

0000000C/00E60853

Explanation: An invalid WQALLNUM value was specified on a READS request. The valid range is X'0001' to X'0007'.

User response: Correct the invalid WQALLNUM value and reissue the request.

Problem determination: Examine the validity of the

WQALLNUM field. The valid range is X'0001' to X'0007'.

0000000C/00E60854

Explanation: The specified WQALLRBA was not in the active log.

User response: Correct the invalid WQALLRBA value and reissue the request.

Problem determination: Examine the validity of the WQALLRBA field. Check the beginning RBA of the active log. The WQALLRBA field must be greater than or equal to the beginning RBA value of the active log. The RBA of the first CI in the active log will be returned in field IFCAFCI or it can be determined by running the print log map (DSNJU004) utility.

0000000C/00E60855

Explanation: A log RBA value past the end of the current active log was specified. The specified WQALLRBA value was beyond the end of the log. The CI has yet to be written.

User response: Correct the invalid WQALLRBA value and reissue the request.

Problem determination: Examine the validity of the WQALLRBA field. Check the ending RBA of the log. The WQALLRBA field must be less than the ending RBA value.

0000000C/00E60856

Explanation: No complete CI's are available from the RBA specified in WQALLRBA.

User response: Lower the value in WQALLRBA by at least X'1000' or wait until at least one CI has been written beyond the RBA specified in WQALLRBA and reissue the request.

Problem determination: Examine the WQALLRBA field and determine whether or not one complete CI beyond WQALLRBA has been written to the log.

0000000C/00E60857

Explanation: This code indicates that an IFI READS request for IFCID 185 contained an invalid WQALCDCD value.

System action: Control returns to the user program with return code 0000000C in field IFCARC1 and reason code 00E60857 in field IFCARC2.

User response: WQALCDCD is a user-specified field in the QUAL_AREA of an IFI READS for IFCID 185. Reissue the request with a valid WQALCDCD value. For IFI READS requests for IFCID 185, the valid values are A, Y, and N. If a value is not specified, a value of A is used as the default.

0000000C/00E60858

Explanation: This code indicates that an IFI READS request for IFCID 185 was denied because the system parameters indicate that data capture processing is not allowed on this DB2 system. The system parameter field SPRMCDC is set to 'no'.

System action: Control returns to the user program with return code 0000000C in field IFCARC1 and reason code 00E60858 in field IFCARC2.

User response: Inspect system parameter SPRMCDC. If change data capture is not allowed on this system, consult with the database administrator to determine if the system parameter should be changed to 'yes' to allow DB2 data capture processing.

00000008/00E60859

Explanation: An IFI READS request for IFCID 129 was made to pass the last partially full log CI to the log exit, but the log exit is not active. Either the log exit (DSNJW117) was not installed, or an error in the exit has deactivated the exit.

User response: Either install the log capture exit, or look for message DSNJ150E indicating that the log capture exit has been deactivated. See the description for DSNJ150E for more information about reactivating the log capture exit.

0000000C/00E60860

Explanation: On a READS request for IFCID 0254, an error was encountered while collecting statistics for a group buffer pool.

User response: Reissue the request. If the problem persists, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The group buffer pool name is saved in field IFCAGBPN. The reason and return code from the internal macro are saved in fields IFCAR0B and IFCAR1B.

0000000C/00E60861

Explanation: An invalid WQALGBPN value was specified on a READS request.

User response: Correct the invalid WQALGBPN value and reissue the request.

Problem determination: Examine the validity of the WQALGBPN field. The qualifier is an 8-byte group buffer pool name in which an imbedded X'00' is used as a pattern character.

00000008/00E60863

Explanation: On a READS request for IFCID 0306, a resource was unavailable while attempting to read the log.

User response: Reissue the request. If the problem persists, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00000008/00E60864

Explanation: On a READS request for IFCID 0306, the return area supplied was not large enough to hold one log record. No log record is returned, but position is held in the log.

User response: Increase the size of the return area and issue a WQALMODN request. If the problem persists, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The size of the return area required is returned in field IFCABSRQ of the IFCA return area.

00000008/00E60865

Explanation: On a READS request for IFCID 0306, no data is returned for a WQALMODF call because log position is already held in the log, possibly by a previous WQALMODF call.

User response: You might want to use a WQALMODN request instead.

00000008/00E60866

Explanation: On a READS request for IFCID 0306, no data is returned for a WQALMODN call because no log position is held in the log.

User response: A WQALMODF call might be necessary before a WQALMODN call.

0000000C/00E60867

Explanation: An invalid WQALLRBA value was specified on a READS request for IFCID 0306. The specified value exceeds the end-of-log.

User response: Correct the WQALLRBA field. A pause might also be necessary before you issue a WQALMODF request again.

0000000C/00E60868

Explanation: The return area was specified incorrectly for IFCID 0306. The return area did not reside in ECSA storage.

User response: Respecify the return area and make sure that it resides in ECSA storage.

0000000C/00E60869

Explanation: An invalid WQALLCRI field was specified on a READS request for IFCID 0306.

User response: Correct the invalid WQALLCRI field and reissue the request.

Problem determination: Check the validity of the WQALLCRI field. It must be X'00'.

0000000C/00E60870

Explanation: An invalid WQALLOPT field was specified on a READS request for IFCID 0306.

User response: Correct the invalid WQALLOPT field and reissue the request.

Problem determination: Check the validity of WQALLOPT field. It must be X'00' or X'01'.

00000008/00E60871

Explanation: On a READS request for IFCID 306, log records are returned, but data is not decompressed as requested.

Problem determination: See the reason code in field QW0306DG to determine why decompression was not performed. One reason code can be 00C90064, which means that the decompression dictionary changed since the log record was written.

00000008/00E60872

Explanation: On a READS request for IFCID 0306, no data is returned for a WQALMODD call because log position is already held in the log, possibly by a previous WQALMODF or WQALMODN call.

User response: If WQALMODD is desired, make sure that a WQALMODT call has been issued first.

0000000C/00E60873

Explanation: On a READS request for IFCID 0306, no data is returned for a WQALMODF call because the RBA supplied was too old. This is because DB2 has migrated into and out of or out of data sharing mode.

User response: The change of mode into and out of data sharing also changes the log sequencing from RBA to LRSN and back to RBA. A log read application that is sensitive to log sequencing should take an appropriate action. A cold start of the application might be necessary.

0000000C/00E60874

Explanation: An invalid value was specified for WQALFLTR on a READS request for IFCID 316. See the definition in the DSNDWQAL parameter block for valid values.

User response: Correct the invalid WQALFLTR value and reissue the request.

0000000C/00E60875

Explanation: An invalid value was specified for WQALFFLD on a READS request for IFCID 316. See the definition in the DSNDWQAL parameter block for valid values. This error might also be issued if WQALFLTR = X'02' is specified with WQALFFLD = 'A'.

User response: Correct the invalid WQALFFLD value and reissue the request.

00000004/00E60900

Explanation: This is an informational code. One or more data rows defined with DATA CAPTURE CHANGES might not have been retrieved.

System action: All successfully retrieved data rows defined with DATA CAPTURE CHANGES are returned in the return area. One header instance of 0185 is returned for each data row associated with a failure or warning. A reason code in field QW0185RC in the header indicates the reason for the failure or warning.

Problem determination: Inspect the reason code in QW0185RC to determine the cause of each failure or warning.

00000004/00E60901

Explanation: The available buffer is not large enough to hold the largest 0185 record instance.

System action: No data is returned.

User response: Reissue the IFI READS request for IFCID 0185 with a larger return area. The suggested size of the new area is 4KB more than the original size.

00000004/00E60902

Explanation: The IFI READS request for IFCID 0185 is invalid. The READS request tried to retrieve captured DB2 table changes, but no data was captured for the current SQL statement.

System action: No data is returned.

User response: Ensure that the IFI READS request follows the current SQL statement and precedes any subsequent SQL statement. Captured data must be retrieved at the time of the SQL call.

00000004/00E60903

Explanation: One or more data rows marked with DATA CAPTURE CHANGES were not retrieved. In addition, there is insufficient space in the return area to hold all the data in an IFI READS request for IFCID 0185. This is a combination code for 00E60900 and 00E60802.

System action: As many complete 0185 records as can fit are returned in the return area. Also, one 0185 header record is returned for each failed data row. The reason code in field QW0185RC in the header indicates the reason for the failure.

User response: Refer to the description of reason codes 00E60900 and 00E60802 for details.

00000004/00E60904

Explanation: The IFI READS request for IFCID 0185 could not be executed successfully because a resource was not available. Some 0185 record instances might have been returned to the return area before the problem occurred.

System action: The last 0185 record instance returned is type D (QW0185TP = D). Field QW0185RC contains a reason code for the specific unavailable resource. In addition, the data portion (QW0185DR) of this record instance contains the following message:

```
UNSUCCESSFUL EXECUTION CAUSED BY AN
UNAVAILABLE RESOURCE. REASON reason,
TYPE OF RESOURCE type,
AND RESOURCE NAME name
```

In the message, *reason* is identical to field QW0185RC. The variables *type* and *name* identify the specific resource that is unavailable at the time.

User response: Retrieve all returned record instances. Examine the reason code (QW0185RC) for each instance for other possible errors or warnings. Use the reason code in QW0185RC and the error message in QW0185DR to determine why the resource is unavailable. Refer to “Resource types” on page 738 in Appendix C, “Problem determination” for an explanation of resource type codes. Refer to Part 3, “DB2 codes,” on page 159 for an explanation of the given reason code.

00000004/00E60A00

Explanation: A down-level data description was detected. A requester specified no data description to be returned in an IFI READS request for IFCID 0185. That is, the WQALCDDCD field of the qualification area is set to N, but a description change (ALTER TABLE ADD) that requires a refresh of the data description occurred. This reason code does not apply to the success or failure of the IFI request, but rather to the status of the data in the IFCID 0185 record.

System action: This reason code is only issued once for each table within each SQL scope. The 0185 record instance that contains this reason code has the header portion only. Moreover, contents of all time stamp, log RBA, and operation code fields in the header are all zeros.

User response: The requester can issue an SQL DESCRIBE to get the new description, or can consider

changing the DataPropagator NonRelational (DPropNR) exit routine to set WQALCDDCD to A or Y.

00000004/00E60A01

Explanation: The data row marked with DATA CAPTURE CHANGES is rejected by the installation-defined edit procedure 'proc-name' for the object table. This reason code does not apply to the success or failure of the IFI request, but rather the status of the data in the IFCID 0185 record.

System action: The following message is returned in the data area of 0185:

```
VIOLATION OF INSTALLATION DEFINED
EDIT PROCEDURE proc-name.
REASON CODE: reason-code
```

In the message, *proc-name* is the edit procedure name and *reason-code* is EXPLRC2 returned by the edit procedure.

User response: Examine the edit procedure for any errors. If it is not an edit procedure error, determine the requirements imposed by the edit procedure.

00000004/00E60A08

Explanation: The following message is returned in the data portion of the data row area in the 0185 trace record: COLUMN *column_name* ON TABLE *table_name* IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE. RT: *return_code*, RS: *reason_code*, MSG: *message_token*.

An installation field procedure returned an error indicated by *return_code* for column *column_name* on table *table_name*. Use *return_code* to determine the problem. The *return code* can be:

- | | |
|----|---------------------------------------|
| 4 | Invalid value on decode |
| 8 | Invalid parameter value |
| 12 | Field procedure error on any function |

Use *reason_code* and *message_token* for additional information. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

System action: Whenever this reason code is present in the QW0185RC field in the record header, no record is returned in the data row section for this table. The message listed above takes its place. The length of the record corresponds to the message length.

Programmer response: Examine the field procedure for any errors. If it is not a field procedure error, determine the requirements imposed by the field procedure.

00000004/00E60A09

Explanation: The following message is returned in the data portion of the data row area in the 0185 trace record:

```
INCORRECT DATA RETURNED FROM FIELD PROCEDURE
fieldproc_name FOR TABLE table_name AND
COLUMN column_name,
MSG: message_token
```

Unexpected data was returned from field procedure *fieldproc_name* and for column *column_name* on table *table_name*. For more information see *message_token*. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

System action: Whenever this reason code is present in the QW0185RC field in the record header, no record is returned in the data row section for this table. The message listed above takes its place. The length of the record corresponds to the message length.

Programmer response: Correct the field procedure so that it returns values and their descriptions that are mutually consistent.

00000004/00E60A0A

Explanation: The following message was returned in the data portion of the data row area in the 0185 trace record: AN INSTALLATION FIELD PROCEDURE HAS RETURNED A RETURN CODE IN REGISTER 15 OTHER THAN AN EXPECTED 0 OR 4

This indicates that an installation field procedure returned an unexpected error. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

System action: Whenever this reason code is present in the QW0185RC field in the record header, no record is returned in the data row section for this table. The message listed above takes the place of the record. The length of the record corresponds to the message length.

Programmer response: Examine the field procedure for the specific return code generated.

00000004/00E60A0B

Explanation: This is a warning code, and does not represent an error. For the corresponding data row with this reason code in field QW0185RC, a date or time column value was returned in the ISO format, even though the date/time installation option was specified as LOCAL. Invocation of local date and time exits is not supported for captured data. This reason code does not apply to the success or failure of the IFI request, but to the status of the data in the IFCID 0185 record.

System action: A date or time column value was returned in the ISO format even though the installation option was specified as LOCAL.

Programmer response: The requester needs to be aware that a date or time was returned in ISO format since the LOCAL date and time installation option, which was in effect at the time of capture, is not supported for data capture.

Chapter 24. X'E7.....' codes

00E70004

Explanation: An inconsistency has been detected in the subsystem catalog tables.

This abend reason code is issued by the following CSECTs: DSNXOCK, DSNXOLV

System action: The application program abends.

Operator response: Notify the system programmer or database administrator.

System programmer response: Notify the database administrator if appropriate. Otherwise, use the information under the Problem Determination section to resolve the problem.

Problem determination: The module name and the name of the inconsistent subsystem catalog table can be found in the SQLCA. Refer to Part 3 of *DB2 Diagnosis Guide and Reference* for information about how to find the SQLCA.

Register 7 is the cursor table pointer and is always restricted entirely over the relational data system (RDS) subcomponent.

Dump the page set containing the inconsistent subsystem catalog using the DUMP option of the REPAIR utility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 48.

00E70005

Explanation: A relational data system (RDS) subcomponent internal inconsistency was detected.

This abend reason code is issued by the following CSECTs: Any of the RDS modules

System action: The application program abends.

Operator response: Notify the system programmer.

System programmer response: This code generates an SVC dump and SYS1.LOGREC entries. Use information from those two sources and from the Problem Determination section of this code to resolve the problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The abend code can be issued by any of the RDS modules. The module name can be found in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module where the error was detected.

SQLERRM might contain some meaningful information for this particular error.

Refer to Part 3 of *DB2 Diagnosis Guide and Reference* for information about how to find the SQLCA.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 14.

00E70006

Explanation: An internal inconsistency has been reported to the relational data system (RDS) subcomponent by the RDS subcomponent of DB2.

This abend reason code is issued by the following CSECTs: Any of the RDS interpreter modules

System action: The application program abends.

User response: Notify the system programmer.

Operator response: Provide a print of the SVC dump to the system programmer.

System programmer response: Use the information in the 'Problem Determination' section of this message to resolve the problem.

Problem determination: The abend code may be issued by any of the RDS interpreter modules (DSNX...). The module name appears in the SQLCA. SQLERRD1 in the SQLCA contains a unique code that identifies the location within the module at which the error was detected. SQLERRM contains information describing the particular error.

Refer to Part 3 of *DB2 Diagnosis Guide and Reference* for information about how to find the SQLCA.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 2.

00E70007

Explanation: A bad application-supplied address was encountered while trying to copy SQLCA back to the application program.

This abend reason code is issued by the following CSECT: DSNXERD

System action: The application program abends.

System programmer response: Contact the application programmer.

Problem determination: The register contents at the time of abend are as follows:

R2 A decimal code identifying the data:
1 FRB address is bad.

- 2 FRBPARM has the bad address used to locate the RDIIN.
- 18 RDICODEP has the bad address used to locate the SQLCA.
- R3** The bad application data area address.
- R4** The length of the data.
- R5** The key of the data or the address of the CT if the SQLCA contains SQLCODE -902.
- R8** The address of the FRB in the application address space (RDIIN) or the address of the RDA if the SQLCA contains SQLCODE -902

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4 or 23.

00E70009

Explanation:

An invalid value or a return code(EXPLRC1) of 12 was returned by the Access Control Authorization exit routine, DSNX@XAC.

System action:

The authorization check is abended. An SVC dump is requested by DB2 functional recovery. If EXPLRC1=12, then the Access Control Authorization exit routine is no longer invoked and authorization checking is performed by DB2.

Operator response:

Notify the system programmer.

System programmer response:

If message DSNX210I has been issued to the System Console, retrieve the return code (EXPLRC1) and reason code (EXPLRC2) from this message and refer to the exit routine's documentation to determine the course of action to be taken.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

The abend with this reason code is issued because the access control authorization exit routine returned an invalid value in one of the return fields or returned a return code (EXPLRC1) of 12. The register contents at the time of abend are set as follows:

- Register 3 points to the field that has the invalid value. This field may be in the EXPL or XAPL control block. The control block eye catcher will enable you to distinguish between the two.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNXACAE

00E7000A

Explanation: A relational data system (RDS) subcomponent abended because one or more parallel tasks abended.

System action: The application program abends.

Operator response: Notify the system programmer.

System programmer response: Use the information in the Problem Determination section of this message to resolve the problem.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend code is issued by the RDS modules that detect abends of other parallel tasks.

This abend reason code is issued by the following CSECTs: DSNXRGF, DSNXRGN

00E7000C

Explanation: The application program supplied an invalid address.

System action: The application program abends.

User response: Correct the invalid address. See Problem Determination for instructions on how to determine the failing SQL statement and the bad address. Use this information to determine the application's incorrect setting of the address. For further information, refer to Part 5 of *DB2 Application Programming and SQL Guide*.

Operator response: Notify the user or system programmer.

System programmer response: Assist the user in determining the invalid address.

Problem determination:

At the time of abend the register contents are:

- R2** A decimal code identifying the bad data:
- 1 (1)** The bad FRB address used to locate the FRBPARM.
 - 2 (2)** FRBPARM has the bad address used to locate the RDIIN.
 - 3 (3)** RDIVPARM has the bad address used to locate the SQLDA length.
 - 4 (4)** RDIVPARM has the bad address used to locate the SQLDABC.
 - 5 (5)** RDIVPARM has the bad address used to locate the SQLDA length.

- 6 (6) RDIAUXPA has the bad address used to locate the SQLDA length.
- 7 (7) RDIAUXPA has the bad address used to locate the SQLDABC.
- 8 (8) PVDPTR has the bad address used to locate the data variable.
- 9 (9) PVINFO has the bad address used to locate the indicator variable.
- 10 (A) Either RDIVPARM or RDIAUXPA has the bad address used to locate the PVARs structure.
- 11 (B) RDIAUXPA has the bad address used to locate the SQLN.
- 12 (C) RDIAUXPA has the bad address used to locate the SQLDAID.
- 13 (D) RDIAUXPA has the bad address used to locate the SQLDABC.
- 14 (E) RDIAUXPA has the bad address used to locate the SQLD.
- 15 (F) RDIAUXPA has the bad address used to locate the SQLVAR.
- 16 (10) PVINFO has the bad address used to locate the indicator variable.
- 17 (11) PVDPTR has the bad address used to locate the data variable.
- 18 (12) PVDPTR has the bad address used to locate the data variable.
- 19 (13) PVDPTR has the bad address used to locate the data variable.
- R3 The bad data address.
- R4 The length of the data.
- R5 The key of the data.
- R8 If register 2 = 8 or 9, R8 contains the address of the RDIVPARM. If register 2 = 16 or 17, R8 contains the address of the RDIAUXPA. Otherwise, R8 contains the address of the RDIIN. This is the application's invocation parameter list. The address of the RDIIN may not be valid if the RDIIN could not be located (Register 2 = 1 or 2).

The program name identifies the failing program. The statement number refers to the statement number in the DB2 precompiler listing. The SQL statement executed can then be found in the application program's compiler/assembler listing. For example, if the statement number is X'00E6', refer to statement number 230 in the DB2 precompiler listing. This precompiler statement number can be cross-referenced to the program's compiler/assembler listing.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4 or 23.

Use the following offsets to trace through the control blocks.

PVARs:

Offsets	Len	Description
0 (0)	4	LENGTH OF BLOCK
4 (4)	12	PVENTY, OCCURS ONCE FOR EACH HOST VARIABLE IN THE SQL STATEMENT

PVENTRY:

Offsets	Len	Description
0 (0)	2	COLUMN TYPE
2 (2)	2	COLUMN LENGTH
4 (4)	4	PVDPTR, POINTER TO HOST VARIABLE DATA
8 (8)	4	PVINFO, POINTER TO INDICATOR

FRB:

Offsets	Len	Description
0 (0)	4	BLOCK IDENTIFIER "FRB"
4 (4)	2	RAL ENTRY NUMBER
6 (6)	2	FVL ENTRY NUMBER
8 (8)	4	FRBPARM, POINTER TO PARAMETER LIST (RDIIN)
12 (C)	2	PARAMETER COUNT
14 (E)	2	RETURN CODE
16 (10)	4	REASON CODE
20 (14)	4	FEEDBACK
24 (18)	4	PRH PC LX/EX VALUE
28 (1C)	2	REQUEST QUALIFIER VALUE
30 (1E)	2	RESERVED
32 (20)	0	END OF USER FRB SECTION

RDIIN:

Offsets	Len	Description
0 (0)	2	PARM LIST LENGTH
2 (2)	2	FLAGS
4 (4)	2	CALL TYPE
6 (6)	8	PROGRAM NAME
14 (E)	8	TIMESTAMP
22 (16)	2	SECTION #
24 (18)	4	PTR TO ERROR CODE STRUCTURE

Offsets	Len	Description
28 (1C)	4	RDIVPARG PTR TO USER INPUT VARIABLES (PVAR STRUCTURE)
32 (20)	4	RDIAUXPA PTR TO DB2 RETURN VARIABLES (PVAR STRUCTURE)
36 (24)	2	STATEMENT #
38 (26)	2	STATEMENT TYPE

00E7000F

Explanation: A deadlock condition has been detected.

This abend reason code is issued by the following CSECT: DSNXIDPM

System action: The requested operation is not performed.

User response: Rerun the application.

System programmer response: If the deadlock condition becomes chronic, examine the mix of applications running to determine why the deadlock is occurring.

Problem determination: The requested operation is not performed. Message DSNT375I is issued and an SQLCODE -904 is issued. For more information, refer to the SQL code or to the description of the DSNT375I message.

00E70010

Explanation: A timeout condition has been detected.

System action: The requested operation is not performed.

User response: Rerun the application.

Problem determination: The requested operation is not performed. Message DSNT376I is issued and an SQLCODE -904 is issued. For more information, refer to the SQL code or to the description of the DSNT376I message.

00E70011

Explanation: During an authorization check for plan or command authorization, an execution unit switch took place to a new execution unit and the new execution unit abended.

System action: The calling execution unit is also abended.

Operator response: Notify the system programmer. Print SYS1.LOGREC. Also print the dump from any previous dump data set if the failing module name is DSNXACKP or the dump title is 'RDS AUTHCHK'.

System programmer response: See problem determination and if you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The module issuing this abend reason code has invoked the DSNXCHK macro to perform an authorization check for either the application plan or the command authorization. The DSNXCHK macro does a cross-memory execution unit switch to module DSNXACKP. Look for a previous dump in which the failing module name is DSNXACKP, the dump title is RDS AUTHCHK, or the failure is an allocation failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00E70012

Explanation: A user exit has written beyond the end of the output buffer.

System action: The application program abends.

Operator response: Notify the system programmer.

System programmer response: Correct the exit routine. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of abend the register contents are:

- R2 contains the first 4 characters of the exit routine name.
- R3 contains the next 4 characters of the exit routine name.

If the exit routine name is DSNXVDTX then DECPDLEN contains the LOCAL DATE LENGTH specified on the DB2 Installation Application Programming Defaults Panel. The exit routine wrote beyond this length in returning a local date format to DB2.

If the exit routine name is DSNXVTMX then DECPLEN contains the LOCAL DATE LENGTH specified on the DB2 Installation Application Programming Defaults Panel. The exit routine wrote beyond this length in returning a local time format to DB2.

00E70013

Explanation: DRDS at the server site supplied an invalid address.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5, 14.

00E70014

Explanation: DB2 could not validate the data definition control support tables during startup.

System action: The requested operation is not performed.

Operator response: Notify the system programmer.

System programmer response: Provide a print of the SVC dump to the system programmer. Use the information in the 'Problem Determination' section. The data definition control support tables could not be validated. No data definition SQL statements can be executed until these tables can be validated.

Register 2 contains the address of a message that indicates the reason for the problem. DB2 startup continues. Correct the problem if it still exists. DB2 will attempt to validate the data definition control support tables when the user attempts to execute any data definition SQL statements.

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 2, 5, 14.

00E70015

Explanation: DB2 was abnormally terminated because the Access Control Authorization exit has indicated that it is unable to process authorization checks and that DB2 should be terminated.

System action: The authorization check task is abended. An SVC dump is requested by DB2 functional recovery. A message is issued to the operator console, and DB2 is terminated.

System programmer response: Use the information in the 'Problem Determination' section of this message to resolve the problem.

Problem determination: Locate operator console message DSNX210I. This message has the return and reason codes from the exit. Since the Access Control Authorization exit (DSNX@XAC) is external to DB2, you will need to refer to its documentation for an explanation of these codes and a resolution to the problem.

00E70069

Explanation: An installation error was detected while the CICS Attachment Facility was attempting to establish the connection to DB2 for your CICS

transaction. This error can be caused by one of the following:

- The current CICS transaction identifier was not found in any of the resource control table (RCT) entries.
- A valid authorization name was not found using the RCT entry for this CICS transaction. The AUTH= parameter in the RCT specifies up to three sources for authorization checking. None of these yielded a valid name for checking. For example, the RACF group might have been specified, but the user was not a member of any RACF group. Or terminal identifier might have been specified, but the transaction was being run without a terminal.

This abend reason code is issued by the following CSECT: DSNCEXT1

System action: The request is not processed.

System programmer response: Check the RCT table specifications for this transaction to determine if they are missing or incorrect. If modification is needed, change the RCT source and install the RCT again. Refer to Chapter 2-10, "Connecting the CICS Attachment Facility," of *DB2 Administration Guide* for more information.

Problem determination: You might be able to use the DSNCL DISPLAY command to check for the existence of an RCT entry for this transaction. If an entry exists, refer to the RCT source. Look at the AUTH= parameter list and determine why CICS was unable to establish a valid authorization name for checking.

00E7006A

Explanation: While processing your request, the IMS Attachment Facility could not identify the DB2 subsystem. The DB2 identification must be defined to the IMS control region, the DL/I batch region, and any dependent region accessing the DB2 subsystem.

This abend reason code is issued by the following CSECTs: DSNMSNO0, DSNMERR0

System action: The connection is not established.

System programmer response: To make the identification to the IMS regions, you must create a subsystem member (SSM) in the IMSVS.PROCLIB library and identify the SSM to the applicable IMS regions. Refer to Chapter 2-9, "Connecting the IMS Attachment Facility," of *DB2 Administration Guide* for more details.

00E7006B

Explanation: The CICS or IMS Attachment Facility detected that a shutdown was in progress for the DB2 subsystem while processing your request. This might occur during initial connection processing or during

subsequent requests, depending on the type of DB2 shutdown.

This abend reason code is issued by the following CSECTs: DSNCEXT1, DSNMERR0

System action: The connection is not established.

User response: Before you can continue, you must restart the DB2 subsystem. Contact the operator to restart the subsystem, and then resubmit your transaction.

Operator response: Restart the DB2 subsystem.

00E70081

Explanation: A DROP or ALTER statement was issued but the object cannot be dropped or altered. The object is referenced by a prepared dynamic SQL statement that is currently stored in the prepared statement cache and is in use by an application.

This reason code is issued by the following CSECT: DSNXIDMH

System action: The requested operation is not performed.

Programmer response: The requested operation cannot be performed until there are no applications that reference the object using dynamic SQL. Ensure that other applications have quiesced or performed a commit operation. Then try the request again.

Problem determination: An SQLCODE -904 is issued. The message tokens for that message report the name and type of the object that was being referenced by another application.

00E70082

Explanation: The user has reached the maximum number of outstanding stored procedures or opened cursors for the current thread.

System action: No additional stored procedures may be invoked, and no more cursors are allowed to be opened.

Programmer response: Applications should close cursors as soon as possible, and should issue COMMIT often to allow the stored procedure result set to be cleared.

00E7009A

Explanation: A DECLARE GLOBAL TEMPORARY TABLE statement or OPEN CURSOR (of a scrollable cursor) was issued, but the operation cannot be performed due to one of the following reasons:

- A TEMP database has not been created yet.
- A table space has not been created in the TEMP database yet.

- No table space in the TEMP database has a page size that is large enough for the declared global temporary table.
- A table space in the TEMP database is not available at this time.

System action: The operation is not allowed.

Operator response: Notify the system programmer.

System programmer response: To perform the operation, you must create the required TEMP database or create a table space with a large enough page size.

Problem determination: The requested operation is not performed. An SQLCODE -904 is issued. For more information, refer to Part 2, "SQL return codes," on page 9.

00E7009B

Explanation: An invalid operation has been attempted on an incomplete table that was created in a previous release of DB2. The table definition is incomplete due to a missing unique index on a primary key or unique key.

The following DDL operations are not allowed:

- ALTER TABLE
- CREATE INDEX
- DROP INDEX

System action: DB2 does not process the operation.

Operator response: Notify the system programmer.

System programmer response: In order to perform the operation on the object, you must use the release of DB2 in which the table was created.

Problem determination: DB2 does not perform the requested operation, and issues SQL code -904. For more information, refer to Part 2, "SQL return codes," on page 9.

00E7009C

Explanation: An attempt was made to execute a statement that depends on an unavailable catalog object. The catalog object will be available after the catalog is updated to the necessary level.

System action: The operation is not allowed.

Operator response: Notify the system programmer.

System programmer response: In order to perform the operation, you must update the catalog to the required level. To do this, run install job DSNTIJTC. For more information about this job, see Part 2 of *DB2 Installation Guide*.

Problem determination: The requested operation is not performed. SQLCODE -904 and message DSNT501I are issued. For more information, refer to Part 2, "SQL return codes," on page 9 or to the description of the

DSNT501I message in *DB2 Messages*.

00E7009D

Explanation: The code level of the DB2 catalog is incompatible with the current code level of:

- A DB2 subsystem that is starting, or
- A datasharing group

System action: DB2 cannot start. Message DSNX208E or DSNX209E is displayed on the system console to describe the problem. An SVC dump is requested for the DSNX208E problem.

Operator response: Notify the system programmer.

System programmer response: Before DB2 can start, each DB2 subsystem must use a level of code that is compatible with the catalog.

Problem determination: DB2 does not start. Message DSNX208 or DSNX209 display a reason code or level information that helps with problem diagnosis.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 16, 69.

00E7009E

Explanation: The object is dependent on facilities of a release of DB2 that is newer than the release that you are currently running (fall back).

System action: The operation is not allowed.

Operator response: Notify the system programmer.

System programmer response: In order to perform the operation on the object, you must use the release of DB2 that supports the new facilities.

Problem determination: The requested operation is not performed. An SQLCODE -904 and/or message DSNT501I is issued. Message DSNT501I describes which object has the release dependency.

00E7009F

Explanation: An error occurred while loading the catalog DBD during start-up processing.

System action: If message DSNX204I is issued to the console, DB2 is started ACCESS(MAINT). Otherwise, the current START command processing is terminated.

Operator response: Notify the system programmer.

System programmer response: Obtain copies of SYS1.LOGREC and the SVC dump. If message DSNX204I was issued to the console, see the description of that message.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference*

for information on identifying and reporting the problem.

Register 2 points to a character string that describes the specific error encountered.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNXLDBD

00E700A6

Explanation: Failure in DB2 code supporting LE.

System action: The application program abends.

User response: Notify the system programmer.

Operator response: Notify the system programmer. Print SYS1.LOGREC.

System programmer response: See problem determination and if you suspect an error in DB2, refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00E700A7

Explanation: LE returned an unexpected return code to DB2.

System action: The application program abends.

User response: Notify the system programmer.

Operator response: Notify the system programmer. Print SYS1.LOGREC.

System programmer response: See problem determination and if you suspect an error in DB2, refer to Section 3 of *Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: At the time of abend, register R2 contains two bytes of the function code presented to LE, followed by two bytes of the unexpected return code sent back to DB2 from LE.

Confirm DB2 is running with the correct release of LE with the required service level. Refer to the Program Directory to determine the minimum level of OS/390 and LE and fixes that are required.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00E70100

Explanation: This is an internal RDS error. The SQLWARN0 field does not contain a valid value while determining SQLSTATE field value. SQLWARNx fields are described in Appendix D of *DB2 SQL Reference*.

System action: The application program ABENDs.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. procedures.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E70105

Explanation: This is an internal RDS error. One of the SQLWARNx fields does not contain a valid value while determining SQLSTATE field value. SQLWARNx fields are described in Appendix D of *DB2 SQL Reference*.

System action: The application program ABENDs.

Operator response: Notify the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 1, 5.

00E70106

Explanation: DB2 received a functional request and encountered an internal authorization error. The function cannot be processed.

System action: The function is rejected with this reason code. If the request was SQL, then the SQLCODE is -922.

Operator response: Notify the system programmer.

System programmer response: Please call the IBM Support Center to resolve this problem.

00E70110

Explanation: The commit failed because the application was not connected to the Current Server.

This abend reason code is issued by the following CSECT: DSNXECW

System action: The reason code or SQLCODE -900 is returned to the application which is in an unconnected state.

User response: A previous failure has left your application in an unconnected state . Notify the system programmer that a system failure occurred during execution of your application. Any changes made in the last unit of work is rolled back. Re-run your application after determining the state of the Current Server database.

Operator response: For Communication failure, refer to DSNL500I message.

System programmer response: Diagnose the failure that left the user application in an unconnected state. See "Problem Determination" section below.

Problem determination: Refer to the previous SQL error in the application.

00E70115

Explanation: The unit of work was placed in a state where a rollback operation is required. This can happen when an abend occurs during the execution of a stored procedure, a user defined function (UDF), or a restricted SQL operation was issued from a stored procedure.

This item is issued by the following CSECT: DSNXECW.

System action: In the IMS and CICS environments, all SQL statements are rejected until the rollback occurs. In the other environments, all SQL statements other than a static ROLLBACK are rejected until a static ROLLBACK is executed.

Programmer response: Correct the stored procedure or UDF, rebind it and resubmit the calling application.

00E70121

Explanation: User ID, password not valid in an IMS or CICS environment. An SQL CONNECT with user ID, password was issued from an IMS or CICS application.

System action: The SQL CONNECT request is not processed. The application is placed in the connectable and unconnected state.

00E70122

Explanation: The user ID or password submitted on a request to CONNECT to the local DB2 exceeded the maximum length supported. The maximum length for each is 8 characters.

System action: The SQL CONNECT request was not processed. The application is placed in the connectable and unconnected state.

00E70911

Explanation: The current unit of work was the victim in a deadlock, or experienced a timeout, and had to be rolled back. RC00E70911 is the same as the SQLCODE -911. For more information, refer to the SQL return code.

This abend reason code is issued by the following CSECTs: DSNCEXT3, DSNMDR10

System action: The statement cannot be executed. The application is rolled back to the previous COMMIT.

Operator response: Notify the system programmer.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E70913

Explanation: The application was the victim in a deadlock or experienced a timeout. RC00E70913 is the same as the SQLCODE -913. For information, refer to the SQL return code.

This abend reason code is issued by the following CSECT: DSNXEEZ

System action: The statement cannot be executed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00E72008

Explanation: The relational data system (RDS) sort subcomponent has determined that there is not enough storage to continue the sort process.

System action: The application program abends.

Operator response: Notify the system programmer.

System programmer response: The CT is formatted and a return code with a value of 8 is returned from the sort subcomponent to indicate a resource was unavailable. Check the SYSOUT message file for any errors detected by the sort subcomponent.

00E72018

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an internal inconsistency. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.
- R3 is an unique decimal code that identifies the error location and error type.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72048

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECT: DSNXSORI

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an internal inconsistency. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SPL.
- R3 is an unique decimal code that identifies the error location and error type.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72058

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECTs:

DSNXSMR	DSNXSMRE	DSNXSMRG
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System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

- | **Problem determination:** The sort subcomponent has
- | detected that the number of unsorted records input to
- | sort did not equal the number of sorted records
- | returned by sort minus the number of records removed
- | from the sort by the evaluation of aggregate functions.
- | The precise problem can be determined only by
- | analyzing the abending module at the point of failure.
- | The register contents at the time of abend are set as
- | follows:
- | • R2 points to the SRTCOMM.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72068

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECTs: DSNXSMR, DSNXSMRG

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an internal inconsistency in the merge process. The precise problem can be determined only by analyzing the abending module at the point of failure.

The register contents at the time of abend are: R2 points to the SRTCOMM.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72078

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECTs: DSNXSMR, DSNXSMRG

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The Sort subcomponent has detected a sort work file management inconsistency in the merge process. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SPL.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72088

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an error from the Data Manager. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.

- R3 is an unique decimal code that identifies the error location and error type of the Data Manager request that failed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72098

Explanation: The relational data system (RDS) sort subcomponent has detected an internal inconsistency.

This abend reason code is issued by the following CSECT: DSNXSORI

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The sort subcomponent has detected an invalid request for tag sort processing. The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.
- R3 is an unique decimal code that identifies the error location and error type.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72100

Explanation: DB2 detected an internal inconsistency in sort during parallel query processing.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

System programmer response: This is a DB2 internal error.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SRTCOMM.
- R3 is an unique decimal code that identifies the error location and error type.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00E72200

Explanation: DB2 detected an internal inconsistency in sort during parallel query processing. This is a DB2 internal error.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

Operator response: Notify the system programmer. Provide a print of the SVC dump to the system programmer.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The precise problem can be determined only by analyzing the abending module at the point of failure. The register contents at the time of abend are set as follows:

- R2 points to the SPL.
- R3 is an unique decimal code that identifies the error location and error type.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECT: DSNXSPRM

00E73001

Explanation: The SQL statement or utility could not be executed because the required level of z/OS is not installed.

System action: For a SQL statement, the statement is rejected with SQLCODE -20101 and this reason code. For a utility, the utility is rejected with message DSNT500I and this reason code.

System programmer response: Refer to the Program Directory to determine the minimum level of z/OS that is required for the syntax used in the statement or utility.

00E73002

Explanation: The SQL statement could not be executed because of a resource unavailable condition. The resource is Language Environment.

System action: The SQL statement is rejected with SQLCODE -20101 and this reason code.

System programmer response: Refer to the system console for preceding errors. Correct the cause of these errors and restart the DB2 subsystem.

00E73003

Explanation: The SQL statement could not be executed because the statement needed a level/feature of OS/390 that is not installed. DB2 attempted to load a required Language Environment load module and was unable to do so.

System action: The SQL statement is rejected with SQLCODE -20101 and this reason code.

System programmer response: Refer to the Program Directory to determine the minimum level of OS/390 that is required for the syntax used in the statement.

00E73004

Explanation: The SQL statement could not be executed because of a resource unavailable condition. The resource was an LE token.

System action: The SQL statement is rejected with SQLCODE -20101 and this reason code.

System programmer response: Refer to the system console for preceding errors. Confirm that the zparm keyword LEMAX is greater than zero. If the problem is persistent, consider increasing the number of LE tokens that the DB2 subsystem is allowed to create. See the Installation Guide for more information on LE tokens.

00E73005

Explanation: The SQL statement or utility operation could not be completed because a hardware resource is not available.

System action: The SQL statement is rejected with SQLCODE -20107 or the utility issues message DSNT500I and terminates.

System programmer response: Examine the -20107 or DSNT500I message to identify the type of hardware resource that is not available. Refer to *DB2 Program Directory, GI10-8182* to determine the minimum level of hardware support that is needed for the syntax used in the statement or utility.

00E73006

Explanation: The SQL statement could not be completed because a functional requisite is not available.

System action: The requested operation is not performed, and SQLCODE -904 is returned with this reason code.

System programmer response: Examine the information returned with SQLCODE -904 to identify the type of resource that is not available.

If ICSF was the unavailable resource, review the DB2 system console for possible DSNX211I messages during DB2 startup for additional problem determination.

Problem determination: Refer to the Program Directory to determine the minimum functional requisite that is needed for the syntax used in the statement.

00E79000

Explanation: DB2 received an SQL CALL statement for a stored procedure. The CALL statement was not accepted because one or more columns of the SYSIBM.SYSROUTINES catalog table for the procedure contains invalid values.

System action: The statement cannot be executed. A DSNX9xx message is displayed on the MVS system console to describe the error that was detected.

Programmer response: Use ALTER PROCEDURE or ALTER FUNCTION to correct the invalid column values in the SYSIBM.SYSROUTINES table.

00E79001

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function. The statement was not accepted because the routine was stopped. Possible reasons are:

- the STOP PROCEDURE ACTION(REJECT) command was issued for this procedure, or
- the STOP FUNCTION ACTION(REJECT) command was issued for this user-defined function, or
- there was a previous abnormal termination of the routine.

System action: The statement cannot be executed.

Programmer response: If the user-written routine was stopped by an abnormal termination, correct the cause of the abnormal termination.

Use the -START PROCEDURE command to activate the stored procedure.

Use the -START FUNCTION command to activate the user-defined function.

Problem determination: This reason code is issued by the following CSECTs: DSNX9CCM, DSNX9GPL.

00E79002

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function. The statement was not accepted because the procedure could not be

scheduled before the installation-defined time limit expired. This can happen for any of the following reasons:

- The DB2 STOP PROCEDURE(name) or STOP FUNCTION SPECIFIC command was in effect. When this command is in effect, a user-written routine cannot be scheduled until a DB2 START PROCEDURE or START FUNCTION SPECIFIC command is issued.
- The user-written routine could not be assigned to a TCB in the DB2-established stored procedures address space in the required time interval, because all available stored procedure TCBs were in use.
- The DB2-established stored procedures address space dispatching priority is low, resulting in delays when processing stored procedure requests. If the delays become excessive, the TCBs in the stored procedure address space do not become available to process new SQL CALL statements in a timely manner.
- The dispatching priority assigned by WLM to the caller of the user-written routine was low, which resulted in WLM not assigning the request to a TCB in a WLM-established stored procedure address space before the installation-defined time limit expired.
- The WLM application environment is quiesced so WLM will not assign the request to a WLM-established stored procedure address space.
- WLM is being used in compatibility mode, and the needed stored procedure address space has not been started using the MVS START command.

System action: The statement cannot be executed.

Programmer response: If the routine was stopped, use the DB2 -START PROCEDURE or -START FUNCTION command to activate the user-written routine.

If the DB2-established stored procedures address space was to be used, the cause of the timeout condition might be one of the following:

- Stored procedure or user-defined function applications might not be completing. If this occurs, the TCB used to process the stored procedure will not become available to process new stored procedure requests.
Use the -DISPLAY PROCEDURE and -DISPLAY FUNCTION commands to determine the number of DB2 threads that are currently running a stored procedure or a user-defined function. If the number of threads seems excessive, use the -DISPLAY THREAD command to look at details about each of the threads.
- If there are not enough stored procedure TCBs available to meet the volume of requests, increase the number of stored procedure TCBs by changing the value of the NUMTCB keyword in the JCL procedure used to start the DB2 stored procedures address space.

If a WLM-established stored procedures address space was to be used, the cause of the timeout condition might be one of the following:

- If goal mode is being used to manage the number of WLM-established stored procedure address spaces, the dispatching priority assigned to the caller of the stored procedure might be too low. If the work is of low priority, WLM might leave it queued for a longer period of time.
- The WLM application environment is quiesced. Issue *MVS WLM DISPLAY,APPLENV=wlmenv* command to verify the status of the application environment. The *MVS WLM VARY APPLENV=wlmenv,RESUME* command can be used to activate the environment if it is quiesced.
- If compatibility mode is being used to manage the number of WLM-established stored procedure address spaces, then the problem might be that there are not enough address spaces or enough TCBs running in those address spaces to support the number of user-written routines being invoked. You might need to increase the number of address spaces and TCBs. You might also need to improve the dispatching priority of these address spaces to ensure that they are processing the stored procedure requests quickly enough.

00E79004

Explanation: DB2 received an SQL CALL statement for a stored procedure. The stored procedure could not be accepted, because the DB2-established stored procedures address space is not active.

The DB2-established stored procedures address is not active for any of the following reasons:

- The DB2 module DSNZPARM specified a blank value for the name of the JCL PROC for the DB2-established stored procedure address space.
- The stored procedures address space was cancelled or intentionally terminated by the system administrator.

System action: The statement cannot be executed.

Programmer response: DB2 automatically starts the DB2 stored procedures address space during DB2 startup, when a nonblank value is specified for the JCL PROC for the DB2-established stored procedures address space in the DB2 module DSNZPARM. If the DB2-established stored procedures addressspace terminates while DB2 is active, you can issue the -START PROCEDURE(*) command to restart it.

Problem determination: This reason code is issued by the following CSECTs: DSNX9CAL, DSNX9GPL.

00E79006

Explanation: DB2 received an SQL CALL statement for a stored procedure or an SQL statement containing an invocation of a user-defined function. The statement cannot be honored, because the user-written routine's load module is not compatible with Language Environment preinitialization environment.

System action: The SQL CALL statement is rejected with SQLCODE -471 and this reason code.

Programmer response: Ensure the routine is compiled with a level of the compiler which generates a module that can be a target of a Language Environment preinitialization CEEPIPI call. Ensure that the routine is link edited with the Language Environment runtime library.

Verify that the user-written routine is described correctly in SYSIBM.SYSROUTINES as a main or sub program. This failure can occur if the procedure options for the stored procedure indicate it is a sub program and the specification in the catalog indicates it is a main program.

Message DSNX962I will also be displayed on the MVS system console. This message indicates the specific Language Environment preinitialization service that failed and the failing return code.

For the required levels of the compilers, see *DB2 Application Programming and SQL Guide*.

00E79007

Explanation: An attempt to call a DB2 stored procedure or UDF invocation failed because the host language specified in the LANGUAGE clause of CREATE PROCEDURE or CREATE FUNCTION did not match the language reported by Language Environment.

System action: The attempt to call the stored procedure fails, and the procedure is marked STOP-REJ.

System programmer response: Use the ALTER FUNCTION or ALTER PROCEDURE statement to correct the LANGUAGE attribute specified for the user-defined function or procedure.

00E79008

Explanation: The SQL CALL statement could not be processed. The SECURITY attribute of the user-defined function or procedure requested that a specific security environment be established. An error occurred while attempting to establish this security environment.

System action: The SQL CALL statement is rejected with SQLCODE -471 and this reason code.

System programmer response: Additional error messages might have been generated by the external

security product to describe the error. Use the ALTER FUNCTION or ALTER PROCEDURE statement to modify the SECURITY attribute specified for the user-defined function or procedure.

00E7900B

Explanation: The SQL CALL statement could not be processed. DB2 determined that the user-defined function or procedure was to be run in a specific WLM-established address space, but the necessary WLM services are not available.

The user-defined function or procedure specified a non-blank WLM ENVIRONMENT attribute.

System action: The SQL CALL statement is rejected with SQLCODE -471 and this reason code.

Programmer response: Use the ALTER FUNCTION or ALTER PROCEDURE statement to modify the WLM ENVIRONMENT attribute specified for the user-defined function or procedure, or specify the NO WLM ENVIRONMENT clause.

System programmer response: Issue the START FUNCTION SPECIFIC or START PROCEDURE command to allow the altered user-defined function or procedure to be called.

00E7900C

Explanation: SQL CALL statement or user-defined function invocation could not be processed. The WLM application environment name specified for the user-written routine is not defined or is currently not available for DB2 use in the active WLM policy.

System action: The SQL statement is rejected with SQLCODE -471 and this reason code.

Programmer response: Use the -ALTER PROCEDURE or -ALTER FUNCTION command to update the WLM ENVIRONMENT to specify an application environment that is defined and active in the active WLM policy, or update the WLM policy to contain a valid application environment name.

If the WLM policy definition is updated, use the MVS WLM VARY command to activate this new definition.

If the WLM application environment is quiesced, use the MVS WLM VARY APPLENV= applenv, RESUME command to activate the application environment.

00E7900E

Explanation: SQL CALL statement or user-defined function invocation could not be processed. The routine was invoked by another stored procedure or user-defined function which had the opposite characteristic of being WLM-managed or DB2-managed from this routine. Nesting is not allowed between DB2-managed stored procedures and WLM-managed

stored procedures or user-defined functions.

System action: The SQL statement is rejected with SQLCODE -471 and this reason code.

Programmer response: Use the ALTER PROCEDURE command to change the attribute to NO WLM ENVIRONMENT, or alter the invoking routine to not invoke this one.

00E7900F

Explanation: Insufficient storage space available for the parameter list to a user-defined function or stored procedure. This error is caused by a single parameter or a group of parameters requiring more contiguous storage than DB2 can obtain.

System action: The SQL statement is rejected with SQLCODE -904 and this reason code.

Programmer response: Validate the length of each parameter.

If LOBs are being used, consider using LOB locators instead.

00E79010

Explanation: DB2 received an SQL CALL statement for a stored procedure. The CALL statement was not accepted because one or more columns of the SYSIBM.SYSROUTINES catalog table for the procedure contains invalid values. The value of the column was valid in a prior release of DB2, but is invalid in this release of DB2.

Possible reasons for this include a LANGUAGE column with value COMPIJAVA.

System action: The statement cannot be performed. SQL code -471 is returned on the SQL CALL statement with this reason code.

Programmer response: Use ALTER PROCEDURE to correct the invalid column in the SYSIBM.SYSROUTINES catalog table.

To migrate a LANGUAGE COMPIJAVA stored procedure to LANGUAGE JAVA, use the following procedure:

1. Ensure that you have a WLM application environment that has been set up to run LANGUAGE JAVA.
2. Put the .class file containing the stored procedure code into a directory that is identified in CLASSPATH in the JAVAENV for your LANGUAGE JAVA WLM application environment. Alternatively, you may put the .class file into a Java JAR file and invoke the SQLJ.INSTALL_JAR built-in stored procedure.
3. Issue an ALTER PROCEDURE command against the stored procedure that specifies LANGUAGE JAVA and WLM ENVIRONMENT *java applenv*.

00E79100

Explanation: An internal DB2 error was encountered while processing a stored procedure request.

System action: The task encountering the error is abended.

User response: Notify the system programmer.

System programmer response: This is a DB2 internal error.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 4.

Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E79101

Explanation: DB2 received an unexpected return code from a WLM service.

System action: A record is written to SYS1.LOGREC and an SVC dump is requested. The application program abends.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSNX9CAL, DSNX9MON

00E79102

Explanation: An error occurred while attempting a Java Native Interface function to invoke a Java stored procedure.

System action: The SQL CALL statement fails with SQL code -471 and reason code 00E79102.

Programmer response: Check the operator console for message DSNX961I. This message contains information about the Java error.

00E79106

Explanation: DB2 could not process an SQL CALL statement for a REXX stored procedure. There were errors associated in setting up an environment to run a REXX stored procedure. See the system console for the associated DSNX993I message.

System action: The SQL statement fails with this reason code and SQL code -471.

Programmer response: Use the information provided in the DSNX993I message, and the TSO and REXX

messages in ddname SYSTSPRT for diagnosis. You can find TSO and REXX message explanations in *z/OS TSO/E Messages* and *z/OS TSO/E REXX Reference*.

00E79107

Explanation: DB2 tried to load the Java class that is specified by SQLCODE -471 to execute a Java stored procedure. The class was not found.

System action: The SQL CALL statement fails with SQLCODE -471 and this reason code.

Programmer response: The third error token in the SQLERRMC field of the SQLCA for SQLCODE -471 contains the class name that was not found. The startup procedure for the stored procedure address space in which the stored procedure runs contains a JAVAENV DD statement that points to a data set. That data set must contain a CLASSPATH variable that includes the path that contains the class name for the stored procedure. The CLASSPATH variable must also include all classes that are referenced by the stored procedure class.

00E79108

Explanation: DB2 tried to load the Java method that is specified by SQLCODE -471 to execute a Java stored procedure. The method was not found.

System action: The SQL CALL statement fails with SQLCODE -471 and this reason code.

Programmer response: The third error token in the SQLERRMC field of the SQLCA for SQLCODE -471 contains the user-specified method name and the DB2-generated signature for the method that was not found. If the signature is too long to fit in the SQLERRMC field, the signature is truncated. Left bracket ([]) characters in the signature display as less than (<) characters.

If the first error token in the SQLERRMC field contains the string 'main signature', the method for the stored procedure is a main method, and the stored procedure definition includes parameters with data types other than character data types.

Ensure that the SQL data types of the parameters in the stored procedure definition map to the parameters in the Java method to be invoked.

In z/OS UNIX System Services, run the command `javap -s -private` on the .class file that was used to generate the Java DLL for the stored procedure. The signature of the Java method needs to match the command output.

00E79109

| **Explanation:** A routine was defined to run in a WLM application environment that was not set up correctly for the language that was specified.

| Java routines must be run in a WLM application environment that has been set up to run Java routines. This application environment cannot be used to run non-Java routines.

System action: The SQL CALL statement SQLCODE -471 and this reason code.

Programmer response: Contact the system programmer

| **System programmer response:** Use the ALTER PROCEDURE statement if you need to change the WLM application environment.

| To set up a WLM application environment to run LANGUAGE JAVA routines, add a JAVAENV DD statement to the startup procedure for the stored procedure address space. The JAVAENV DD statement specifies a data set that contains environment variables for running Java routines.

00E79200

Explanation: A Control Center 390 stored procedure encountered an unexpected abnormal termination or error condition.

System action: The Control Center 390 stored procedure terminates, and returns a failing return code to the calling application. The Control Center 390 stored procedure retries from the abnormal termination, so DB2 will not detect that the stored procedure has abnormally terminated. The count of abnormal terminations maintained by DB2 will not be incremented for this abnormal termination.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in Control Center 390, contact IBM support.

Problem determination: The error is recorded on SYS1.LOGREC, and an SVC dump is requested.

Chapter 25. X'E8.....' codes

00E80001

Explanation: A required parameter was not passed via the MVS MGCR service which started the DB2 address space. The parameter must be the address of SCOM for the system services address space or the address on an ASCE for the database services address space or the distributed data facility address space.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the parameter value in error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 8.

00E80002

Explanation: The DB2 subsystem services address space was not started by a valid subsystem or an error occurred during MVS IEFSSREQ processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of an 8-byte field that contains the following diagnostic information: bytes 1 through 4, the subsystem name; bytes 5 through 8, the contents of register 15 that contains the return code set by the MVS IEFSSREQ macro.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 8.

00E80003

Explanation: An unsupported pending function request was detected during processing in the system services address space.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the pending function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80004

Explanation: An error occurred when a POST was issued from a resource manager address space to the system services address space in order to indicate that the DB2 subsystem startup function completed successfully.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The system services address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80005

Explanation: An error occurred when a POST was issued from a resource manager address space to the system services address space in order to indicate that the allied authorization function completed successfully.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Probable cause is that the system services address space is abnormally terminating.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80006

Explanation: An unsupported pending function request was detected during processing in the resource manager address space.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the pending function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8000E

Explanation: MVS was unable to establish an ESTAE for the DB2 address space control task.

This abend reason code is issued by the following CSECT: DSNYASCP

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8000F

Explanation: The expected latent parameter passed by the MVS MGCR macro service is invalid. The cause was probably an attempt to start DB2 by some means other than the command -START DB2.

This abend reason code is issued by the following CSECT: DSNYASCP

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the parameter value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 8.

00E80011

Explanation: MVS was unable to make the address space nonswappable.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 8.

00E80012

Explanation: An error occurred when a POST was issued from the system services address space to a resource manager address space in order to indicate the results of the MGCR invocation.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason

code records information in the variable recording area (VRA).

Problem determination: The resource manager address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 3, 5, 8.

00E80013

Explanation: MVS was unable to create a resource manager address space.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of an 8-byte field that contains the following diagnostic information: bytes 1 through 4, the four character resource manager address space name; bytes 5 through 8, the MGCR return code.

Probable cause is that the MVS auxiliary storage management has inhibited the starting of new address spaces because of a shortage of real storage.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 3, 5.

00E8001F

Explanation: An unsupported function request was detected by the DB2 address space start function.

This abend reason code is issued by the following CSECT: DSNYASTR

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in

Appendix C, “Problem determination,” on page 735: 2, 3, 5.

00E8002F

Explanation: An unsupported function request was detected by the DB2 address space stop function.

This abend reason code is issued by the following CSECT: DSNYASTP

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 3, 5.

00E80031

Explanation: An unsupported input parameter was detected for allied address space initialization.

System action: The caller’s task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the parameter value.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 2, 3, 5.

00E80032

Explanation: An unsupported input parameter was detected for allied address space termination.

System action: The caller’s task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the parameter value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80033

Explanation: This reason code accompanies a X'04F' system abend code. This module detected that the DB2 subsystem was terminating. Refer to *DB2 Messages*.

System action: The caller's task is abended with code X'04F'.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8003C

Explanation: An address space control element (ASCE) could not be located for the executing address space during EOM processing.

This abend reason code is issued by the following CSECT: DSNYALLI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8003D

Explanation: An unrecovered resource (for example, a latch) was detected for a must-complete function.

This abend reason code is issued by the following CSECT: DSNYALLI

System action: Abnormal termination of the DB2 subsystem is initiated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8003E

Explanation: MVS was unable to establish an ESTAE in an address space about to be initialized as a DB2 allied address space.

This abend reason code is issued by the following CSECT: DSNYALLI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8003F

Explanation: An unsupported function request was detected by the allied address space control function.

This abend reason code is issued by the following CSECT: DSNYALLI

System action: The caller's task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80041

Explanation: An error occurred when a POST was issued from an allied address space to the system services address space in order to indicate a pending allied authorization request.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The system services address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80042

Explanation: An error occurred when a POST was issued from the system services address space to a resource manager address space in order to indicate a pending allied authorization request.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The resource manager address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8004F

Explanation: An unsupported function request was detected by the allied address space authorization function.

This abend reason code is issued by the following CSECT: DSNYAUTH

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80051

Explanation: An error was detected in the command that was used to start the DB2 subsystem. There are two conditions that can cause this error. If the -START DB2 command is in error, this abend results.

Secondly, if the DB2 subsystem is not running (had never been started, or had been stopped), any DB2 command that is entered is interpreted as being a -START DB2 command. In this second case, the subsystem starts just long enough to discover that the command actually is not a -START DB2 command and then issues the abend.

System action: The DB2 subsystem is terminated.

Operator response: Reenter the command if it was entered in error; otherwise advise the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

This error does not cause a SYS1.LOGREC record to be written or an SVC dump to be requested. A diagnostic tool (for example, MVS SLIP) is required to get subcomponent diagnostic information.

Problem determination: Register 9 contains the address of a 12-byte field that contains the following diagnostic information: bytes 1 through 4, the address of the buffer that contains the command used to start DB2; bytes 5 through 8, the general command processor return code; bytes 9 through 12, the IPC command processor return code, or 'FFFFFFF' if bytes 5 through 8 contain a positive value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80052

Explanation: A resource manager provided notification of failure during facility startup notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80053

Explanation: A resource manager provided notification of failure during release work notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the RMID of the

resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80054

Explanation: The recovery manager (RM) subcomponent provided notification of an error during restart recovery processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the return code from the recovery manager subcomponent.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80055

Explanation: The recovery manager (RM) subcomponent detected an error during DB2 checkpoint processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the return code from the recovery manager subcomponent.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80056

Explanation: During startup, DB2 was unable to access DSN6FAC in ZPARMS and therefore was unable to determine whether the distributed data facility was to be loaded.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Assemble DSN6FAC and re-link-edit the DSNZPARM load module.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9.

00E80057

Explanation: An error occurred while trying to start a DB2 resource manager address space. A possible cause of this problem would be a JCL error in a start up procedure. Note that the error is probably not in the address space that issued this abend.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 3.

00E80058

| **Explanation:** The version of DB2 that you are
| attempting to start is not compatible with this version
| of MVS. This version of DB2 requires a z/Architecture
| processor running z/OS V1R3 or above.

System action: The DB2 subsystem is not started.

Operator response: Notify the system programmer.

System programmer response: Change the DB2 start-up procedures to use a version of DB2 that is compatible with the version of MVS that you are using.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

00E80059

| **Explanation:** An error was detected during DB2
| initialization processing indicating that the location
| name is not specified in the DDF communication
| record from the BSDS.

| **System action:** The DB2 subsystem is terminated.

| **Operator response:** Notify the system programmer.

| **System programmer response:** Complete the
| following steps:

- | 1. Verify that the location name in the DDF
| communication record from the BSDS is specified. A
| location name must be specified even if DDF is not
| used.
- | 2. Use the change log inventory utility (DSNJU003) to
| add or update the location name in the DDF
| communication record in the BSDS.
- | 3. Start DB2 again.

| **Problem determination:** See installation job
| DSNTIJUZ, job step DSNTLOG, for an example that
| uses DSNJU003 to update the DDF communication
| record. If you used the installation CLIST to install or
| migrate to this version of DB2, then DSNTIJUZ
| member in your prefix.NEW.SDSNSAMP library is
| customized to update the DDF communication record
| with the values that you specified during installation.

00E8005F

Explanation: An unsupported function request was detected by the DB2 subsystem startup control function.

This abend reason code is issued by the following CSECT: DSNYSTRT

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80061

Explanation: A resource manager initialization table (RMIT) that has an invalid format was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of an 8-byte field that contains the name of the load module in which the invalid resource manager initialization table (RMIT) format exists.

Probable cause is that the load module does not contain an RMIT or, the linkage editor entry control statement does not specify the RMIT as the module entry point.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8006F

Explanation: An unsupported function request was detected by the definitional control block management function.

This abend reason code is issued by the following CSECT: DSNYSDLB

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8007F

Explanation: An unsupported function request was detected by the application program call parameter management function.

This abend reason code is issued by the following CSECT: DSNYSPCB

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80081

Explanation: An invalid initialization load module list (ILML) was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The module might not contain an initialization load module list or the linkage editor entry control statement might not specify the initialization load module list as the module entry point.

Register 9 contains the address of an 8-byte field that contains the name of the module that holds the invalid initialization load module list.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80084

Explanation: A resource manager provided notification of failure during subsystem startup notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Verify that you entered the -START DB2 command using the correct DSNZPARM initialization parameter module. If it was not, reenter the command with the correct DSNZPARM module. Otherwise, notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 8, 9, 16, 19.

00E8008F

Explanation: An unsupported function request was detected by the resource manager initialization function.

This abend reason code is issued by the following CSECT: DSNYSIRM

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80091

Explanation: An error occurred when a POST was issued from the control address space to a resource manager address space in order to indicate that DB2 shutdown is to be initiated for that address space.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: The resource manager address space might be abnormally terminating.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8009F

Explanation: An unsupported function request was detected by the DB2 subsystem shutdown control function.

This abend reason code is issued by the following CSECT: DSNYSTOP

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800AF

Explanation: An unsupported function request was detected by the resource manager termination function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800B1

Explanation: A service task could not be created during processing of the -STOP DB2 command.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the return code from the create-service task function of the agent services manager (ASM) subcomponent.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800CE

Explanation: MVS was unable to establish an ESTAE for the stop-work notification function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the ESTAE macro return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800D1

Explanation: A resource manager provided notification of failure during local memory-create notification processing.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 8 contains the address of a 4-byte field that contains the RMID of the resource manager that requested DB2 subsystem termination.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800D2

Explanation: An error was encountered while attempting to obtain the MVS LOCAL lock.

System action: The DB2 subsystem is terminated.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800D3

Explanation: An error was encountered while attempting to release the MVS LOCAL lock.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E800DF

Explanation: An unsupported function request was detected by the address space global common services function.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80100

Explanation: The DB2 subsystem was abended because the DB2 address space control task ESTAE was entered. This reason code is issued for all abend completion codes, except for the X'04E' abend completion code.

System action: Termination of the DB2 subsystem is initiated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

The DB2 subsystem is unable to determine the cause of the error.

Problem determination: The subcomponent that caused the error is unknown. Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5, 9, 16, 19.

00E8011D

Explanation: An unrecovered resource (for example, a latch) was detected for a must-complete function.

This abend reason code is issued by the following CSECT: DSNYEATE

System action: Termination of DB2 subsystem is initiated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8011E

Explanation: The allied address space task primary ESTAE detected that MVS was unable to establish the secondary ESTAE.

This abend reason code is issued by the following CSECT: DSNYEATE

System action: Abnormal termination of allied address space is continued.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error

in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8011F

Explanation: The allied address space task primary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS RTM.

This abend reason code is issued by the following CSECT: DSNYEATE

System action: Abnormal termination of the allied address space is continued.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8012D

Explanation: The allied address space task secondary ESTAE detected an unrecovered resource (for example, a latch) for a 'must complete' function.

This abend reason code is issued by the following CSECT: DSNYEAT2

System action: Abnormal termination of DB2 subsystem is initiated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8012F

Explanation: The allied address space task secondary ESTAE was entered without a subsystem diagnostic work area (SDWA) provided by MVS.

This abend reason code is issued by the following CSECT: DSNYEAT2

System action: Continue with the abnormal termination of the allied address space.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80130

Explanation: The FRR that protects the -START/-STOP DB2 command processor function was entered while a valid -STOP DB2 command was being processed.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80140

Explanation: The ESTAE that protects the stop work notification function was entered.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Refer to *DB2 Messages* for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80150

Explanation: An initialization entry point list having an invalid format was detected.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of an 8-byte field that holds the name of the load module in which the invalid initialization entry point list exists.

Probable cause is that the module does not contain an initialization entry point list or the linkage editor entry control statement does not specify the initialization entry point list as the module entry point.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80151

Explanation: An invalid module entry point address was detected in an initialization entry point list entry.

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 12-byte field that contains the following diagnostic information: bytes 1 through 8, the name of

the load module that contains the initialization entry point list with the invalid entry; bytes 9 through 12, and the entry number of the initialization entry point list entry. Probable cause is that the initialization entry point list entry defines an invalid module entry point or defines a valid entry point for a module that has not been included in the loaded module.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E8015F

Explanation: An unsupported function request was detected by the module entry point list (MEPL) management function.

This abend reason code is issued by the following CSECT: DSNYEMCL

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA).

Problem determination: Register 9 contains the address of a 4-byte field that contains the function request value.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 3, 5.

00E80160

Explanation: During DB2 startup processing, the Initialization Procedures subcomponent detected a load module with an invalid AMODE or RMODE attribute. The abend is preceded by message DSNY006I or by DSNY007I.

System action: Subsystem startup is terminated.

Operator response: See message DSNY006I or message DSNY007I.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

See message DSNY006I or message DSNY007I.

Problem determination: See message DSNY006I or message DSNY007I.

00E80161

Explanation: During DB2 subsystem startup processing, the Initialization Procedures subcomponent detected a load module that was not at the same version of DB2 as the subsystem being started.

System action: Subsystem startup is terminated.

Operator response: See message DSNY010I.

System programmer response: The recovery routine for the CSECT issuing this reason code records information in the variable recording area (VRA). If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

See message DSNY010I.

Problem determination: See message DSNY010I.

00E80170

Explanation: You requested a facility that was not loaded or started at the time DB2 started. Whether or not to load or start a facility is contained in the DSN6FAC member in ZPARMS.

This reason code is returned to the calling CSECTs by DSNYNFAC along with a return code of 8.

This is not an error in DSNYNFAC. If an error exists, it might be in the calling CSECT or in the DSN6FAC member in ZPARMS.

System action: This is determined by the caller of DSNYNFAC.

Operator response: Notify the system programmer.

System programmer response: If it can be determined that DSN6FAC is in error, assemble DSN6FAC with corrections and re-link-edit the DSNZPARM load module.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 9.

Chapter 26. X'E9.....' codes

00E90101

Explanation: This reason code is issued when a DB2 directory cannot be opened. This is probably a DB2 subsystem error.

This abend reason code is issued by the module identified in the SYS1.LOGREC entry for this abend code.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem determination: This abend results when any one of a number of DB2 internal directories cannot be opened. One customer-usable directory can also cause this abend if it cannot be opened. This is the DSNZPARM directory that is established at installation.

This directory may have a name different from that specified at installation, because the customer has the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available to be opened.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

This abend is intercepted by an FRR or ESTAE for the subcomponent or module that issued the DSNZOPEN request. The module containing the abended request is identified in the SYS1.LOGREC entry. This information may be useful in communicating with IBM about the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 8, 9, 32.

00E90201

Explanation: An incorrect parameter was encountered. This reason code is issued by module DSNZTGET in response to a DSNZGDE request. This is a DB2 subsystem error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem determination: Locate the caller's save area by examining register 13 in the SYS1.LOGREC register save area. Registers 0 and 1 in the caller's save area identify the incorrect parameter(s).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 8, 9, 32.

00E90202

Explanation: An error was found in the directory control information for a DB2 directory. This is probably a DB2 subsystem error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem determination: This abend results when incorrect control information is found for any one of a number of DB2 internal directories. One customer-usable directory can also cause this abend. This is the DSNZPARM directory that is established during installation.

This directory may have a name different from that specified at installation, because the customer has the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 8, 9, 32.

00E90203

Explanation: An error was found in the descriptor control information for a DB2 directory. This is probably a DB2 subsystem error.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer.

System programmer response: Obtain a print of SYS1.LOGREC and the SVC dump.

Problem determination: This abend results when the

descriptor control information is incorrect for any one of a number of DB2 directories. One customer-usable directory can also cause this abend. This is the DSNZPARM directory that is established at installation.

This directory may have a name different from that specified at installation, because you have the option of changing the name during installation. Ensure that the DSNZPARM directory (or its equivalent) is available.

If the DSNZPARM directory (or its equivalent) is available, the problem is a DB2 subsystem problem. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5, 8, 9, 32.

00E90403

Explanation: A failure occurred when DB2 processed the -SET SYSPARM command. This error can be caused by inconsistent data or an internal error in DB2.

System action: A record is written to SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer. Collect the following materials listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Obtain the SYS1.LOGREC and SVC dump from the operator.

If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E90404

Explanation: DB2 has detected an error while processing the -SET SYSPARM command.

System action: A diagnostic record is written to SYS1.LOGREC, and an SVC dump is requested. The requesting execution unit abends.

Operator response: Notify the system programmer. Collect the following materials listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Obtain the SYS1.LOGREC and SVC dump from the operator. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00E90405

Explanation: An error occurred while DB2 was attempting to create a service task during -SET SYSPARM command processing.

System action: A diagnostic record is written to

SYS1.LOGREC, and an SVC dump is requested.

Operator response: Notify the system programmer. Collect the following materials listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

System programmer response: Obtain the SYS1.LOGREC and SVC dump from the operator. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 27. X'F1.....' codes

The DSN1LOGP service aid can abend with user abend code X'099'. You can find the corresponding abend reason code in register 15 at the time of error.

00F10100

Explanation: An internal error has been detected in the DSN1LOGP service aid.

Operator response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F10101

Explanation: The stand-alone log read function returned an invalid RBA. See the explanation for message DSN1211E.

Operator response: If you determine that the data set is a log data set and it is not damaged, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Chapter 28. X'F3.....' codes

Many of the following abend reason codes are returned in register 15 at the time of an X'0Cx' system abend and not as the reason code for an X'04E' abend. This is indicated in the descriptions that follow.

00F30001

Explanation: This reason code may be returned to subsystem-type recovery coordinators when they connect to DB2 or during processing of indoubt threads to inform the coordinator that further recovery coordination actions are required.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECTs:

DSN3ID30 DSN3RIA0 DSN3RIS0

System action: Processing continues.

00F30002

Explanation: The requested DB2 subsystem, as specified by the subsystem name, is not active. The option to notify the requester, either via an ECB post or a SEND/MODIFY MVS command, is accepted.

This reason code is issued by the following CSECT: DSN3CLOX

System action: The request to notify the caller when the subsystem is active is queued for processing during subsystem startup.

User response: Retry the connection request after DB2 has been started.

00F30003

Explanation: An abend has occurred during an attempt to access or modify the caller-provided function request block (FRB) while executing in the caller's PSW key.

This abend reason code is issued by the following CSECTs:

DSNAPRHH DSNAPRHHX DSN3CLOX DSN3ID00

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This reason code is placed in register 15 during any access to an attachment-provided function request block (FRB). A subsequent X'0Cx' abend indicates an FRB addressability problem. This abend is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30004

Explanation: An abend has occurred during an attempt to access the attachment-provided parameter list while executing in the caller's PSW key.

This abend reason code is issued by the following CSECTs:

DSNAPRHH	DSNAPRHHX	DSN3CLOX	DSN3CT30
DSN3CT80	DSN3EXT0	DSN3ID00	DSN3ID30
DSN3ID80	DSN3PR00	DSN3RIA0	DSN3SI30
DSN3SI80	DSN3TR00		

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This reason code is placed in register 15 during any access to an attachment-provided parameter list. A subsequent X'0Cx' abend indicates a parameter addressability problem.

This abend is probably the result of a logic error in the attachment facility. For call attachment users, the abend may have been caused by a bad parameter address passed to call attachment.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30005

Explanation: An error was detected during processing of a request to establish or delete a 'termination ECB'. Either a parameter value was incorrect or an abend

occurred while accessing the attachment-provided parameter list.

This reason code is issued by the following CSECT: DSN3EXT0

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the nonabend case, either the ECB address was zero or the Request Code was not 'Establish' or 'Delete'. If the reason code is in register 15 on an abend, either the parameter list or a parameter value was not addressable in the caller's PSW key.

The error may be the result of an internal error in the attachment facility. Call attachment users should check that the supplied ECB address is not zero and that it is addressable in their PSW key.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30006

Explanation: A failure occurred while processing the 'Subsystem Name' during connection processing. In the abend case, connection processing failed when accessing the 'Subsystem Name' in the caller's PSW key. In the nonabend case, MVS was unable to locate a DB2 subsystem with the specified name.

This reason code is issued by the following CSECT: DSN3ID00

System action: The request is not processed.

User response: A dump should be taken in your recovery routine for abend analysis. If the named subsystem could not be found, verify that the correct subsystem name was specified. Call attachment users should note that the Translate function cannot be invoked for this reason code.

System programmer response: See Problem Determination.

Problem determination: If the named subsystem could not be found, scan the MVS system log to verify that it was initialized during MVS IPL processing.

If this reason code was specified in register 15 on an abend, check that the subsystem name value is addressable in the caller's PSW key.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00F30007

Explanation: A failure occurred while processing the 'Connection Type' parameter during connection processing. Either the 'Connection Type' value was invalid or an abend occurred accessing the parameter using the caller's PSW key.

This reason code is issued by the following CSECTs: DSN3CL0X, DSN3ID30.

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. This failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30008

Explanation: A failure occurred while processing the 'Notify Message/Startup ECB' parameter during connection processing. An abend occurs while accessing the parameter or while verifying that the ECB word was addressable in the caller's PSW key. In the nonabend case, either the parameter had a zero length or the supplied ECB address was zero.

This reason code is issued by the following CSECT: DSN3CL0X

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be due to a logic error in the attachment facility. Call attachment users should verify that the Startup ECB address is nonzero and that the ECB word is addressable in their PSW key.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30009

Explanation: A request was received to establish a termination ECB, but a termination ECB had already been established for the connected task.

This reason code is issued by the following CSECT:
DSN3EXT0

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or invoking application.

Problem determination: This failure is probably the result of a logic error in the attachment facility.

00F30010

Explanation: A request was received to delete a termination ECB, but a termination ECB has not been established for the connected task.

This reason code is issued by the following CSECT:
DSN3EXT0

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or invoking application.

Problem determination: This failure is probably the result of a logic error in the attachment facility.

00F30011

Explanation: A connection or other work request was received, but the designated DB2 subsystem is not active. If the request was to connect to the subsystem, and the Notify Message/Startup ECB was supplied, it was not accepted.

In some instances, this code may be reported if the application program issued an RRSF IDENTIFY function request and RRS/MVS was not available.

System action: The request is not processed.

User response: If the failure occurred on a connection request and a Notify Message/Startup ECB was provided, a dump should be taken for problem analysis. Reconnect to DB2 when the subsystem is active again.

If RRS/MVS was not available for an RRSF IDENTIFY request, ensure RRS/MVS is active and retry the request.

System programmer response: Obtain all dumps

taken by the attachment facility or invoking application.

Problem determination: The Notify Message or Startup ECB could not be accepted for one of two reasons.

- Storage for a buffer could not be obtained, or
- the length of the Message/ECB parameter was zero.

In the latter case, the attachment facility is probably in error. If insufficient storage was available for a buffer, the size of the CSA in 24-bit storage should be increased.

In some instances, the failure was reported because the application required an RRSF IDENTIFY request and RRS/MVS was not active. Additional checking is needed when RRS/MVS is involved.

00F30012

Explanation: The requested DB2 subsystem, as specified by the subsystem name, is not active. The option to notify the requester, either via an ECB post or a SEND/MODIFY MVS command, is accepted, but overlays a previous Notify Message/Startup ECB request.

This reason code is issued by the following CSECT:
DSN3CL0X

System action: The request to notify the caller when the subsystem is active is queued for processing during subsystem startup.

User response: Retry the connection request after DB2 has been started.

00F30013

Explanation: The requester is not authorized to connect to this DB2 subsystem. This condition might indicate an attempted security violation.

This reason code is issued by the following CSECT:
DSN3AUCN

System action: The connection request is denied.

User response: Verify that you have specified the correct RACF authorization ID. If necessary, request authorization to access the DB2 subsystem from your security administrator.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. Refer the user to your security administrator if the user should be granted authorization to a DB2 subsystem. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to authorize users to specific DB2 subsystems.

Problem determination: During TCB connection processing, Subsystem Support invokes the RACROUTE service (causing a RACF RACHECK) to

verify the authorization ID associated with the requester. If the RACF return code indicates the requester is not authorized to connect to this DB2 subsystem, the connection request is terminated with this reason code.

00F30014

Explanation: The requester of a Subsystem Support function (for example, ABORT) for a connection is not in the same PSW key as when the connection was created.

This abend reason code is issued by the following CSECTs:

DSN3AB00	DSN3CM00	DSN3CT80	DSN3PR00
DSN3SI30	DSN3SY00		

System action: The requester's task is abended with code X'04E'.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This failure may be the result of a logic error in the attachment facility or an intentional attempt to violate DB2 connection protocols. The error should be evaluated in the same way as a system X'0C2' abend, an attempt by a nonprivileged program to perform privileged operations.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5, 49.

00F30015

Explanation: The attachment facility specified an invalid combination of values of FRBRALE and FRBQUAL. No Program Request Handler exists to service the call.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

Problem determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. The FRBRALE and FRBQUAL values in the caller's FRB should be examined to determine which one is in error. Not all combinations of valid FRBRALE and FRBQUAL values are supported. Each RALE is supported differently.

00F30016

Explanation: The attachment facility specified an invalid FRBRALE value. The value is outside the limits of those supported for the requesting connection. This can occur in many cases, one of which is when an SQL call is requested with a blank plan name by the requester.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

Problem determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. FRBRALE contains the invalid value that was passed. The value passed is not consistent with the resources allocated to the connected application.

If the plan name contains blanks, an SQL call is invalid. The requester should respecify the plan name and issue the request again.

00F30017

Explanation: The attachment facility specified an invalid FRBQUAL value. The value is outside the limits of those supported for the requesting connection.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

Problem determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. FRBQUAL contains the invalid value that was passed. The value passed is not consistent with the resources allocated to the connected application.

00F30018

Explanation: The requester's TCB is not connected to this instance of the DB2 subsystem. The TCB may have been connected to a previous instance.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: Request a new connection to DB2.

System programmer response: See Problem Determination.

Problem determination: This error can occur for one of the following reasons:

- The DB2 subsystem has terminated and the connected application issues a DB2 work request without reestablishing the connection after the subsystem is restarted.
- The connection has been terminated by a CANCEL THREAD command.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00F30019

Explanation: The requester's primary ASID (PASID) is not equal to the home ASID (PSAAOLD).

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: You may want to take a dump for problem analysis. The request may be retried, but first ensure the CPU is not in cross-memory mode.

System programmer response: See Problem Determination.

Problem determination: No requester of a DB2 attachment facility may be in cross-memory mode. That is, PASID must equal HASID, which must equal SASID.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00F30020

Explanation: An error was detected while processing the 'Commit Option' on a SSAM termination request. Either the value of the 'Commit Option' parameter was not valid or an abend occurred when accessing the parameter.

This abend reason code is issued by the following CSECTs:

DSN3ID80	DSN3SI80	DSN3TR00
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System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this

reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be the result of a logic error in the attachment facility. Call Attachment users should note that only 'SYNC' and 'ABRT' are valid terminate options.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30021

Explanation: An attachment facility issued a Subsystem Support request, but provided too few or too many parameters.

This abend reason code is issued by the following CSECTs:

DSN3AB00	DSN3CM00	DSN3CT30	DSN3CT80
DSN3EXT0	DSN3ID30	DSN3ID80	DSN3PR00
DSN3RIA0	DSN3SI30	DSN3SI80	DSN3SY00

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or by the requesting application.

Problem determination: This failure is probably the result of a logic error in the attachment facility.

Upon entry to each of the CSECTs listed above, register 1 contains the address of the Function Request Block (FRB). FRBPCNT contains the number of passed parameters and FRBPARM points to a list of parameter addresses. The required number of parameters is unique to the calling protocol for each CSECT.

00F30022

Explanation: An error was detected while processing the 'Connection Name' for a connection request. Either the value of the 'Connection Name' parameter was not valid or an abend occurred when accessing the parameter.

This abend reason code is issued by the following CSECT: DSN3ID30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. A 'Connection Name' is invalid if it is not a printable

string (e.g. binary zeros). The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30023

Explanation: This reason code may be returned during connection processing if the connection name is already in use by another allied address space, but the connection type is different.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

System action: The connection request is rejected.

System programmer response: Collect the diagnostics produced by the allied address space which could not connect to DB2.

Problem determination: Follow the instructions indicated by the diagnostics to assure that a different connection name will be used on future attempts to connect to DB2.

00F30024

Explanation: The 'connection name' or 'connection type' does not match the name or type established by another connected task in the address space.

This reason code is issued by the following CSECT: DSN3ID30

System action: The connection request is denied.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: All tasks within an address space connecting to the same DB2 subsystem must connect with the same connection name and type. Tasks within TSO and batch address spaces using the 'BATCH' connection type may specify unequal connection names. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 49.

00F30025

Explanation: A request to establish a DB2 termination ECB has completed successfully; however, DB2 is stopping. The new termination ECB might not be posted.

This reason code is issued by the following CSECT: DSN3EXT0

System action: Control is returned to the attachment facility.

User response: Since DB2 is stopping, you should attempt to terminate your connection. Next, issue a connect request and provide a Startup ECB. When the Startup ECB is posted, issue the connect request again to re-establish your connection to the restarted DB2.

00F30026

Explanation: The attachment facility specified an invalid FRBFVLE value. The value is outside the limits of those supported for the requesting connection.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility and requesting application.

Problem determination: Register 1 contains a pointer to the FRB at the entry to DSNAPRHX. FRBFVLE contains the invalid value that was passed. The value passed must not be zero and it must be consistent with the resource requested by FRBRALE.

00F30027

Explanation: An error occurred while processing the 'Weighting Factor' parameter. This parameter was provided by the attachment facility on a request to allocate a DB2 plan to the application.

Either an abend occurred accessing the 'Weighting Factor' or the value of the parameter is out of range.

This abend reason code is issued by the following CSECT: DSN3CT30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key.

The value of the 'Weighting Factor' must be a positive number between zero and 255. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30028

Explanation: This reason code is returned when previous invocations of DB2 have set the thread into a state such that the only acceptable request that can be made for the thread is ABORT. This could occur, for example, if the ally has issued "Prepare to Commit" and DB2 returned a "No" vote on the call. In this situation, the only acceptable request for the ally to make is ABORT.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally may have produced diagnostics to report this condition, or it may handle this condition internally without requiring outside intervention.

This reason code is issued by the following CSECTs: DSN3TR00, DSN3CHM00

System action: The current allied request is rejected. The state of the thread is unchanged.

System programmer response: Collect any diagnostics produced by the allied address space.

Problem determination: Follow the instructions indicated by the diagnostics, if any.

00F30029

Explanation: This reason code is returned when a COMMIT request is received in an improper context. Either a PREPARE is required before the COMMIT request, or the connection type does not allow a COMMIT request.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECTs: DSN3CM00, DSN3TR00

System action: The current allied request is rejected. The state of the thread is unchanged.

00F30030

Explanation: An abend has occurred during an attempt to access the caller-provided 'INDOUBT RESOLUTION' parameter while executing in the PSW key. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECTs: DSN3RIA0, DSN3RIM0

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F30031

Explanation: This reason code is returned when a DEALLOCATE request is received from a CICS or IMS thread, but PREPARE has already completed for the thread and either COMMIT or ABORT are the only acceptable requests.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3TR00

System action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the DEALLOCATE request may have produced diagnostics related to this error.

System programmer response: Collect the diagnostics produced by the allied address space, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30032

Explanation: An error occurred while processing the 'Indoubt Resolution' parameter. This parameter was provided by the attachment facility on a request to allocate a DB2 plan to the application.

Either an abend occurred accessing the 'Indoubt Resolution' or the value of the parameter is incorrect for this connection type.

This abend reason code is issued by the following CSECT: DSN3CT30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. For TSO, batch, and Call Attachment connections, the value of the 'Indoubt Resolution' parameter must be 'NO'. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30033

Explanation: An abend has occurred during an attempt to access the 'Plan Name' parameter while executing in the caller's PSW key.

This abend reason code is issued by the following CSECT: DSN3CT30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure may be the result of a logic error in either the attachment facility or the requesting application.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30034

Explanation: The authorization ID associated with this connection is not authorized to use the specified plan name or the specified plan name does not exist.

This reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

System action: The request to allocate a plan to the authorization ID is denied.

User response: Verify that the correct plan name was specified. If this plan exists, then request execution authority to the plan from either the owner of the plan or from another person given authority to grant execution authority to the plan.

00F30035

Explanation: An abend has occurred during an attempt to access the caller-provided authorization ID while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided

information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30036

Explanation: This reason code may be returned during connection processing for a coordinator thread if a coordinator for that connection name already exists. This may be a case of two IMS or CICS systems using the same connection name.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

System action: The connection request is rejected.

System programmer response: Collect the diagnostics produced by the allied address space which could not connect to DB2.

Problem determination: Follow the instructions indicated by the diagnostics to ensure that a different connection name will be used on future attempts to connect to DB2.

00F30037

Explanation: This reason code may be returned during connection processing for a CICS or IMS dependent (noncoordinator) thread if a coordinator for that connection name does not already exist. This may be an internal error in CICS, IMS, or the attachment package.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally attempting to connect to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3ID30

System action: The connection request is rejected.

System programmer response: Collect the diagnostics produced by the allied address space which could not connect to DB2.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30038

Explanation: An abend has occurred during an attempt to access the 'Correlation ID' parameter while executing in the caller's PSW key.

This abend reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30039

Explanation: This reason code may be returned on a PREPARE request if Network ID (NID) is specified, but NID was previously specified on the CREATE THREAD request. NID cannot be specified on both requests. This may be an internal error in CICS, IMS, or the attachment package.

This reason code is not normally visible to users or operators, but may appear in DB2 traces. The ally issuing the PREPARE to DB2 should have produced diagnostic information relating to the connection failure.

This reason code is issued by the following CSECT: DSN3PR00

System action: The PREPARE request is rejected.

System programmer response: Collect the diagnostics produced by the allied address space which had the failing request.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30040

Explanation: The allocation of the plan to the connection failed. Either a resource is unavailable or the requested resource (plan) is not known to DB2.

This reason code is issued by the following CSECT: DSN3CT30

System action: Information on the failing resource name, object type, and a Database Services reason code, that help to explain the allocation failure, are returned to the attachment facility.

User response: Unknown plans must be bound before they can be accessed.

Call Attachment users may invoke the TRANSLATE function to move the information returned to the attachment facility into the error message field SQLERRMT in the SQLCA.

System programmer response: Refer to message DSNT500I for identification of unavailable resources and diagnostics to be collected. Refer to Table 3 in Appendix C, "Problem determination," on page 735 for an explanation of resource type codes.

Problem determination: See response suggestions above.

00F30042

Explanation: An abend has occurred during an attempt to access the caller-provided recovery coordinator option while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3ID30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30043

Explanation: A terminate request was received with the 'Deallocate' option, but a unit of recovery is still outstanding for the connection. Either 'SYNC' or 'ABRT' must be requested before resources can be deallocated.

This reason code is issued by the following CSECT: DSN3TR00

System action: The termination request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

Problem determination: This failure is probably the result of a logic error in the attachment facility or a DB2 connection management error. This reason code is placed in register 0 and the return code is placed in register 15.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 82 on page 737.

00F30044

Explanation: This reason code is returned when a DEALLOCATE request is received with uncommitted work outstanding. Either the PREPARE, COMMIT sequence or an ABORT request is required.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3TR00

System action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the DEALLOCATE request may have produced diagnostics related to this error.

System programmer response: Collect the diagnostics produced by the allied address space, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30045

Explanation: An error has occurred while attempting to locate the Unit of Recovery associated with a DISPLAY, COMMIT, or ABRT request. This is probably the result of a logic error in the requesting program.

This reason code is issued by the following CSECTs: DSN3RIA0, DSN3RIM0

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 0 and the return code is placed in register 15.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 22, 23, 24, 25, 26.

00F30046

Explanation: A terminate request was received with the 'Commit' option, but this option is not supported for this connection type. Only the 'SYNC' or 'ABRT' options are valid for TSO, batch, and Call Attach connections.

This reason code is issued by the following CSECT: DSN3TR00

System action: The termination request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

Problem determination: This failure is probably the result of a logic error in the attachment facility.

00F30047

Explanation: This reason code is returned when a RECOVER INDOUBT-ABORT request is received from a CICS or IMS recovery coordinator, but the thread is already in the process of COMMITting.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3RIA0

System action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the RECOVER INDOUBT-ABORT request may have produced diagnostics related to this error.

System programmer response: Collect the diagnostics produced by the allied address space, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30048

Explanation: An abend has occurred during an attempt to access the attachment-provided 'Network ID' while executing in the caller's PSW key.

This abend reason code is issued by the following CSECTs: DSN3CT30, DSN3PR00

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: This reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30049

Explanation: A request was received to connect the requester's TCB to a DB2 subsystem, but the TCB is already connected.

This reason code is issued by the following CSECT: DSN3ID30

System action: The connection request is rejected.

User response: A dump should be taken for problem analysis.

System programmer response: Obtain all dumps taken by the attachment facility or requesting application.

Problem determination: The failure is probably the result of a logic error in the attachment facility.

00F30050

Explanation: A DB2 request has been received after a failure during a previous request and cleanup of the previous request did not complete. This can happen if DB2 recovery was bypassed on a previous request. This bypass occurs if the application has an enabled unlocked task (EUT) FRR active and requested a retry back to the application mainline code.

This reason code is issued by the following CSECT: DSNAPRHX

System action: The request is not processed. DB2 will terminate the connection when the TCB terminates.

User response: You must terminate your task. Do not attempt further DB2 requests. Do not request terminating the connection. You should request a dump for problem analysis.

System programmer response: See Problem Determination.

Problem determination: The diagnostic data should be examined for prior failures while processing a request for this connection. Users of the call attachment facility cannot retry from an EUT FRR routine if an error occurs during DB2 processing.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00F30051

Explanation: This reason code is returned when a RECOVER INDOUBT request is received from a CICS or IMS recovery coordinator, but the thread is still processing in DB2 code other than EOT. The request cannot be processed at this time but may be successful if issued again later.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This reason code is issued by the following CSECT: DSN3RIA0

System action: The current allied request is rejected. The state of the thread is unchanged. The ally issuing the RECOVER INDOUBT request may have produced diagnostics related to this error.

System programmer response: Collect the diagnostics

produced by the allied address space, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30052

Explanation: The caller's connection with DB2 has been terminated, because the caller's recovery coordinator has already terminated.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The request has been processed by terminating the agent.

User response: Your application program may identify to DB2 when its recovery coordinator has identified again.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F30053

Explanation: An error occurred while processing the 'Current Level' parameter. This parameter was provided by the attachment facility on a termination request.

Either an abend occurred accessing the 'Current Level' or the value of the parameter is invalid.

This abend reason code is issued by the following CSECTs:

DSN3CT80	DSN3ID80	DSN3SI80
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System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: See Problem Determination.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable in the caller's PSW key. The value of the 'Current Level' parameter must be zero or a number representing the connection's authority level. The failure is probably the result of a logic error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 5, 49.

00F30054

Explanation: The value of the 'Current Level' parameter does not match the current authority level of the connection. This parameter was provided by the

attachment facility on a termination request.

This reason code is issued by the following CSECTs:

DSN3CT80 DSN3ID80 DSN3SI80

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: Collect all dumps taken by the attachment facility or requesting application.

Problem determination: The failure is probably the result of a logic error in the attachment facility.

00F30055

Explanation: The maximum number of concurrent identify level agents has been exceeded.

This abend code is issued by the following CSECT: DSN3ID30

System action: The connection request is not processed.

User response: Attempt connection to DB2 at a later time.

System programmer response: Ensure that the DB2 system parameters controlling the maximum number of concurrent identifies are correct. These system parameters are Max Users, Max TSO connect, and Max Batch connect on installation panel DSNTIPE.

00F30056

Explanation: An IDENTIFY request for connection to DB2 was rejected. DB2 had been started in restricted access mode. Only authorization IDs authorized to perform maintenance functions are permitted access to DB2.

This reason code is issued by the following CSECT: DSN3AUCN

System action: The connection request is not processed.

User response: Retry the connection request after DB2 has been restarted in full access mode.

00F30057

Explanation: An invalid application-supplied address was encountered while accessing the application-provided data.

This abend reason code is issued by the following CSECTs: DSNAET03, DSNAPRHX.

System action: The application program is abended with code X'04E' and this reason code.

System programmer response: Obtain the dump printout from the application programmer. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The register contents at the time of abend are as follows:

- | | |
|-----------|--|
| R2 | A decimal code identifying the bad data: |
| 1 | FRB address is invalid. |
| 2 | FRBPARM contains an invalid RDIIN address. |
| 18 | RDICODEP contains an invalid SQLCA address. |
| R3 | The invalid application data area address. |
| R4 | The address of the RDIIN. |
| R5 | The virtual storage key of the data. |
| R8 | The address of the FRB in the application address space. |

Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 4.

00F30058

Explanation: Access to DB2 has been denied by the site's authorization exit.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The request is not processed.

User response: Contact your security administrator and request authority to access this DB2 subsystem.

System programmer response: No action is necessary unless the request denial was in error. If it was, the authorization exit should be tested to determine the cause of the error.

00F30059

Explanation: The return code from the authorization exit was not valid. Field EXPLARC must be set by the authorization exit to either 0 or 12.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The request is not processed.

System programmer response: Diagnostics obtained for the failure must be analyzed and the exit corrected.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00F30060

Explanation: Upon return from an authorization exit, the returned value of the SQL ID was not equal to either the returned primary or one of the returned secondary authorization IDs.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The request is not processed.

System programmer response: Diagnostics obtained for the failure must be analyzed and the exit corrected.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00F30061

Explanation: An abend occurred while referencing the SIGNON request's secondary authorization ID parameter provided by the attachment facility.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: SIGNON processing is terminated.

System programmer response: Analyze the diagnostic data to determine which attachment module may have been in error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This reason code is placed in register 15 to identify which parameter was not addressable with the caller's PSW key. The failure is probably the result of an error in the attachment facility.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30062

Explanation: Upon return from the SIGNON authorization exit, the returned value of the primary authorization ID is null. The first character is less than or equal to X'40'.

This abend reason code is issued by the following CSECT: DSN3AUSI

System action: The request is not processed.

System programmer response: Diagnostics obtained for the failure must be analyzed and the exit corrected.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 5.

00F30063

Explanation: The DB2 attachment facility for IMS, CICS, or RRSAF provided a secondary authorization ID value, but no primary authorization ID value. This is a violation of the SIGNON protocol.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: The SIGNON request is terminated with a return code of 12 and this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 22, 23, 24, 25, 26, 49.

This is probably an error in the attachment facility.

00F30064

Explanation: The DB2 attachment facility for IMS, CICS, or RRSAF did not provide a value for the primary authorization ID, and the current primary authorization ID is also null. This is a violation of the SIGNON protocol. A user's connection must have an associated primary authorization ID.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: The SIGNON request is terminated with a return code of 12 and this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 22, 23, 24, 25, 26, 49.

This is probably an error in the attachment facility.

00F30065

Explanation: An error occurred in determining the commit state of the thread.

This abend reason code is issued by the following CSECTs:

DSN3PR00	DSN3CM00	DSN3AB00
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System action: The caller is abended in DSN3PR00

and DSN3CM00. In DSN3AB00 a dump is taken and an abort is attempted.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced. These can be used to locate the areas for examination, especially the RAL in the dump.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30066

Explanation: An abend occurred during an attempt to access the caller-provided ACEE address field while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: The sign-on request is not processed.

User response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request that abended.

Problem determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30067

Explanation: The caller holds a DB2 latch. This is a violation of the Authorization Services request protocol. The caller cannot hold a DB2 latch when requesting connection or sign-on services.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A requester of connection or sign-on cannot hold a DB2 latch.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 2, 49. Determine who the requester was.

00F30068

Explanation: The CCB is being freed. This Authorization Service request specifies the address of a CCB that has previously been requested to be freed.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed.

User response: A dump should be taken for program analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Authorization Service requests must be serialized. Once a request to free a given CCB is made, no subsequent Authorization Service request can be made referencing the same CCB.

Collect the following diagnostic items as described in Appendix C, "Problem determination," on page 735: 2, 5, 49.

00F30069

Explanation: The exit environment is incorrect. Either the exit environment was freed after connection processing or an error occurred acquiring storage for a CCB or during connection processing.

This abend reason code is issued by the following CSECT: DSN3AUSI

System action: The sign-on request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 3, 5, 49.

00F30070

Explanation: Functional recovery for the connection or sign-on processing could not be established. The executing module could not establish its ESTAE. This can occur if the current address space has insufficient storage. This may lead to an abnormal termination of the DB2 subsystem.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed. The caller is abended with code X'04E' and this reason code.

User response: A dump should be taken for problem analysis.

Operator response: Notify the system programmer and restart DB2 if necessary.

System programmer response: Examine the usage and free areas in the LSQA portion of the current address space private area. If necessary, have the size of the private areas expanded.

Problem determination: The caller should produce a SYS1.LOGREC entry and an SVC dump, so that the system programmer can examine the LSQA area.

Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30071

Explanation: A logic error has occurred. An Authorization Service request has been made that references the same CCB as a currently processing request. These requests must be serialized.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed.

User response: Notify the system programmer. A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Authorization service requests must be serialized. Once an authorization service request is made referencing a given CCB, no subsequent authorization service requests can be made referencing the same CCB until the first request completes.

Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 2, 5, 49.

00F30072

Explanation: The requester's authorization ID or password could not be verified. This condition may indicate a security violation.

This reason code is issued by the following CSECT: DSN3AUCN

System action: The connection request is not processed.

User response: Verify that you have specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. Refer the user to your security administrator if the user should be granted access to a DB2 subsystem. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to authorize users for specific DB2 subsystems.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates the authorization ID or password could not be verified, the connection request is terminated with this reason code.

00F30073

Explanation: The parameter flag settings on the Authorization Service request contradict each other. One flag is set to request the build of the exit environment. The other flag is set to request the release of the exit environment. These flags are mutually exclusive.

This abend reason code is issued by the following CSECT: DSN3AUCN

System action: The connection request is not processed. The caller is abended with code X'04E' and this reason code.

User response: A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Only one of these flags can be set on when requesting connection processing.

Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 2, 49.

00F30074

Explanation: There is a problem in the execution environment. Connection or sign-on was requested from an SRB-mode execution unit, but the authorization services service task that would normally be switched to does not exist.

This abend reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed.

User response: Notify the system programmer. A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. for failure analysis procedures.

Problem determination: Determine why the authorization services service task was not created.

Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 3, 4, 49.

00F30075

Explanation: RACROUTE returned an error when a request was made to RACROUTE to free an ACEE.

This reason code is issued by the following CSECTs: DSN3AUCN, DSN3AUSI

System action: The connection or sign-on request is not processed.

User response: A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items, described in Appendix C, "Problem determination," on page 735: 1, 2, 3, 49.

00F30076

Explanation: An error occurred while attempting to obtain a CCB.

This abend reason code is issued by the following CSECT: DSN3TM00

System action: The allied user is abended with code X'04E' and this reason code.

Operator response: Notify the system programmer.

System programmer response: An SVC dump, associated SYS1.LOGREC entries, and SYSLOG should be available. If you suspect an error in DB2, refer to

Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: General purpose register 2 contains a reason code from authorization services that indicates the cause of the failure.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30077

Explanation: A plan or package could not be executed for one of these reasons:

- It is disabled in the environment in which you attempted to run.
- The attach library that you are using is from a previous release of DB2 that does not support the ENABLE and DISABLE options of the bind operation.

This reason code is issued by the following CSECT: DSN3CT30

System action: The plan or package is not executed.

System programmer response: One of the following:

- Rebind the plan or package to enable it to execute in the present environment.
- Check the SYSPLSYSTEM or SYSPKSYSTEM catalog table to find an environment in which the plan or package can be executed.
- Correct the attach library.

00F30078

Explanation: An abend occurred during an attempt to access the caller-provided connecting system type code while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3ID30

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: This reason code is placed in register 15 during any access to caller-provided information. When any abend occurs this register indicates which parameter caused the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30080

Explanation: CSECT DSNAPRHX was unable to cancel its ESTAE.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The application program is abended with code X'04E' and this reason code.

User response: Notify the system programmer. The application may be retried.

System programmer response: See Problem Determination.

Problem determination: A nonzero return code was received from the Cancel ESTAE operation. The return code has been placed into Register 2. Refer to *MVS/ESA Programming: Assembler Services Reference* for the meaning of the return code.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 4, 5.

00F30081

Explanation: An abend occurred during an attempt to access the caller-provided accounting token field while executing in the key of the caller. This is probably the result of a logic error in the requesting program.

This abend reason code is issued by the following CSECT: DSN3SI30

System action: The SIGNON request is not processed.

User response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30082

Explanation: This reason code is returned when the automatic bind for plan is disabled. The automatic bind is disabled through the installation process.

This reason code is issued by the following CSECT: DSN3CT30

System action: The plan is not automatically bound.

System programmer response: Rebind the plan prior to execution.

00F30083

Explanation: This reason code is returned because an allied application, or its recovery routine, attempted to issue an SQL request following an abend that could not be retried (that is, CANCEL, DETACH).

This reason code is issued by the following CSECT: DSNAPRHX

System action: Control is returned to the calling program, either the application program or its recovery routine, so that end-of-task processing can take place.

User response: If you feel that this is a DB2 problem, notify the system programmer.

System programmer response: This reason code is issued because an allied application had an MVS CANCEL or DETACH issued against it and its recovery routine either retried back to the application, or did itself, try to execute another SQL statement to DB2. This call is rejected to help allow the application to be processed through end-of-task processing.

Problem determination: If you believe that this error is not the result of the above reason, then collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F30085

Explanation: The requester's password could not be verified. This condition might indicate a security violation.

System action: The connection request is not processed.

User response: Verify that you specified the correct RACF password for this requester.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to set up the security controls for remote connection requests in the communications database.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates the password could not be verified, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT: DSN3AUCN

00F30086

Explanation: The requester's password is expired. This condition might indicate a security violation.

System action: The connection request is not processed.

User response: Change your password so that it is no longer expired.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to set up the security controls for remote connection requests in the communications database.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates the password expired, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT:
DSN3AUCN

00F30087

Explanation: The requester's authorization ID or password could not be verified by the site's security exit routine. This condition might indicate a security violation.

System action: The connection request is not processed.

User response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to set up the security controls for remote connection requests in the communications database.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the site's security exit routine failed to

verify the requester, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT:
DSN3AUCN

00F30088

Explanation: The requester's authorization ID was revoked. This condition might indicate a security violation.

System action: The connection request is not processed.

User response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to set up the security controls for remote connection requests in the communications database.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the requester's authorization ID was revoked, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT:
DSN3AUCN

00F30089

Explanation: The requester's authorization ID is not defined to RACF. This condition might indicate a security violation.

System action: The connection request is not processed.

User response: Verify that you specified the correct RACF authorization ID and password. If necessary, request authorization to the DB2 subsystem from your security administrator.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when a request is denied. If this error occurred during a remote connection request, examine the communications database to determine the security controls in effect for a remote connection request. Refer to Part 3 (Volume 1) of *DB2 Administration Guide* for examples of how to set up the security controls for

remote connection requests in the communications database.

Problem determination: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password, if supplied, associated with the requester. If the RACF return code indicates that the requester's authorization ID is not defined, the connection request is terminated with this reason code.

This reason code is issued by the following CSECT:
DSN3AUCN

00F30090

Explanation: The application program issued an RRSF SIGNON or AUTH SIGNON function request, but the application either has OPEN CURSORS or SPECIAL REGISTERS that are not in their initial state and the reuse=INITIAL rule is in effect.

System action: The SIGNON or AUTH SIGNON request is not processed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSN3SI30

00F30091

Explanation: The application program issued an RRSF IDENTIFY function request, but RRS/MVS is not available.

System action: The IDENTIFY request is not processed.

User response: Retry the IDENTIFY request after RRS/MVS has been started.

Problem determination: This reason code is issued by the following CSECT: DSN3ID30

00F30092

Explanation: The application program issued an RRSF SIGNON or AUTH SIGNON function request, but the application has issued an SQL request since the last invocation of SRRCMIT or SRRBACK and therefore is not at a point of consistency.

System action: The SIGNON or AUTH SIGNON request is not processed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSN3SI30

00F30093

Explanation: The application program issued an RRSF TERMINATE THREAD or TERMINATE IDENTIFY function request, but the application has issued an SQL request since the last invocation of SRRCMIT or SRRBACK and therefore is not at a point of consistency.

System action: The function request is not processed.

User response: You can continue processing with a corrected request.

Problem determination: This reason code is issued by the following CSECT: DSN3CT80 DSN3ID80

00F30094

Explanation: During remote connection processing, Authorization Services invokes the RACROUTE service using the RACF RACINIT form to verify the authorization ID and password associated with the requester, and changes the password to a new password (if supplied). If the RACF return code indicates that the requester's new password is invalid, the connection request is terminated with this reason code.

System action: The connection request is not processed.

User response: Verify that your new password value meets the installation's requirements for new passwords.

System programmer response: Examine the console/SYSLOG output for RACF messages issued when the request was denied.

This reason code is issued by the following CSECT:
DSN3AUCN

00F30095

Explanation: An internal error was detected in either DB2 or OS/390 RRS.

System action: The application is abended. This error may, in many cases, eventually abend the DB2 subsystem.

Operator response: Notify the system programmer.

System programmer response: This is probably either an error in DB2 or in OS/390 RRS. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with DB2 or with OS/390 RRS.

Collect the following diagnostic items listed in

Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3SQLF, DSN3CMIT, DSN3CT30, DSN3SPIN, DSN3SPTN, DSN3BABR, DSN3CMT2, DSN3CTXS, DSN3RRSX

00F30096

Explanation: An internal error was detected in either DB2 or RRS Context Services.

System action: The application is abended. This error can, in many cases, eventually abend the DB2 subsystem.

Operator response: Notify the system programmer.

System programmer response: This is probably either an error in DB2 or in RRS. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there can be a problem with DB2 or with OS/390 RRS Context Services.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3ID30, DSN3ID80, DSN3SPIN, DSN3SPTN

00F30097

Explanation: The context_key supplied via the CONTEXT SIGNON function of RRSAF is not associated with the current context.

System action: CONTEXT SIGNON is not performed.

User response: Use CTXSDTA to store the primary authid in the context data associated with the current context before invoking CONTEXT SIGNON. The context_key used to store the data must be the context_key that is passed as input to CONTEXT SIGNON.

Problem determination: This reason code is issued by the following CSECT: DSN3SI30

00F30098

Explanation: The CONTEXT SIGNON function of RRSAF requires OS/390 R5 or later.

System action: CONTEXT SIGNON is not performed.

User response: Check the release level of OS/390 that you are running on.

Problem determination: This reason code is issued by the following CSECT: DSN3SI30

00F30099

Explanation: The data retrieved using the context_key passed via the CONTEXT SIGNON function of RRSAF is a version not supported by DB2.

System action: CONTEXT SIGNON is not performed.

User response: Determine the version number supported by the DB2 release you are running. This is described in the description of CONTEXT SIGNON in the DB2 Application Programming and SQL Guide. Use CTXSDTA to store the correct version of the context data associated with the current context before invoking CONTEXT SIGNON.

Problem determination: This reason code is issued by the following CSECT: DSN3SI30

00F3009A

Explanation: An attempt to was made to invoke the DB2 API for an agent that was currently performing syncpoint processing. This could occur if an RRSAF attached application invoked DB2 after another control task had already initiated RRS syncpoint processing for the same DB2 agent.

After syncpoint processing has been initiated on behalf of an agent that is connected by RRSAF to DB2, the DB2 API may not be used to access DB2 until the syncpoint processing completes.

System action: The API request is rejected.

User response: Serialize the initiation of RRS syncpoint processing with the use of the DB2 API.

00F3009B

Explanation: The RRSAF prepare exit was invoked for a DB2 agent that is currently executing in DB2.

This could occur if a control task initiated RRS syncpoint processing for a DB2 agent while an application task was accessing DB2 data using the same DB2 agent.

Once a DB2 agent is active in DB2, another task may not initiate RRS syncpoint processing for the same agent.

System action: DB2 returns ATRABACK to the prepare request. The DB2 agent is abended with reason 00E50013.

User response: Serialize the initiation of RRS syncpoint processing with accessing DB2 data.

Problem determination: An entry recording this condition is written in SYS1.LOGREC.

00F3009C

Explanation: An RRS syncpoint exit was invoked for a DB2 agent by a task different than the task currently associated with the DB2 agent and the DB2 early code module installed on the system does not support this function.

System action: The RRS syncpoint request is abended. This will result in DB2 losing its connection with RRS. The DB2 subsystem must be stopped and then started again in order to establish a new connection with RRS.

Operator response: Notify the system programmer.

System programmer response: The version of the DB2 early code that was loaded from the LINKLIST library does not support RRS syncpoints initiated from a task that is not connected to the DB2 agent associated with the RRS unit of recovery for which syncpoint processing is being initiated. The DB2 early code must either be the DB2 V5 with APAR PQ16273 applied or the DB2 V6 early code. Make sure a compatible version of the DB2 early code will be loaded and then re-ipl the system.

Problem determination: An entry recording this condition is written in SYS1.LOGREC.

00F3009D

Explanation: An abend occurred during an attempt to access the caller-provided user ID while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The SIGNON request is not processed.

User response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3009E

Explanation: An abend occurred during an attempt to access the caller-provided application name while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The SIGNON request is not processed.

User response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem determination: The reason code is placed in

register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3009f

Explanation: An abend occurred during an attempt to access the caller-provided workstation name while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The SIGNON request is not processed.

User response: You may retry from your recovery routine (ESTAE) and continue execution with the same level of capability you had before the request was abnormally terminated.

Problem determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F300A0

Explanation: An error occurred while processing the package list parameter. The attachment facility provided this parameter on a request to allocate a DB2 special plan to the application. Either an abend occurred accessing the package list or a package list entry is invalid.

System action: The request is not processed.

User response: A dump should be taken for problem analysis.

Problem determination: For the abend case, this reason code is placed in register 15 to identify which parameter was not addressable. The failure is probably the result of a logic error in the requesting program.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 49.

00F300A1

Explanation: The global transaction ID (XID) parameter that was provided on a SIGNON request is invalid for one of the following reasons:

- An incorrect XID value was specified
- The value was specified in an incorrect format
- If an address of a global transaction ID was specified, the length values were not within the valid range

System action: The SIGNON request is not processed.

| **User response:** Correct the XID parameter on the
| SIGNON request.

| 00F300A2

| **Explanation:** An IDENTIFY request for connection to
| DB2 was rejected. DB2 had been started in light mode.
| Only connection names that have indoubt units of
| recovery that need to be resolved with this DB2
| member are permitted access.

| **System action:** The connection request is not
| processed.

| **User response:** Retry the connection request after DB2
| has been restarted in full access mode, or, attempt to
| connect to another member of the data sharing group.

| 00F300A3

| **Explanation:** While executing in the PSW key of the
| caller, an abend occurred during an attempt to access
| the accounting-string parameter that was provided by
| the caller. This is probably the result of a logic error in
| the requesting program.

| **System action:** The SIGNON request is not processed.

| **User response:** You may retry from your recovery
| routine (ESTAE), and continue execution with the same
| level of capability you had before the request was
| abnormally terminated.

| **Problem determination:** The reason code is placed in
| register 15 prior to any access to caller-provided
| information.

| 00F300A4

| **Explanation:** The application program issued a CALL
| DSNRLI with function SIGNON, AUTH SIGNON, or
| CONTEXT SIGNON with a accounting-string
| parameter that is not supported on this version of DB2.

| **User response:** Correct the request, and continue
| processing.

00F30101

Explanation: The parameter contained in the
IEFSSNxx member used to initialize DB2 (and other
subsystems) is in error. Refer to message DSN3101I for
details.

The abend reason code is issued by the following
CSECT: DSN3UR00

System programmer response: See message
DSN3101I.

Problem determination: Collect the following
diagnostic items listed in Appendix C, "Problem
determination," on page 735: 1, 2, 5.

00F30102

Explanation: The parameter contained in the
IEFSSNxx member used to initialize DB2 (and other
subsystems) is in error. The DB2 subsystem recognition
character must be not be blank. For details, see
message DSN3102I.

This abend code is issued by the following CSECT:
DSN3UR00

System programmer response: See message
DSN3102I.

Problem determination: Collect the following
diagnostic items listed in Appendix C, "Problem
determination," on page 735: 1, 2, 5.

00F30103

Explanation: The parameter contained in the
IEFSSNxx member used to initialize DB2 (and other
subsystems) is in error and/or the named module is
not resident in a library available during IPL. Refer to
message DSN3103I for details.

This abend code is issued by the following CSECT:
DSN3UR00

System programmer response: See message
DSN3103I.

Problem determination: Collect the following
diagnostic items listed in Appendix C, "Problem
determination," on page 735: 1, 2, 5.

00F30104

Explanation: Module DSN3UR00 was unable to obtain
the DB2 subsystem affinity table index for the named
subsystem. MVS did not recognize the named
subsystem. Refer to message DSN3109I for details.

This abend code is issued by the following CSECT:
DSN3UR00

System programmer response: See message
DSN3109I.

Problem determination: Collect the following
diagnostic items listed in Appendix C, "Problem
determination," on page 735: 1, 2, 5.

00F30105

Explanation: Module DSN3UR00 was unable to load
Early module 'DSN3EPX'. Either there was an I/O
error, or the named module is not resident in a library
available during IPL. Refer to message DSN3105I for
details.

This abend reason code is issued by the following
CSECT: DSN3UR00

System programmer response: See message
DSN3105I. If you suspect an error in DB2, refer to Part

2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F30106

Explanation: A global transaction identifier from RRS could not be extracted for a SIGNON request. The SIGNON request was for a thread that indicated it was part of a global transaction, and that RRS was to provide the global transaction id.

- | **System action:** The application is abended.
- | **Operator response:** Collect the SYS1.LOGREC and SVCDUMP, and notify the system programmer.
- | **System programmer response:** This is probably either an error in DB2 or in RRS. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem. If RRS has terminated, restart RRS.
- | **Problem determination:** Examine the SVCDUMP to determine the cause of the RRS failure. Register zero contains the return code from the RRS ATRRWID request.

00F30107

Explanation: An abnormal termination occurred during an attempt to access the caller-provided xid parameter while executing in the PSW key of the caller. This is probably the result of a logic error in the requesting program.

System action: The SIGNON request is not processed.

User response: Correct the problem and submit your job again.

Problem determination: The reason code is placed in register 15 prior to any access to caller-provided information.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30111

Explanation: The DB2 program which establishes DB2 as an MVS subsystem during Master Scheduler initialization has determined that either its own load module or a load module loaded by it does not have the attributes AMODE(31) and RMODE(ANY). Message DSN3111I was issued just prior to the abend. This message contains the name of the load module in error.

This abend reason code is issued by the following CSECT: DSN3UR00

System action: DB2 subsystem initialization is terminated.

System programmer response: See message DSN3111I.

00F30112

Explanation: DB2 is unable to register the installation-specified command prefix with MVS. The command prefix is specified in the subsystem definition parameter. The subsystem specified by *ssnm* in message DSN3112I is not available.

This abend reason code is issued by following CSECT: DSN3UR00

System programmer response: See message DSN3112I.

00F30113

Explanation: DB2 detected an error in the subsystem definition parameter, which is obtained from the IEFSSNxx member of SYS1.PARMLIB. The subsystem specified by *ssnm* in message DSN3113I is not available. This abend reason code is issued by following CSECT: DSN3UR00

System programmer response: See message DSN3113I.

00F30114

Explanation: DB2 group attach is not supported on this release of MVS. DB2 found an installation-specified group attach name specified in the subsystem definition parameter, IEFSSNxx, but DB2 group attach is not supported on this release of MVS. DB2's group attach feature requires MVS/ESA SP4.2.2 or higher.

This abend reason code is issued by the following CSECT: DSN3UR00

System action: The DB2 subsystem is not available.

Operator response: Notify the system programmer.

System programmer response: Correct the subsystem definition parameter to not specify a group attach name and re-IPL.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested.

Collect the following diagnostic items: CONSOLE LOG, SVCDUMP, and LOGREC.

00F30115

Explanation: DB2 received a nonzero return code from the MVS Name/Token service IEANTCR when DB2 attempted to register the group attach name. The group attach name is specified in the subsystem definition

parameter, IEFSSNxx. The DB2 subsystem is unavailable.

This abend reason code is issued by following CSECT: DSN3UR00

System action: The DB2 subsystem is not available.

Operator response: Notify the system programmer.

System programmer response: Contact the IBM Support Center.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC, and a DB2 dump is requested. Register 3 contains the return code, in hexadecimal, that was returned to DB2 from MVS IEANTCR Name/Token services.

Collect the following diagnostic items: CONSOLE, SVCDUMP, LOGREC.

00F30116

Explanation: The version of the DB2 early code module that you are attempting to use is not compatible with this version of MVS. This version of DB2 requires MVS/ESA.

System action: The DB2 subsystem is not available.

Operator response: Notify the system programmer.

System programmer response: The version of the DB2 early code that was loaded from the LINKLIST library is not compatible with the release of MVS that you are using. Change the concatenation order of the LINKLIST library so that a compatible release of DB2 early code is used.

Problem determination: Diagnostic information is recorded in SYS1.LOGREC and a DB2 dump is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 3, 5.

This abend reason code is issued by following CSECT: DSN3UR00

00F30120

Explanation: An error occurred when DB2 invoked the Security Authorization Facility R_ticketerv callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. DB2 generated this reason code in conjunction with message DSN3581I.

System action: Authentication fails.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information.

00F30121

Explanation: A DB2 internal error occurred when DB2 invoked the Security Authentication Facility R_ticketerv callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentication fails. A dump should be taken for problem analysis.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the diagnostic items described in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30122

Explanation: An error occurred when DB2 invoked the Security Authorization Facility R_usermap callable service. DB2 attempted to use this callable service to determine the user ID associated with the principal name received via a Kerberos ticket that was received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentication fails.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information.

00F30123

Explanation: A DB2 internal error occurred when DB2 invoked the Security Authorization Facility R_usermap callable service. DB2 attempted to use this callable service to validate a Kerberos ticket received from a remote client. This reason code is generated in conjunction with message DSN3581I.

System action: Authentication fails. A dump should be taken for problem analysis.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: See message DSN3581I for more information. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the diagnostic items

described in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30203

Explanation: This reason code is returned when a DB2 program attempts to either activate an already active SSI function code or deactivate an already inactive SSI function code.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

00F30210

Explanation: One of these conditions exists:

- Module DSN3RS0X received a nonzero return code from ENQ (exclusive).
- Module DSN3ENQ0 received a nonzero return code from ENQ (shared) and the indication was other than 'the task already has the resource enqueued'.

This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3ENQ0, DSN3RS0X.

System action: The caller is abended.

Operator response: Notify the system programmer.

System programmer response: To determine the error return from the ENQ SVC, examine the SVC dump.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced. Register 2 at the time of the abend contains the value passed back by ENQ in register 15. This can be used to locate the response area.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30211

Explanation: One of the following conditions exists:

- Module DSN3DEQ0 wanted to release the resource unconditionally but did not have it to release.
- Module DSN3RS0X received a nonzero return code from DEQ and the indication was other than 'the task had not been assigned control'.

This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3DEQ0, DSN3RS0X.

System action: The caller is abended. The current request has probably been processed completely. However, processing serialization may not have been maintained.

Operator response: Notify the system programmer.

System programmer response: To determine the error returned from the DEQ SVC, examine the SVC dump.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced. Register 2 at the time of the abend contains the value passed back by DEQ in register 15. This can be used to locate the response area.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30212

Explanation: A function that is allowed only for DB2 key callers was invoked by a supervisor state caller in another key. (Problem state callers receive system X'0C2' abend completion codes instead.)

This abend reason code is issued by the following CSECT: DSN3AC0X

System action: The caller is abended.

Operator response: Notify the system programmer.

System programmer response: To determine the DB2 service module running in the wrong PSW key, examine the SVC dump.

Problem determination: If the invoker is a DB2 service module, an SVC dump and associated SYS1.LOGREC entries are produced. The invoker should have been in DB2 KEY during the invocation.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30213

Explanation: The invoker of module DSN3AC0X passed an invalid action code. The only valid codes are 0 (deactivate) and 1 (activate).

This abend reason code is issued by the following CSECT: DSN3AC0X

System action: The caller is abended.

Operator response: Notify the system programmer.

System programmer response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30214

Explanation: The invoker of module DSN3AC0X passed an invalid SSOB function code. The valid codes range from 1 to 255.

This abend reason code is issued by the following CSECT: DSN3AC0X

System action: The caller is abended.

Operator response: Notify the system programmer.

System programmer response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30215

Explanation: The invoker of module DSN3AC0X passed an invalid 'QUEUE' parameter. The storage provided could not be modified in the DB2 PSW key.

This abend reason code is issued by the following CSECT: DSN3AC0X

System action: The caller is abended with system completion code of X'0C4'.

Operator response: Notify the system programmer.

System programmer response: To determine the caller of the activate and deactivate service module, examine the SVC dump.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service module. The save area chain should indicate the invoker of this service module. The invoker should have set a correct parameter value before invoking module DSN3AC0X.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30216

Explanation: The ASCB for the newly created DB2 subsystem services address space could not be located. The presumption is that the DB2 subsystem has not been started successfully. Further entry of commands to the DB2 subsystem results in attempts to start DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The current -START command

processing is terminated. Subsequent commands are processed as though this command had not been processed.

Operator response: Retry the command. If the command fails again, notify the system programmer.

System programmer response: If the command fails again, request an IPL of MVS, as the failure may be the result of an MVS internal problem.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced. The ASID passed back by the MVS command scheduler for the -START command is not valid.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30217

Explanation: The console ID for the MVS console that entered the current command is not found in the MVS unit control module (UCM) structure. This is a serious error. An internal MVS START command may have been incorrectly issued by an application program that provided invalid input parameters.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The caller is abended.

Operator response: Retry the -START DB2 command. If the command fails again, notify the system programmer.

System programmer response: If the command fails again, request a stand-alone dump and an IPL of MVS, as this may be due to an MVS internal problem.

Problem determination: The SSOB command extension mapped by IEFSSCM contains the invalid console ID.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30218

Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages command processing is in an undefined state. This is a serious error.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The current TCB is abended. Two possible reasons are:

- There is no DB2 subsystem services address space. Therefore, the initial command state can safely be set in the control word, and the current command can

be treated as a 'first' (-START) command. Processing of the command continues.

- The system services address space ASID is known, but the state of the DB2 subsystem is uncertain. In this case, the command facility is considered disabled, and message DSN3108I is returned to the issuer of the command.

Operator response: Notify the system programmer.

System programmer response: Examine the ERLY block field ERLYCMST. If the value of ERLYCMST is greater than 2, the field is in error.

Problem determination: The calling TCB may have requested an SVC dump or created associated SYS1.LOGREC entries.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30219

Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages EOM broadcast processing is in an undefined state. This is a serious error.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The calling TCB is abended.

Operator response: Cancel DB2. (End of task processing may still work, and it does a more complete clean-up than end-of-memory processing does.) If this does not work, issue the MVS FORCE command for the DB2 address spaces. If the problem is still unresolved, request a stand-alone dump and re-IPL MVS.

System programmer response: Examine the ERLY block field ERLYEMST. If the value of ERLYEMST is greater than 2, it is in error.

Problem determination: The calling TCB may have requested an SVC dump or created associated SYS1.LOGREC entries.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3021A

Explanation: The ERLY block for this DB2 subsystem is in error. The control word that manages identify processing is in an undefined state. This is a serious error.

This abend reason code is issued by the following CSECT: DSN3CL0X

System action: The calling TCB is abended.

Operator response: Stop the DB2 subsystem and reissue the -START DB2 command.

System programmer response: Examine the ERLY block field ERLYIDST. If the value of ERLYIDST is greater than 2, it is in error.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F3021B

Explanation: A return code other than 0, 4, or 8 was received from the MVS internal START command processor. The presumption is that the DB2 subsystem has not been started successfully. Further entry of commands to the DB2 subsystem results in further attempts to start DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The current -START command processing is abended. Subsequent commands are processed as though this command had not been processed.

Operator response: Retry the command. If the command fails again, request a stand-alone dump and re-IPL MVS.

System programmer response: Examine the SVC dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3021C

Explanation: Module DSN3EC0X could not establish an ESTAE during the processing of the first (presumed to be the -START command) command. The caller is abended. This can occur if the MVS system address space that is broadcasting the command has insufficient storage. Further entry of commands to the DB2 subsystem may result in a successful start of DB2.

This abend reason code is issued by the following CSECT: DSN3EC0X

System action: The caller is abended (without ABDUMP). The current -START command processing is terminated. Subsequent commands are processed as though this command had not been processed.

Operator response: Retry the command. If the command fails again, request a stand-alone dump and re-IPL MVS.

System programmer response: Examine the

stand-alone dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem determination: A stand-alone dump is necessary.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 51.

00F3021D

Explanation: Module DSN3RS0X could not establish an ESTAE during either the initialization or termination of the online DB2 subsystem. The caller is abended.

This can occur during initialization if the MVS system address space that is broadcasting the first command (presumed to be the -START command) has insufficient storage. In this case, further entry of commands to the DB2 subsystem may result in a successful start of DB2.

This can occur during termination if the current address space (usually system services, in case of EOM broadcast, an MVS system address space) has insufficient storage. In this case, after the DB2 subsystem has shut down, further entry of commands to the DB2 subsystem may result in a successful start of DB2.

This abend reason code is issued by the following CSECT: DSN3RS0X

System action: The caller is abended (without ABDUMP). The initialization is aborted, but termination proceeds.

Operator response: Retry the command. If the failure persists, a re-IPL of MVS is necessary and the system programmer should be notified. A stand-alone dump should be requested first.

System programmer response: Examine the stand-alone dump, LOGREC entries, and the console log for indications of an MVS failure.

Problem determination: A stand-alone dump is necessary.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5, 51.

00F3021E

Explanation: Module DSN3RTR0 could not establish an ESTAE while in the process of routing control to the actual ESTAE routine. The caller (RTM) is abended. This causes the original error to percolate to a higher-level recovery routine and causes this abend to be shown in an RTM recovery environment.

This can occur if the current address space (usually an allied address space) has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3RTR0

System action: The caller is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: Examine the usage and free areas in the LSQA portion of the current address space private area. If necessary, have the size of the private area expanded.

Problem determination: A SYSUDUMP is requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4, 5.

00F3021F

Explanation: Module DSN3RS0X discovered that the SSVT was not set to its initial state at DB2 subsystem initialization or termination time. An abend is issued in order to record SYS1.LOGREC data and request an SVC dump.

This abend reason code is issued by the following CSECT: DSN3RS0X

System action: The caller is not abended. The SSVT is reset to its initial state. Subsystem initialization or termination continues.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The SVC dump contains an image of the SSCVT and the SSVT.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30220

Explanation: Module DSN3RS0X discovered that the PRHB was not set to its initial state at DB2 subsystem initialization or termination time. An abend is issued in order to record SYS1.LOGREC data and request an SVC dump.

This abend reason code is issued by the following CSECT: DSN3RS0X

System action: The caller is not abended. The PRHB is reset to its initial state. Subsystem initialization or termination continues.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The associated SYS1.LOGREC entries and SVC dump contain the relevant information.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30230

Explanation: The module DSN3SSLM discovered that a user exit still exists for an allied address space that is being disconnected from DB2. This is an internal error.

This abend reason code is issued by the following CSECT: DSN3SSLM

System action: The connection between the allied address space and the DB2 subsystem is terminated.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A previous part of the disconnection process between DB2 and an allied address space has either not completed or terminated in error. The SVC dump and associated SYS1.LOGREC entries contain the relevant material for problem analysis.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00F30310

Explanation: A nonzero return code was received from the recovery manager. It is issued by module DSN3RIA0 (application resolve-indoubt-UR) and by module DSN3RIM0 (resource manager resolve-indoubt-UR).

This abend reason code is issued by the following CSECTs: DSN3RIA0, DSN3RIM0

System action: This is a DB2 error. The invoker is abended.

Operator response: Notify the system programmer.

System programmer response: Collect the related materials. Determine the called recovery manager module and the module that issued the abend.

Problem determination: The associated SYS1.LOGREC entry indicates which module issued the abend. Check the recovery manager resolve-indoubt exit trace for the return code.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30311

Explanation: Module DSN3RIM0 could not establish an ESTAE during the processing of a resolve-indoubt (RMRQ) request. This can occur if the current address space has insufficient storage. This probably leads to an abnormal termination of the DB2 subsystem.

This abend reason code is issued by the following CSECT: DSN3RIM0

System action: The caller is abended (without ABDUMP).

Operator response: Notify the system programmer, and restart DB2 if necessary.

System programmer response: Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

Problem determination: The caller should produce a SYS1.LOGREC entry and an SVC dump, so that the system programmer can examine the LSQA area.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30312

Explanation: Module DSN3RIA0 could not establish an ESTAE during the processing of a resolve-indoubt-UR (RARQ) request. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3RIA0

System action: The caller is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: Examine the usage and free areas in the local system queue area (LSQA) portion of the current address space private area. If necessary, have the size of the private area expanded.

Problem determination: The caller should produce a SYS1.LOGREC entry and an SVC dump.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F30313

Explanation: A CCB could not be allocated. This could occur when the storage pool has no more free space available.

This abend reason code is issued by the following CSECT: DSN3RIB2

System action: The request to obtain a CCB is not

processed. The application program is abended with code X'04E' and this reason code.

User response: A dump should be taken for problem analysis.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30400

Explanation: This reason code is returned when a DB2 program makes a duplicate request to be called when a specific SSI function code is encountered on the SSI.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

System programmer response: Collect the diagnostics produced by the application program reporting the failure, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30401

Explanation: This reason code is returned when a DB2 program makes a request to no longer be called when a specific SSI function code is encountered on the SSI, but the control block representing the original request to be called is busy and cannot be deleted now. The request is processed when the control block is no longer busy.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

System programmer response: Collect the diagnostics produced by the application program reporting the failure, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30402

Explanation: This reason code is returned when a DB2 program makes a request to no longer be called when a specific SSI function code is encountered on the SSI, but the control block representing the original request to be called cannot be found.

This reason code is not normally visible to users or operators, but might appear in DB2 traces.

System programmer response: Collect the diagnostics produced by the application program reporting the failure, if any.

Problem determination: Follow the instructions indicated by the diagnostics.

00F30405

Explanation: The DB2 subsystem was abended by module DSN3SSI1 because the system services address space's jobstep task terminated.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: You can start DB2 again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error which should have recorded an entry in SYS1.LOGREC data set and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to determine the actual cause of the error. Refer to "DB2 abend completion codes (X'04E' and X'04F)" on page 5 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30406

Explanation: The DB2 subsystem was abended by module DSN3SSI1 because the system services address space was forced to an end-of-memory condition.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: You can start DB2 again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data sets and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to

determine the actual cause of the error. Refer to “DB2 abend completion codes (X'04E' and X'04F)” on page 5 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2.

00F30407

Explanation: The DB2 subsystem was abended by module DSN3SSI1, because the jobstep task in a resource manager address space terminated.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: You can start DB2 again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. Examine the SYS1.LOGREC entries and SVC dumps to determine the actual cause of the error. Refer to “DB2 abend completion codes (X'04E' and X'04F)” on page 5 for information on X'04F' and X'04E' abend completion codes.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2.

00F30408

Explanation: The DB2 subsystem was terminated because a DB2 resource manager address space is in end-of-memory processing.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 can be started again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that recorded data on the SYS1.LOGREC

data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dumps should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 3, 5.

00F30409

Explanation: The DB2 subsystem was abended by module DSN3SSES, because an allied task going through either end-of-task or one of its terminating ancestor tasks was in a DB2 must-complete function or was still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSN3SSES

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2.

00F3040A

Explanation: The DB2 subsystem was abended by module DSN3SSI1, because an allied address space going through end-of-memory had one or more agents that either were in a DB2 must-complete function or were still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the

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SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F3040B

Explanation: See message DSN3001I.

This abend reason code is issued by the following CSECT: DSN3SSTM

System programmer response: See message DSN3001I.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3040C

Explanation: The DB2 subsystem was abended because the SSSS IEFSSREQ service agent (EB) was in a DB2 must-complete function upon return from the agent services create allied agent function.

This abend reason code is issued by the following CSECT: DSN3SSI2

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F3040D

Explanation: The DB2 subsystem was abended because the SSSS IEFSSREQ service agent (EB) was in a DB2 must-complete function upon return from the agent services terminate allied agent function.

This abend reason code is issued by the following CSECTs:

DSN3ID80 DSN3SSI2 DSN3SSES

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F3040E

Explanation: The DB2 subsystem was abended after a failure during processing of an IDENTIFY, COMMAND, or MVS HELP subsystem interface broadcast. The recovery routine DSN3SSES attempted to clean up processing and pass the error to the caller, but was unable to do so.

This abend reason code is issued by the following CSECT: DSN3SSES

System action: The DB2 subsystem is terminated.

Operator response: The DB2 subsystem should be restarted.

System programmer response: Scan the SYS1.LOGREC entries for the initial error and subsequent abends encountered by module DSN3SSES. The ESTAE DSN3SSES is established at least three times. Repetitive errors within the ESTAE module ultimately result in a subsystem termination with this reason code.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3040F

Explanation: The DB2 subsystem was abended because a DB2 latch, critical to the deferred end of task (EOT) termination process, was held by an MVS dispatchable unit, normally in an allied address space, which was no longer being dispatched and was, therefore, unable to release the latch.

This DB2 termination reason code is issued by the following CSECTs:

DSN3SSES DSN3SSI1 DSN3SSI2

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates. The system programmer should be notified.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error associated with an allied address space and especially in the case where the allied address space has been forced to an end-of-memory condition.

The console output should be examined for errors associated with allied address spaces.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30410

Explanation: The DB2 subsystem was abended, because the end-of-task listening module failed during a must-complete window. End-of-task processing is considered to be in a must-complete state until an ESTAE has been established. The 'user' of this ESTAE routine was the allied end-of-task listening module DSN3EOT0.

This abend reason code is issued by the following CSECT: DSN3AAES

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30411

Explanation: The DB2 subsystem was abended because the abnormal termination of an agent failed during end-of-memory (EOM) processing for an allied address space. The 'user' of this ESTAE routine was the allied EOM routine DSN3EOM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer. DB2 may be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30412

Explanation: The DB2 subsystem was abended because the abnormal termination of an agent failed during resolve-indoubt processing for an allied agent. The 'user' of this ESTAE routine was the resolve-indoubt-UR RMRQ routine DSN3RIM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer. DB2 may be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30413

Explanation: The DB2 subsystem was abended, because the abnormal termination of an agent failed. However, this recovery routine was unable to determine who its caller was. It should be one of the following: DSN3EOT0, DSN3EOM0, or DSN3RIM0.

This abend reason code is issued by the following CSECT: DSN3AAES

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3AAES has recorded data on the SYS1.LOGREC data set and has requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30414

Explanation: The DB2 subsystem was abended, because module DSN3SSI1 (or its caller, DSN3CL0X) was unable to establish the ESTAEs during the processing of a command SSI call. This is probably an MVS problem, because these modules are executing in the MVS CONSOLE address space.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates. If the failure persists, request a stand-alone dump, and re-IPL MVS.

System programmer response: This can occur if the MVS system address space that is broadcasting the command has insufficient storage. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 is unable to write a SYS1.LOGREC record or request a dump. The MVS CONSOLE function should have produced these diagnostic aids. Examine the dump to determine whether the problem is in MVS or DB2. Other unrelated failures in the MVS CONSOLE address space would indicate an MVS problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3.

00F30415

Explanation: The DB2 subsystem was abended because module DSN3SSI1 (or its caller, DSN3CL0X) was unable to establish the ESTAEs during the processing of an EOM SSI broadcast. This is probably an MVS problem, because these modules are executing in the MVS master scheduler address space.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates. If the failure persists, request a stand-alone dump and re-IPL MVS.

System programmer response: This can occur if the MVS master scheduler address space has insufficient free virtual storage. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 is unable to write a SYS1.LOGREC record or request a dump. The MVS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in MVS or DB2. Other unrelated failures in the MVS Master Scheduler address space would indicate an MVS problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3.

00F30416

Explanation: The DB2 subsystem was abended, because module DSN3EOM0 was unable to establish the ESTAE during the processing of an EOM for an allied address space.

This abend reason code is issued by the following CSECT: DSN3EOM0

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates. If the failure persists, request a stand-alone dump and re-IPL MVS.

System programmer response: This can occur if the MVS master scheduler address space that is broadcasting the EOM has insufficient free virtual storage. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: DB2 is unable to write a SYS1.LOGREC record or request a dump. The MVS master scheduler should have produced these diagnostic aids. Examine the dump to determine whether the problem is in MVS or DB2. Other unrelated failures in the MVS Master Scheduler address space would indicate an MVS problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 3.

00F30417

Explanation: The DB2 subsystem was abended because of a failure in the first end of task (FEOT) processing for a task that had established subsystem affinity to DB2.

This abend reason code is issued by the following CSECT: DSN3SSES

System action: The DB2 subsystem is terminated.

Operator response: DB2 can be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3SSES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30418

Explanation: The DB2 subsystem was abended because of a failure in the end-of-memory (EOM) processing for an address space that had established subsystem affinity to DB2.

This abend reason code is issued by the following CSECT: DSN3SSES

System action: The DB2 subsystem is terminated.

Operator response: DB2 may be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3SSES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30419

Explanation: The DB2 subsystem was abended because a DB2 latch, critical to the Deferred End of Task (EOT) Termination process, was held by an MVS dispatchable unit, normally in an allied address space,

which was no longer being dispatched and was, therefore, unable to release the latch.

This abend reason code is issued by the following CSECTs:

DSN3SSES	DSN3SSI1	DSN3SSI2
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System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: DB2 may be started again after it terminates. The system programmer should be notified.

System programmer response: At least one SVC dump and associated SYS1.LOGREC entries should be available.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error associated with an allied address space and especially in the case where the allied address space has been forced to an end-of-memory condition.

The console output should be examined for errors associated with allied address spaces.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3041A

Explanation: An ESTAE could not be established by the deferred end-of-task (EOT) processor. This error could occur only during DB2 subsystem startup. Probably, an ESTAE could not be established because of a shortage of LSQA space.

This abend reason code is issued by the following CSECT: DSN3EOTS

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If the failure persists, increase the size of the system services address space private area.

Problem determination: An SVC dump and associated SYS1.LOGREC entry should be available.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F3041B

Explanation: The deferred end-of-task (EOT) processor could not locate an AGNT block for the ACE of the agent in abnormal termination. This is a system error.

This abend reason code is issued by the following CSECT: DSN3EOTS

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry and associated SVC dump were requested. Register 8 at the time of the abend contains the ACE pointer. The AGNT block whose AGNTEB field points to the EB contained within the ACE could not be located.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F3041C

Explanation: The DB2 subsystem was abended because of a failure of a MEMTERM request for an allied address space.

This abend reason code is issued by the following CSECTs: DSN3SSI1, DSN3SSES

System action: The DB2 subsystem is terminated.

User response: Notify the system programmer.

Operator response: DB2 can be started again after it terminates.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3SSES recorded data on the SYS1.LOGREC data set and requested an SVC sump. The SYS1.LOGREC entries and the SVC dumps should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30420

Explanation: A failure occurred during deferred end-of-task (EOT) processing for an agent.

This abend reason code is issued by the following CSECT: DSN3EOTS

System action: The DB2 subsystem is terminated.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Determine the module that failed and the registers at the time of the error. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: A SYS1.LOGREC entry and associated SVC dump were requested.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30429

Explanation: A DB2 subsystem task (normally a service task) going through end-of-task (EOT), or one of its terminating ancestor tasks, was a DB2 must-complete function or was still holding one or more DB2 latches.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The DB2 subsystem is terminated with an SVC dump.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: At least one SVC dump and associated SYS1.LOGREC record(s) are available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has recorded data in SYS1.LOGREC and requested an SVC dump. The SYS1.LOGREC record(s) and SVC dump should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2.

00F30450

Explanation: CSECT DSN3CL0X could not establish an ESTAE during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3CL0X

System action: The allied address space is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the

identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

Problem determination: A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30451

Explanation: CSECT DSN3SSI1 could not establish its ESTAEs during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The allied task is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

Problem determination: A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30452

Explanation: CSECT DSN3ID30 could not establish an ESTAE during the processing of an identify SSI call. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECTs: DSN3ID30, DSN3SI30

System action: The allied task is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the identify request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

Problem determination: A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30453

Explanation: CSECT DSN3SSI1 could not establish its ESTAEs during the processing of an SSI call other than FEOT, EOM, HELP, COMMAND, and IDENTIFY. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The allied task is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

Problem determination: A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30454

Explanation: After discovering an error during the processing of an SSI call, module DSN3SSI1's retry routine found an unknown retry point when it was attempting to retry into the mainline code. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSN3SSI1

System action: The allied task is abended.

Operator response: Notify the system programmer.

System programmer response: The user may retry the relevant SSI call. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The recovery routine DSN3SSES has recorded data on the SYS1.LOGREC data set and requested an SVC dump. The SYS1.LOGREC entries and SVC dump(s) should be examined to determine the cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30455

Explanation: CSECT DSN3ID80 could not establish its ESTAE during the processing of the identify termination request. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSN3ID80

System action: The allied task is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the request. If a dump is available, review the virtual storage manager's control blocks to determine if all of the private area has been allocated. If necessary, increase the private area size of the allied address space.

Problem determination: A dump should be produced by the allied task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30456

Explanation: CSECT DSN3TM00 could not identify its caller. The only callers supported are: EOT, EOM, RIUR, and CNCL.

This abend reason code is issued by the following CSECT: DSN3TM00

System action: The calling task is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The caller's recovery routine may record on the SYS1.LOGREC data set and request an SVC dump. Module DSN3TM00 caller's parameter list, recorded in the trace entry, should be examined to determine the cause of the error, and new caller support should be added to DSN3TM00, if necessary.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30457

Explanation: CSECT DSN3TM00 found that the agent termination did not take place after an extra termination request (DSNARARQ).

This abend reason code is issued by the following CSECT: DSN3TM00

System action: The caller is abended. The caller may, in many cases, eventually abend the DB2 subsystem.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The caller's recovery routine records on the SYS1.LOGREC data set and requests an SVC dump. The error indicates that there may be a problem with the subsystem support subcomponent termination routines (namely DSN3ID80, DSN3SI80, and/or DSN3CT80).

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30458

Explanation: The DB2 subsystem is abended because a user-exit module, either DSN3@ATH or DSN3@SGN, is not link-edited with the AMODE (31) attribute.

This abend reason code is issued by the following CSECT: DSN3AMI1

System action: Subsystem start-up is terminated.

Operator response: DB2 may be restarted after the link-edit attributes of DSN3@ATH and/or DSN3@SGN have been changed to AMODE (31) RMODE (ANY).

System programmer response: Link-edit the user-exit module, specifying the attributes AMODE (31) RMODE (ANY).

Problem determination: Refer to the JCL specifying link-edit attributes for the user exit module.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 4.

00F30459

Explanation: The DB2 connection associated with an allied TCB could not be terminated. A RARQ request to terminate the connection could not be issued because either:

- The Resource Access List (RAL) address was zero in field ACERAL, or
- The SSAM Function Vector List (FVL) address in the RAL was zero.

This abend reason code is issued by the following CSECT: DSN3TM00

System action: The DB2 subsystem is terminated with a reason code of X'00F30420'.

Operator response: Notify the system programmer.

System programmer response: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is a DB2 internal error. Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30460

Explanation: The application is running in a WLM-established stored procedure address space and is attempting to connect to DB2 using a type of DB2 Attach other than RRSAF.

System action: The application is abended.

Operator response: Notify the system programmer.

Programmer response: Modify, relink and rerun the application.

System programmer response: Use the MVS VARY WLM,APPLENV=name,REFRESH command to refresh the load module in storage.

Problem determination: The problem may be that the Stored Procedure is link edited with or has loaded the DB2 call attachment facility language interface module DSNALI. Stored procedures that run in WLM-established address spaces must be link edited with or must load the RRS attachment facility language interface module DSNRLI.

This abend reason code is issued by the following CSECTs: DSN3ID30

00F30461

Explanation: DB2 was unable to successfully restart with OS/390 RRS because of an internal error in either DB2 or OS/390 RRS.

System action: DB2 is not connected to RRS and all services dependent on that connection are unavailable. This means that applications may not connect to DB2 using RRSAF and that WLM-established address spaces may not be used for DB2 stored procedures until DB2 successfully restarts with OS/390 RRS.

Operator response: Notify the system programmer.

System programmer response: Stop and then start OS/390 RRS. Stop and then start DB2. If the problem persists, perform an OS/390 RRS cold start. Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination:

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

This abend reason code is issued by the following CSECTs: DSN3RRSR, DSN3RRRS.

00F30501

Explanation: A nonzero return code has been received from the system parameter manager (SPM) subcomponent of DB2 when attempting to read a descriptor from the DSN3DIR1 directory. This descriptor is required in order to complete processing of the active sign-on or create thread. This is a serious error.

This abend reason code is issued by the following CSECTs: DSN3CT30, DSN3SI30

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump should be available. Either the module issuing the abend has made an error in compounding the descriptor name (it is a concatenation of connection type and indicators representing the request type) or the descriptor, or information in the DSN3DIR1 directory is incorrect.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30502

Explanation: A nonzero return code was received from agent service's create allied agent function during an identify or sign-on request. This indicates an allocation error that should not occur for these levels of capability.

This abend reason code is issued by the following CSECTs: DSN3ID50, DSN3SI30

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump and associated SYS1.LOGREC entries should be available. Examine the DB2 trace table to determine which resource manager triggered the error indication. Also, the DSN3DIR1 entry for the appropriate protocol should be checked to ensure that only SSAM is specified to participate in allocation.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30503

Explanation: The member DSN6SYSP is missing from DSNZPARM.

This abend reason code is issued by the following CSECT: DSN3AMI1

System action: DB2 start-up is terminated.

System programmer response: Refer to the coding procedure for DSNZPARM in Part 2 of *DB2 Installation Guide*.

Problem determination: DSN6SYSP CSECT is missing from the DSNZPARM load module.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30571

Explanation: This reason code is returned when a DB2 program attempts to UNSPECIFY an already inactive Program Request Handler (PRH). The indicated PRH is inactive. This reason code merely provides extra information.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

00F30572

Explanation: This reason code is returned when a DB2 program attempts to SPECIFY a Program Request Handler (PRH) and there was one already active. The new specification overlays the older specification.

This reason code is not normally visible to users or operators, but may appear in DB2 traces.

This DB2 reason code is issued by the following CSECT: DSN3SPRX

System action: The new specification replaces the old one.

00F30573

Explanation: The invoker of DSN3SPRH specified an invalid value for a resource access list entry (RALE). The RALE is outside the limits of those supported by the application program support CALL routine. (The application program support CALL routine routes control to the program request handlers.)

This abend reason code is issued by the following CSECT: DSN3SPRX

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: An SVC dump and associated SYS1.LOGREC entries are produced by a DB2 service. Register 2 at the entry to the abend contains the resource access list element (RALE) value passed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30574

Explanation: The invoker of DSN3SPRH specified an invalid request qualifier (QUAL) value. The QUAL is outside the limits of those supported by the application program support call routine that routes control to the program request handlers (PRHs).

This abend reason code is issued by the following CSECT: DSN3SPRX

System action: The requester is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump and SYS1.LOGREC entry are produced by a DB2 resource manager. Register 2 at the entry to the abend contains the QUAL value passed.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30580

Explanation: The DSN3CONN request for the EOM, first EOT or identify SSI call during the 'release-work' notification has resulted in a nonzero return code (see message DSN3580I).

This abend reason code is issued by the following CSECT: DSN3AMI2

System action: The requester is abended.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The original return and reason code appear in the DSN3580I message issued by DSN3AMI2. An SVC dump and associated SYS1.LOGREC entries are produced by some DB2 resource manager.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30581

Explanation: CSECT DSN3AMI2 found an unknown type of notify message in a message buffer. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSN3AMI2

System action: An abend is issued, and the startup/shutdown ESTAE creates a SYS1.LOGREC entry and take an SVC dump.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: Examine the SYS1.LOGREC entries and SVC dumps. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The SVC dump that is produced contains the relevant material for problem analysis. These buffers are set up by DSN3CL0X.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30597

Explanation: A protocol violation has been detected for an identify request. A noncoordinator identify request has been requested from a task that is not a subtask of the active coordinator. This occurs for protocols only where TCB hierarchy must be observed (SASS) and only when a coordinator has already identified itself to DB2.

This abend reason code is issued by the following CSECT: DSN3ID30

System action: The allied task is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump may be produced by the allied address space.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30598

Explanation: A protocol violation has been detected for an identify request. A noncoordinator identify request has been requested in a PSW key different from KEY of the active coordinator at its identify. This occurs only when a coordinator has already identified itself to DB2.

This abend reason code is issued by the following CSECT: DSN3ID30

System action: The allied task is abended, and the request is not processed.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: An SVC dump may be produced by the allied address space.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30599

Explanation: The allied memory function of the subsystem support subcomponent (SSAM) has attempted to remove an AGNT block (representing a connected allied coordinator task) from the chain of active AGNT blocks before all the dependent AGNT blocks have been removed. This AGNT block would normally be removed only during SSAM terminate processing or during EOT processing for the coordinator task. However, in these cases, dependents are terminated bottom up, and this situation, if it occurs, is a serious one. This message probably represents a logic error in the subsystem support subcomponent's allied memory function (SSAM).

This abend reason code is issued by the following CSECT: DSN3UNCH

System action: The requesting SSAM module is abended. The connection name associated with the error is probably unable to continue communication with DB2 until DB2 is terminated and restarted.

Operator response: Notify the system programmer. If necessary, stop and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has created SYS1.LOGREC entries and requested an SVC dump. The SYS1.LOGREC entries and SVC dumps should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30601

Explanation: Asynchronous events occurred which caused the premature termination of the thread. The thread could not be recovered.

There may be other abends or messages concerning this allied user indicating what the asynchronous events were.

This abend reason code is issued by the following CSECTs:

DSN3ID30 DSN3RIA0 DSN3RIM0

System action: The allied user is abended with code X'04E' and this reason code.

Operator response: The system programmer should be notified.

System programmer response: An SVC dump associated SYS1.LOGREC entries and SYSLOG should be available. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30610

Explanation: CSECT DSN3AMT3 could not establish an ESTAE during the processing of an 'end stop-work force' notification. This can occur if the current address space (usually system services) has insufficient storage. This may lead to abnormal termination of DB2.

This abend reason code is issued by the following CSECT: DSN3AMT3

System action: The caller is abended (without ABDUMP).

Operator response: Notify the system programmer and, if necessary, restart DB2.

System programmer response: If necessary, increase the private area size of the failing address space.

Problem determination: An SVC dump and related SYS1.LOGREC entry are requested by the initialization procedures (IP) subcomponent job-step task.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30801

Explanation: The DB2 subsystem was abended by module DSNAPRHX. DSNAPRHX was called and the request was passed on to the DB2 subsystem. However, upon return, it was discovered that the requesting (calling) TCB was in a DB2 must-complete function or was still holding DB2 latches.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The DB2 subsystem is terminated. An MVS SVC dump is requested.

Operator response: Notify the system programmer, and restart DB2.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: This is usually caused by a previous error that has created SYS1.LOGREC entries and requested an SVC dump. The SYS1.LOGREC entries and SVC dumps should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30802

Explanation: CSECT DSNAPRHX, on the return path (normal nonerror path) from the requested function, found that the FRBUDATA flag was on. This is a DB2 subsystem error.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The requesting task gets the FRB return and reason codes as set by the requested function. The task is not abended.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The SYS1.LOGREC entries and SVC dump should be examined to determine the actual cause of the error.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30803

Explanation: CSECT DSNAPRHX could not establish its ESTAE during the processing of an application program support call. This can occur if the current address space has insufficient storage.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The allied task is abended (without ABDUMP).

Operator response: Notify the system programmer.

System programmer response: The user may retry the request. If necessary, increase the private area size of the application address space.

Problem determination: The allied task may have requested an SVC dump.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F30805

Explanation: The caller's connection with DB2 has been terminated, because the DB2 subsystem has terminated or is in the process of terminating abnormally.

This abend reason code is issued by the following CSECT: DSNAPRHX

System action: The request may have been processed or aborted.

User response: The requester may identify to DB2 when it becomes operational again.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5.

00F30901

Explanation: DB2 has lost its cross-memory authority to an allied address space because the ally has released its authorization index.

This reason code is issued by the following CSECT: DSN3SSES

System action: The allied address space is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5

00F30902

Explanation: DB2 has detected a recursive abend condition while processing end-of-task for a task in an allied address space.

This reason code is issued by the following CSECT: DSN3SSES

System action: The allied address space is terminated.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5

00F30903

Explanation: An abend has occurred while processing End-of-Task for the control address space or a resource manager address space.

This reason code is issued by the following CSECT: DSN3SSES

System action: The address space is forced to end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5

00F30904

Explanation: End-of-Task occurred for the control address space or a resource manager address space and DB2 could not establish an ESTAE to protect its processing. Insufficient storage may be the reason the ESTAE could not be established.

This reason code is issued by the following CSECT: DSN3SSI1

System action: The address space is forced to end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5

Problem determination: Attempt to determine if one or more DB2 address spaces is storage-constrained. Examination of the console output for the time period preceding this condition may reveal other messages or

indications that the terminating address space was storage-constrained.

00F30905

Explanation: End-of-Task occurred for the job step task in an allied address space. DB2 would normally attempt to terminate the address space's connection to DB2 but was unable to protect its processing by establishing an ESTAE. Insufficient storage may be the reason the ESTAE could not be established.

This reason code is issued by the following CSECT:
DSN3SSI1

System action: The address space is forced to end-of-memory with this reason code.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 5

Problem determination: Attempt to determine if one or more allied address spaces is storage-constrained. Examination of the console output for the time period preceding this condition may reveal other messages or indications that the terminating allied address space was storage-constrained.

00F31100

Explanation: An internal program request was made for an unknown function due to an invalid FRB request qualifier value in FRBQUAL. This condition is considered to be an internal logic error.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31104

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31105

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31106

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31107

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F31108

Explanation: DB2 encountered a logic error while processing an internal program request.

System action: The request is abnormally terminated.

System programmer response: Contact the IBM Support Center.

Problem determination: Gather any dump and trace materials that are related to the problem.

00F33100

Explanation: The DB2 thread is 'read-only'.

This reason code is issued by the following CSECT:
DSN3PR00

System action: A prepare issued by the application program was processed through Phase 1. DB2 discovered there were no resources modified and no need for commit or abort to be subsequently issued.

User response: May effect a path length savings by not issuing the subsequent commit or abort which normally follows prepare. No further action is required

to complete the unit of recovery; the unit of recovery is complete.

00F3AFFF

Explanation: An unrecoverable error return code was received from the RACROUTE REQUEST=VERIFY macro service. The return code was other than 0, 4, or 8.

This abend reason code is issued by the following CSECT: DSN3@SGN

System action: The SIGNON request is abended. An SVC dump is requested by DB2 functional recovery.

Operator response: Notify the system programmer.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The abend with this reason code is issued by the sample SIGNON exit after the implementation in the user's installation. It indicates that an unrecoverable error occurred with the RACROUTE REQUEST=VERIFY macro service.

GPR 2 at the time of abend will contain the original RACROUTE return code from GPR 15. GPR 3 at the time of abend will contain the reason code returned by the RACROUTE macro service in GPR 0, if any.

Refer to *Resource Access Control Facility (RACF) System Programmer's* for descriptions of the RACROUTE return and reason codes.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

Chapter 29. X'F7.....' codes

00F70001

Explanation: DB2 could not find the system parameters CSECT DSN6GRP.

System action: The DB2 subsystem terminates.

Operator response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.

System programmer response: Investigate the system parameters load module.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70002

Explanation: DB2 data sharing was requested, but MVS was not at the required level. You must use MVS Version 5 Release 1.0 or a later release.

System action: The DB2 subsystem terminates.

Operator response: Restart DB2 on a system with MVS Version 5 Release 1.0 or a later release.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70003

Explanation: The DB2 subsystem parameters specified that data sharing should be active. DB2 startup checking failed for either of two reasons:

- The group and member names contained in the subsystem parameters are not equal to the group and member names contained in the DB2 *ssnmMSTR* JCL start procedure, or
- The DB2 member is already active on another MVS system.

System action: DB2 terminates.

Operator response: Make sure the correct subsystem parameter load module name was specified for the DB2 that failed to start. Restart DB2 with the correct subsystem parameter name.

System programmer response: Make sure the subsystem parameter name specified is the correct one for the DB2 subsystem and is not for a different member or group. You cannot share subsystem parameters among the members of a data sharing group. Make sure the group and member names

specified in the subsystem parameters are equal to the group and member names contained in the DB2 *ssnmMSTR* JCL start procedure.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70401

Explanation: DB2 could not find the system parameters CSECT DSN6GRP.

System action: The DB2 subsystem terminates.

Operator response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.

System programmer response: Investigate the system parameters load module.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70402

Explanation: DB2 could not create a service task for the group basic services function.

System action: The DB2 subsystem terminates.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70403

Explanation: DB2 could not find the system parameters CSECT DSN6SPRM.

System action: The DB2 subsystem terminates.

Operator response: Restart DB2 with the correct system parameters load module. If the problem reoccurs, notify the system programmer.

System programmer response: Investigate the system parameters load module.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70404

00F70405 • 00F70408

Explanation: DB2 could not open the SCA member information record.

System action: DB2 terminates.

Operator response: Check if the CF SCA structure is allocated. Restart DB2. If the problem occurs again, notify the system programmer.

System programmer response: Check if correct policy is active.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70405

Explanation: DB2 encountered an unexpected error while trying to read from or write to the shared communications area (SCA).

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70406

Explanation: DB2 issued an XCF macro IXCQUERY, but it failed. (XCF is the cross-system coupling facility component of MVS.)

System action: The DB2 subsystem terminates.

Operator response: Check the MVS console for XCF-related error messages. Issue an MVS DISPLAY XCF,GROUP command to ensure that XCF is functional. Then try to restart the DB2 subsystem. If the problem reoccurs, notify the system programmer.

System programmer response: Investigate the reason for this unexpected error. Refer to *MVS/ESA Programming: Sysplex Services Reference* for information about XCF return and reason codes.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70407

Explanation: The member name and member ID do
not match in the BSDS, the XCF function data set, or
the SCA structure. The following list contains possible
reasons of the detected inconsistency (register 0
contains a reason code and a combination of registers 1
through 5 might contain the mismatched values):

- # • The member ID for this member in the BSDS dataset
is greater than the allowed maximum (248). Register
1 contains the member ID in the BSDS dataset.
- # • The member name for this member ID in the SCA
does not match the member name in the BSDS data
set. Register 1 and 2 contain the member name in the
SCA. Register 3 and 4 contain the member name in
the BSDS data set.
- # • A member name saved in the SCA does not match
the name saved in XCF couple data set for the same
member ID. Register 1 and 2 contain the member
name in the SCA. Register 3 and 4 contain the
member name saved in the XCF couple data set.
Register 5 contains the member ID.
- # • The member ID saved in the BSDS dataset does not
match what is saved in the XCF couple data set for
the starting member. Register 1 contains the member
ID in the BSDS data set. Register 2 contains the
member ID in the XCF couple data set.
- # • The member ID saved in the BSDS data set does not
match what is saved in the SCA structure for the
starting member. Register 1 contains the member ID
in the BSDS data set. Register 2 contains the member
ID saved in the SCA structure.
- # • The starting member name is not found in the SCA
entry. Register 1 and 2 contain the starting member
name.
- # • The data sharing group already has 248 members
started for it.

System action: The DB2 subsystem terminates.

User response: Review the explanation and compare
the information for member names and member IDs in
the BSDS dataset, XCF couple dataset, and the DB2
SCA coupling facility structure.

00F70408

Explanation: DB2 issued an MVS XCF IXCJOIN request, but it failed. (XCF is the cross-system coupling facility component of MVS.)

System action: The DB2 subsystem terminates.

Operator response: Check the MVS console for XCF-related error messages. Issue an MVS DISPLAY XCF,GROUP command to ensure that XCF is functional. Then try to restart the DB2 subsystem. If the problem reoccurs, notify the system programmer.

System programmer response: Investigate the reason for this unexpected error. Refer to *MVS/ESA Programming: Sysplex Services Reference* for information about XCF return and reason codes.

Problem determination: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70409

Explanation: DB2 encountered an unexpected error while trying to read from or write to the local bootstrap data set (BSDS).

System action: The requesting execution unit abends. A SYS1.LOGREC entry is written and an SVC dump is requested.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F7040A

Explanation: DB2 detected an unexpected error during deletion of a DB2 service task.

System action: DB2 terminates.

System programmer response: Investigate the problem and call the IBM support center.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70410

Explanation: DB2 detected an unexpected error during IRLM locking.

System action: DB2 terminates.

System programmer response: Investigate the problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70600

Explanation: The connection to the shared communications area (SCA) was lost.

System action: DB2 terminates because DB2 data sharing cannot function without the SCA.

User response: Notify the system programmer.

System programmer response: Figure out why the SCA link to this central processor complex (CPC) is lost and correct the problem. Then restart DB2.

Problem determination: If there is an active SFM policy which specifies that a rebuild of the SCA should occur, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70601

Explanation: The shared communications area (SCA) structure failed. DB2 initiated dynamic rebuild of the structure. However, the rebuild process failed and DB2 cannot continue without the SCA.

System action: DB2 terminates.

User response: Notify the system programmer.

System programmer response: Correct the SCA structure and restart DB2. If all DB2s in the group terminate with this code, the next DB2 restart might do a group restart.

00F70602

Explanation: DB2 cannot connect to the shared communications area (SCA) coupling facility structure.

System action: Because DB2 data sharing cannot function without the SCA, DB2 terminates.

User response: Notify the system programmer.

System programmer response: Refer to message DSN7506I for more information

00F70603

Explanation: DB2 encountered an error in accessing the shared communications area (SCA) coupling facility structure.

System action: Since DB2 data sharing cannot function without the SCA, DB2 terminates.

User response: Notify the system programmer.

System programmer response: Refer to message DSN7508I for more information.

00F70604

Explanation: DB2 cannot rebuild the shared communications area (SCA) coupling facility structure.

System action: Because DB2 data sharing cannot function without the SCA, DB2 terminates.

User response: Notify the system programmer.

System programmer response: Refer to messages DSN7506A and DSN7508I for more information

00F70605

Explanation: DB2 cannot create a needed service task. This is a DB2 internal error.

System action: DB2 terminates.

User response: Notify the system programmer.

System programmer response: Investigate the problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

determination,” on page 735:

00F70606

Explanation: DB2 detected an unexpected error. This is a DB2 internal error.

System action: DB2 terminates.

User response: Notify the system programmer.

System programmer response: Investigate the problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70607

Explanation: DB2 detected that the shared communications area (SCA) coupling facility structure reached the directory entry limit of 200.

System action: DB2 terminates because DB2 data sharing cannot function without the SCA.

User response: Notify the system programmer.

System programmer response: Investigate the problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70608

Explanation: DB2 detected an unexpected error. This is a DB2 internal error.

System action: DB2 terminates.

User response: Notify the system programmer.

System programmer response: Investigate the problem.

Problem determination: Refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

00F70609

Explanation: The SCA structure is full.

System action: The DB2 that was writing an entry in the SCA terminates since the critical function cannot go on without the SCA entrywritten.

System programmer response: Refer to *DB2 Data Sharing: Planning and Administration* for a full description of actions in the SCA full scenario section.

Problem determination: Collect the following diagnostic items listed in Appendix C, “Problem

Chapter 30. X'F9.....' codes

An entry in the SYS1.LOGREC data set is requested for all of the following abnormal termination conditions. The SDWA variable recording area (VRA) contains the information provided by the DSNWRCRD function. When VRA space permits, the recordable section of the diagnostic data table (DDT control block) is also placed in the VRA. If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

All general command processor modules use register 10 as a base register. This may be helpful when attempting to match a register value to a module map.

00F90000

Explanation: A command processor has been invoked via the application program support function while the local lock of the caller's address space was held. CSECT DSN9SCNF tried to obtain the lock in order to obtain a response message buffer, but it was unable to do so. This represents a logic error in the function that submitted the command to the application program support function.

System action: Command execution was abended. If the command was properly entered, it may have been partially or completely executed.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS).

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, "X'F9.....' codes."

00F90001

Explanation: A command processor has been invoked via the application program support function. CSECT DSN9SCNF obtained the LOCAL lock of the caller's address space prior to obtaining a response message buffer, but was then unable to release the lock. This condition, if it occurs, is a serious one.

System action: Command execution was abended. If the command was properly entered, it may have been partially or completely executed.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have

it printed. It may be necessary to restart the attachment (IMS or CICS).

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, "X'F9.....' codes."

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F90002

Explanation: The routines of the multiple console support (MCS) service of MVS were unable to initialize. CSECT DSN9SCNM attempted to create the console task controller service task, but the task was not successfully created. This condition may indicate a problem in the address space. If it occurs, this is a serious error.

System action: Subsystem initialization is aborted, causing the DB2 subsystem to terminate.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. Restart the DB2 subsystem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, "X'F9.....' codes."

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F90003

Explanation: The routines of the multiple console support (MCS) service of MVS were unable to initialize. CSECT DSN9SCNM or DSN9SCN6 attempted to create a console service task but the task was not successfully created. This condition, if it occurs, is a serious one.

System action: If the abend was issued by CSECT DSN9SCNM, DB2 subsystem initialization is aborted, causing the DB2 subsystem to terminate. If the abend was issued by CSECT DSN9SCN6, the command from the associated console is executed under a different service task and should proceed normally.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, "X'F9.....' codes," on page 681.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F90004

Explanation: The routines of the multiple console support (MCS) service of MVS detected a logic error. CSECT DSN9SCN7 received a return code from the command preprocessor (the DSN9CMD service) that indicated an intolerable condition. A return code of X'04' is issued if the DSN9CMD calling parameters are invalid (the command text length is not a positive number or the PHB address is zero).

A return code of X'24' is provided if storage for a tokenized command statement (TCS) cannot be obtained from the global storage pool obtained by CSECT DSN9SCNP. The TCS storage request is the first storage request made using this pool. This is not a user error.

System action: The command was not executed.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic

information, see Chapter 30, "X'F9.....' codes," on page 681.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F90005

Explanation: A routine of the multiple console support (MCS) service of MVS was not able to create an ESTAE recovery environment. This condition is detected when the ESTAE service of MVS returns a nonzero return code. The command from the associated MCS console is not executed. Refer to the appropriate MVS publication for an explanation of ESTAE return codes.

System action: Command processing is terminated.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: If available, the diagnostic data table (DDT control block) will appear in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, "X'F9.....' codes," on page 681.

Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 2, 5.

00F90006

Explanation: The agent allocation routine was not able to allocate command processing capability to an agent. This failure occurs, because there is a damaged control block in global storage (CSA). The control block is the command global data area (CGDA). The address of the CGDA is in the general command processor RMFTRUSE field. This is not a user error.

System action: Agent allocation is terminated.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic

information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F90007

Explanation: The command parsing routines have attempted to update one of the command statistical counters that are kept in local storage. However, the counter control block validation field is wrong, indicating a damaged control block. The counter control block is located via the 'CGDASTA' address in the command global data area (CGDA) control block. The CGDA address is in the general command processor RMFTRUSE field. This is not a user error.

System action: The statistical update is not completed. The statistics block address is cleared from the CGDA to prevent future failures. No further command statistical counts are maintained. Processing for the command is retried and should complete normally.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F90008

Explanation: The recovery manager control routine has been called, but register 6 did not contain the address of an execution block (EB) on entry to DSN9SCN9. Because recovery logic requires the address of the EB, CSECT DSN9SCN9 cannot proceed. The EB hexadecimal control block identifier and the block length are compared to known values in order to validate the EB address. This is not a user error.

System action: The function requesting the recovery management service is abended.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

Reference for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F90009

Explanation: This reason code is used to document that CSECT DSN9SCN9 has added information to the SDWA variable recording area (VRA) following the data provided by the DSNWRCRD service. If DSN9SCN9 records a failure in SYS1.LOGREC and the reason code in the VRA is not of the form X'00F9xxxx', the reason code is changed to X'00F90009'. This is done so that anyone examining a SYS1.LOGREC entry can determine, from the reason code, what additional data has been placed in the VRA. The reason code is the first data item in the VRA, as mapped by macro IHAVRA.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F9000A

Explanation: The command parsing routines attempted to obtain a descriptor using the DSNZGDE service of the system parameter manager but the expected descriptor was not found (the DSNZGDE return code was X'04'). All descriptors used by the parser are contained in CSECT DSN9SCNA. This failure probably indicates incorrect data in CSECT DSN9SCNA.

System action: Command execution was abended. The command was not executed.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment (IMS or CICS) or the DB2 subsystem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and*

00F9000B • 00F9000D

Reference for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the SDWA variable recording area (VRA). For additional diagnostic information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F9000B

Explanation: The command parsing routines attempted to obtain storage from the storage pool (PHB) provided on a DSN9SCAN service request. Normally, this is CSA storage in the pool built by CSECT DSN9SCNP. The storage request could not be satisfied, either because no CSA storage was available or because an unreasonably large amount of storage was requested. The amount of storage requested is determined by the length of the command being parsed. Normally, it is several hundred bytes.

System action: Command execution is abended.

Operator response: Print the contents of the SYS1.LOGREC data set. If a dump was produced, have it printed. It may be necessary to restart the attachment facility (IMS or CICS) or the DB2 subsystem.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The diagnostic data table (DDT control block) appears in the subsystem diagnostic work area (SDWA) variable recording area (VRA). Register 8 contains the address of the tokenized command statement (TCS) control block, and register 9 contains the requested storage length. The TCS is the DB2 internal representation of the command text. For additional diagnostic information, see Chapter 30, “X’F9.....’ codes,” on page 681.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F9000C

Explanation: The command preprocessor (GCPC) mainline routine (DSN9SCNP) encountered a validation error when examining the message chains returned from the command processor.

The command processor invoked attempted to return a message formatted for inclusion in an MVS Multiple Line WTO.

System action: Command execution is abended.

Operator response: Notify the system programmer.

System programmer response: This error reflects a failure identified during DB2 internal protocol verification. The command in error is identified by message DSN9017I. Register 8 points to the start of the response message chain returned by the command processor. Register 9 points to the message within the message chain that was found to be in error.

System programmer response: If you suspect an error in DB2, refer to Part 2 of *DB2 Diagnosis Guide and Reference* for information on identifying and reporting the problem.

Problem determination: The GCPC Diagnostic Data Table (DSNDDDT Control Block) is recorded in the Variable Recording Area of the SDWA associated with the error.

Collect the following diagnostic items listed in Appendix C, “Problem determination,” on page 735: 1, 2, 5.

00F9000D

Explanation: The command preprocessor (GCPC) start-up routine (DSN9SCNE) discovered that the ERLY block is out-of-date. This error indicates that the current early code is not yet compatible with this version of DB2; a required early code PTF is missing.

System action: The DB2 subsystem start-up is terminated.

Operator response: Notify the system programmer.

System programmer response: Check the Program Directory, apply the required early code PTF and re-IPL MVS.

Part 4. IRLM messages and codes

This section contains information about IRLM messages and abend codes.

This section contains information about the following topics:

- Chapter 31, "IRLM messages," on page 687
- Chapter 32, "IRLM return and reason codes," on page 707
- Chapter 33, "IRLM abend codes," on page 723

Chapter 31. IRLM messages

This section describes the messages issued by the internal resource lock manager (IRLM). The database management system (DBMS) referred to throughout the messages is either DB2 or IMS. Some messages do not apply to DB2 operations.

The messages have the form of DXRxxxxa and are listed in numeric order.

DXR The prefix for IRLM messages.

xxx The numeric part of the message.

a An alphabetic suffix, as follows:

I The message is for information only.

E The message reports an error condition which might require action.

A Action is required of the user before processing can continue.

IRLM will now direct messages in two ways:

1. If a UN-solicited message is to be issued, the target "console" will be the one in which IRLM was started from.
2. If a solicited message is to be issued, i.e. via "F IRLM,STATUS" opercmd, it will automatically be directed back to the console from which the modify was accepted. Even if it was a TSO session running SDSF.

All messages contain the issuing IRLM subsystem name and ID, *irlmx* where, *irlmx* is the concatenation of the IRLMNM and IRLMID specified as EXEC parameters when the IRLM was started, as shown below.

The following example shows what the *irlmx* looks like when you concatenate the



Figure 1. Format of *irlmx*

IRLMNM and IRLMID:

If IRLMNM='KRLM' and IRLMID='12' then *irlmx*='KRLM012'

If IRLMNM='LRLM' and IRLMID='0' then *irlmx*='LRLM000'

The IRLMID is displayed as three characters in the messages.

```

DXR100I      irlmx STOR STATS PC: pc PVT:pvt
              LTE:lte RLE:rl RLEUSE:rleuse CSA USE:
              ACNT: acnt AHWM: ahwm CUR: cur
              HWM: hwm ABOVE 16M: segabove
              storabove BELOW 16M: segbelow storbelow
CLASS TYPE SEGS MEM TYPE SEGS MEM TYPE SEGS MEM
class type segs mem type segs mem type segs mem
  
```

Explanation: This message is issued in response to the following command:

```
F irlmproc,STATUS,STOR
```

A brief summary of selected storage usage is displayed where:

- | | |
|------------------------------------|--|
| <p><i>pc</i></p> <p><i>pvt</i></p> | <p>The parameter as specified in the irlmproc. Its value is either YES or NO.</p> <p>The extended private storage region limit threshold that is monitored for lock control blocks. When this limit is reached, new lock requests receive an RC08 out-of-storage reason code unless they are must-complete requests. The default value is determined from the size of the extended private storage value minus 10% for a non-lock buffer to be used for IRLM</p> |
|------------------------------------|--|

and system required storage. This value can be modified by the IRLM MODIFY command `MODIFY irlmproc,SET,PVT=`. See the IRLM modify command in the *DB2 Command Reference* for more information.

lte The number of lock table entries in units of 1048576 that were available in the coupling facility the last time this IRLM was connected to the group. If the number is less than one unit, the value is zero. *lte* can be set initially with the `LTE` parameter in the `IRLMPROC`, and can be modified with the IRLM modify command `F irlmproc,SET,LTE=`. See the IRLM MODIFY command in the *DB2 Command Reference* for more information.

lte is valid only when `SCOPE=GLOBAL` or `NODISCON`.

rle The number of record list entries available in the coupling facility the last time that this IRLM was connected to the group.

rle is valid only when `SCOPE=GLOBAL` or `NODISCON`.

rleuse The number of record list entries that were in use in the coupling facility at the time that the MODIFY command was issued. If the IRLM is disconnected from the coupling facility, this number represents the number of record list entries that were in use when the IRLM was last updated prior to disconnect.

rleuse is valid only when `SCOPE=GLOBAL` or `NODISCON`.

acnt The accountable extended private storage used for lock control structures. This value is specified as *xxxK* for kilobytes or *xxxM* for megabytes.

ahwm The greatest amount of extended private storage allocated by IRLM during this initialization period for lock control structures. Its value specified as *xxxK* for kilobytes or *xxxM* for megabytes.

| *cur* The current CSA + ECSA usage. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes. This value accounts for CSA + ECSA storage obtained in IRLM. IRLM often gets storage for locks under an application's ASID and manages this storage regardless of the status of the owning ASID. The display of *cur* storage accounts for all of these under this IRLM's CSA usage.

| *hwm* The greatest amount of CSA + ECSA allocated by IRLM during this initialization period. Its value is specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

segabove

The number of IRLM control block segments above 16M. Its value is the number of control block segments.

storabove

The storage allocated to the segments in *segabove*. Its value is the storage allocation specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

segbelow

The number of IRLM control block segments below 16M. Its value is the number of control block segments.

storbelow

The storage allocated to the segments in *segbelow*. Its value is the storage allocation specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

class

The category of storage. These are: "ACCNT", "PROC", and "MISC". "ACCNT" describes the storage allocated to IRLM lock control blocks. "PROC" describes the storage allocated to IRLM structures used for IRLM processing (including requests). This storage includes CSA, ECSA, and IRLM private storage. "MISC" describes the storage allocated for the rest of IRLM's needs. This includes trace buffers and other diagnostic structures. This storage includes CSA, ECSA, and IRLM private storage.

type

The sub-category for CLASS. For example, T-1 is storage for resource block structures; T-2 is storage for resource request structures, and T-3 is storage for requestor structures. The storage for types T-1, T-2, and T-3 is allocated from IRLM private storage.

segs

The number of storage segments allocated

mem

The storage specified as either *xxxK* for kilobytes or *xxxM* for megabytes.

The following is sample output:

```
DXR100I JR21002 STOR STATS
PC: YES   PVT   : 1500M  LTE:    16M  RLE:  231410  RLEUSE:  20
CSA USE: ACNT: 500K  AHWM:   50M  CUR:  4362K  HWM:  5830K
          ABOVE 16M:    78 4308K  BELOW 16M:    44   53K
CLASS  TYPE SEGS  MEM TYPE SEGS  MEM TYPE SEGS  MEM
ACCNT  T-1    1   64K  T-2    1   64K  T-3    1    4K
PROC   WRK   11   58K  SRB    41   41K  OTH    2    2K
MISC   VAR   68 4497K  N-V    6   22K  FIX    1   24K
```

System action: Processing continues normally.

DXR101I *irlmx* STATUS SCOPE=*nnnnnn* SUBSYSTEMS IDENTIFIED

NAME	STATUS	UNITS	HELD	WAITING	RET_LKS
ssname	zzz	wun	reh	rew	rtlks

Explanation: This message is issued in response to the following command:

F irlmproc,STATUS

A list of DBMSs identified to the IRLM is displayed. Work unit and lock information is displayed for each DBMS.

The message variables are:

nnnnnn One of the following:

LOCAL

SCOPE=LOCAL was specified as an EXEC parameter when the IRLM was started.

GLOBAL

SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is connected to a data sharing group.

DISCON

SCOPE=GLOBAL or SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is not connected to a data sharing group.

NoDISC

SCOPE=NODISCON was specified in the IRLMPROC and the IRLM is connected to a data sharing group.

GINIT SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is joining a data sharing group.

GTERM

SCOPE=GLOBAL was specified in the IRLMPROC and the IRLM is terminating from a data sharing group.

ssname An eight-character DBMS name.

zzz One of the following:

UP The DBMS is active.

DOWN

The DBMS failed.

UP-RO The DBMS subsystem is active and is currently identified to the IRLM as a 'read-only' subsystem.

UP-NS The DBMS subsystem is active and is currently identified to the IRLM as a 'no-share' subsystem.

CLEANUP

The IRLM drove the DBMS STATUS exit, indicating a failure condition, and is waiting for that DBMS to respond with a PURGE, indicating cleanup is complete.

SFAIL The IRLM to which the DBMS is identified disconnected from the data sharing group. The modify locks for

all the subsystems on that IRLM were retained by IRLM. All DBMSs that are identified to IRLMs disconnected from a data sharing group are listed as SFAIL by the surviving IRLMs.

wun The number of work units under the DBMS that are holding or waiting for a lock. No work units exist for a failed DBMS. The field is set to '...' for a failed DBMS.

reh The number of resources locked by the DBMS.

rew The number of waiting lock requests. No waiting requests are permitted for a failed DBMS. The field is set to '...' for a failed DBMS.

rtlks The number of retained locks held by a subsystem that failed or was running on an IRLM that failed. In most cases, retained locks are purged when a DBMS reidentifies to IRLM; therefore the number is zero for active DBMSs. However, it is possible for a DBMS to hold both active and retained locks if it is recovering from a previous failure.

If no DBMSs are identified to this IRLM, the line beginning with *ssname* is replaced with NO INFORMATION AVAILABLE.

System action: Processing continues normally.

DXR102I irlmx STATUS SUBSYSTEMS IDENTIFIED

XNAME	STATUS	XRET-LKS	IRLMID	IRLM_NAME	IRLM_LEVL
ssname	zzz	rtlks	id	iname	ilevl

Explanation: This message is issued in response to the following commands:

F irlmproc,STATUS,ALLD
F irlmproc,STATUS,irlmx

where *irlmx* is the IRLMX + IRLMID fields as specified in the IRLMPROC whose status is requested.

A list of DBMSs identified to the IRLMs in the data sharing group is displayed.

The message variables are:

ssname An 8-character DBMS name.

zzz One of the following:

UP The DBMS is active.

DOWN

The DBMS failed.

UP-RO The DBMS subsystem is active and is currently identified to the IRLM as a 'read-only' subsystem.

UP-NS The DBMS subsystem is active and is

currently identified to the IRLM as a 'no-share' subsystem.

CLEANUP

The IRLM drove the DBMS STATUS exit, indicating a failure condition, and is waiting for that DBMS to respond with a PURGE, indicating cleanup is complete.

SFAIL The IRLM to which the DBMS is identified was disconnected from the data sharing group. The modify locks for all the DBMS subsystems on that IRLM were retained by IRLM. All DBMSs that are identified to IRLMs disconnected from a data sharing group are listed as SFAIL by the surviving IRLMs.

rtlks The number of retained locks held by a subsystem that failed or was running on an IRLM that failed. In most cases, retained locks are purged when a DBMS reidentifies to IRLM; therefore, the number is zero for active DBMSs. However, it is possible for a DBMS to hold both active and retained locks if it is recovering from a previous failure.

id The ID of the IRLM to which the DBMS is identified.

iname The name of the IRLM to which the DBMS is identified.

If no DBMSs are identified to any IRLM or to the IRLM specified, or the IRLM specified is not known, the line beginning with *ssname* is replaced with NO INFORMATION AVAILABLE.

ilevl The IRLM function level requested by the DBMS at IDENTIFY.

If the IRLM to which the DBMS was IDENTIFIED is no longer connected to the data sharing group, then the value displayed for IRLM_LEVEL will be zero. The value displayed for any DBMS is determined by the APAR or PTF level applied to that DBMS.

System action: Processing continues normally.

**DXR103I *irlmx* STATUS IRLMS PARTICIPATING
IN DATA SHARING GROUP
FUNCTION LEVEL *glv***

IRLM-NAME	IRLMID	STATUS	LEVEL	SERVICE	MINLEVEL	MINSERVICE
<i>iname</i>	<i>id</i>	<i>zzz</i>	<i>lv</i>	<i>s</i>	<i>mlv</i>	<i>ms</i>

Explanation: This message displays the active IRLMs in response to the following command:

F *irlmproc*,STATUS,ALLI

A list of IRLMs in the group that are actively data sharing is displayed. If not data sharing, the single IRLM is displayed.

glv The IRLM function level in use by all the IRLMs in the data sharing group.

iname A 4-character IRLM name.

id The ID of the IRLM.

zzz One of the following values:

UP The IRLM is active.

DOWN
The IRLM failed.

lv The current IRLM function level.

s The IRLM service or release that corresponds to the function level given in *s*.

mlv The minimum IRLM function level this IRLM can coexist with.

ms The IRLM service or release that corresponds to the function level given in *mlv*.

System action: Processing continues normally.

DXR104I *irlmx* MAINTENANCE LEVELS

Explanation: This display is produced by the MODIFY *irlmproc*,STATUS,MAINT command. Maintenance levels of all IRLM load modules except DXRRL183, DXRRLFTB, DXRRLM50, and DXRRL186 are displayed to the console in two column format, showing the most recent APAR level and the compile date applied to each csect.

System action: IRLM processing continues normally.

Operator response: Review the maintenance level for any suspected module error or as requested by the IBM Support Center.

**DXR105E *irlmx* STOP COMMAND REJECTED.
AN IDENTIFIED SUBSYSTEM IS
STILL ACTIVE**

Explanation: A STOP *irlmproc* command was entered, but the IRLM still has active DBMSs identified.

System action: The command is not processed, but IRLM processing continues normally.

Operator response: Reenter the STOP command after all active DBMSs have terminated, or terminate the IRLM abnormally with the F *irlmproc*,ABEND command.

**DXR106E *irlmx* INVALID MODIFY COMMAND
PARAMETER SPECIFIED**

Explanation: A MODIFY command specified the procedure name of this IRLM, but the command either contained parameter values not supported by the IRLM

or did not contain a required parameter.

System action: The command is not processed, but IRLM processing continues normally.

Operator response: Reenter the MODIFY command with the correct parameters.

DXR107E *irlmx* STORAGE NOT AVAILABLE TO PROCESS THIS COMMAND

Explanation: The IRLM cannot obtain sufficient internal working storage to process the command.

System action: The command is not processed, but IRLM processing continues normally.

Operator response: Inform the system programmer. Reenter the command after storage is available to process the command.

System programmer response: Increase the region size specified on the IRLM startup procedure.

DXR108I *irlmx* PURGE, *nnnnnnnn* COMMAND FAILED *yyyyyyyy*

Explanation: A PURGE command specified either a name of an active DBMS or a name that is not known to this IRLM.

nnnnnnnn

The *dbmsname* specified on the PURGE, *dbmsname* command.

yyyyyyyy

The reason the purge command failed:

PURGE IN PROGRESS:

Either another PURGE command is being processed, or the IRLM is in the process of cleaning up from the disconnection of another group member.

NAME NOT FOUND OR ACTIVE:

The DBMS name specified cannot be found, or that DBMS is identified as an active subsystem and cannot be purged by the PURGE command.

System action: The command failed, but IRLM processing continues normally.

Operator response: Reenter the PURGE command with the correct parameters.

DXR109I *irlmx* PURGE COMMAND COMPLETED FOR *nnnnnnnn*

Explanation: A PURGE command completed successfully.

nnnnnnnn

The DBMS name specified on the PURGE, *dbmsname*. command

System action: Processing continues normally.

DXR110I *irlmx* STOP COMMAND ACCEPTED

Explanation: The IRLM accepted the STOP command or IRLM has initiated the AUTOSTOP function and is beginning the normal shutdown process.

System action: The IRLM is performing shutdown processing. The IRLM subtasks are being quiesced and detached. If the IRLM is actively part of a data sharing group, then the other IRLMs are informed when this IRLM leaves the data sharing group. If IRLM was autostarted by the DB2 IRLM will issue this message when the DB2 terminates.

DXR116E *irlmx* INITIALIZATION FAILED, CODE=*xx* DETECTED BY *zzzzzzzz*

Explanation: The IRLM was unable to complete initialization because of error code *xx*. The name of the module that detected the failure is *zzzzzzzz*.

The values of *xx* are:

- 01 Unable to allocate global storage.
- 02 Unable to allocate local storage.
- 03 The IRLMID was missing or invalid. IRLMID must be specified as a 1 to 3-digit number from 0 through 255. The IRLMID must be unique among all IRLMs belonging to the same data sharing group (having the same GROUP parameter). This code can also be returned if you are using a printable character (such as 'D') for the IRLM identifier. Because of the way MVS interprets quotes, a printable character must be surrounded by enough single quotes for IRLM to determine that this is a printable character. For the IRLMID parameter in the startup procedure, there must be seven quotes on either side of the character ("'"D'"'). If you are specifying the IRLMID on the EXEC statement, there must be three quotes on either side ("D").
- 05 The DEADLOCK parameter was missing or invalid. This parameter must be specified as *iiii,kkkk*, where *iiii* and *kkkk* are 1 to 4-digit numbers from 1 through 9999.
- 06 An MVS subsystem SSCVT containing the name specified by the IRLNMN parameter does not exist. IRLM was not properly registered with MVS to use the subsystem interface.
- 07 Error in module *zzzzzzzz* initialization.
- 08 Error loading IRLM modules.
- 09 IRLM was already started.

DXR117I

10	The SCOPE parameter was missing or invalid. Either LOCAL, GLOBAL, or NODISCON must be specified.	03	Correct the IRLMID parameter on the IRLM startup procedure.
11	The MAXCSA parameter was missing or invalid. This parameter must be specified with value range from 0 to 999, or blank. The value is ignored, but the parameter must be specified for compatibility.	05	Correct the DEADLOK parameter on the IRLM startup procedure.
12	The IRLMNM parameter was missing or a length greater than 4 was specified.	06	Verify that the IRLM startup procedure specifies the correct IRLM name. If IRLMNM specifies the correct name, verify that an MVS subsystem with that name is defined.
13	The SETDIE for the initial deadlock time interval failed.	07	Analyze the dump to determine the problem.
14	The PC parameter was specified incorrectly. The value must be YES, NO, or blank. The value is ignored, but the parameter must be specified for compatibility.	08	Analyze the dump to determine the problem.
15	The operating system on which IRLM is attempting to start is not MVS/XA or higher.	09	Verify that the IRLM startup procedure specifies the correct IRLM name.
16	The MAXUSRS parameter was invalid.	10	Correct the SCOPE parameter on the IRLM startup procedure.
17	Invalid group name. A 1 to 8 character group name must be specified if running SCOPE=GLOBAL.	11	Correct the MAXCSA parameter on the IRLM startup procedure.
18	Invalid lock table name. The lock table name must be the same as the one defined in the MVS locking policy, or it must not be specified.	12	Correct the IRLMNM parameter on the IRLM startup procedure.
19	The CTRACE DELETE HEAD-level trace failed.	13	Analyze the dump to determine the problem.
20	The CTRACE DEFINE HEAD-level trace failed.	14	Correct the IRLM PC parameter.
21	The CTRACE DEFINE SUB trace failed.	15	IRLM must be run on an MVS/XA or higher system.
22	More than one displayable character was specified for the IRLMID parameter.	16	Correct the MAXUSRS parameter.
23	An invalid value for the TRACE parameter is specified. The only valid values are YES and NO.	17	Correct the XCF group name parameter in the IRLM startup procedure.
24	The value specified for LTE is not in the valid range of 0 to 1024 or is not an even power of two.	18	Correct the lock table name parameter in the IRLM startup procedure.
25	The PGPROT parameter was specified incorrectly. Specify YES or NO as a value.	19	Analyze the dump to see what is wrong with CTRACE.
		20	Analyze the dump to see what is wrong with CTRACE.
		21	Analyze the dump to see what is wrong with CTRACE.
		22	Correct the value for the IRLMID parameter.
		23	Correct the value for the TRACE parameter.
		24	Correct the value for the LTE parameter and issue the START command again.
		25	Correct the PGPROT parameter and reissue the START command.

System action: IRLM user abend 2018 is issued.

Operator response: Notify the system programmer.

System programmer response: Take the following action based on the code:

- 01 Make global storage available to IRLM. Analyze the dump for more information.
- 02 Increase the region size on the IRLM startup procedure. Analyze the dump for more information.

For codes 1, 2, 6, 7, 8, 13, 18, 19, and 20, an SDUMP is also taken. The IRLM discontinued its initialization processing.

DXR117I *irlmx* INITIALIZATION COMPLETE

Explanation: The IRLM successfully completed initialization and is available for use. If SCOPE=GLOBAL or NODISCON is specified, message

DXR132I is issued when the IRLM connects to the global environment and is capable of inter-system data sharing.

System action: The IRLM is processing normally.

DXR121I *irlmx* END-OF-TASK CLEANUP
SUCCESSFUL - HI-CSA *xxxK* or *xxxM* -
HI-ACCT-CSA *xxxK* or *xxxM*

Explanation: The IRLM end-of-task routine released all of the MVS common storage that was in use by the terminating IRLM, except for storage required for EOT/EOM processing.

The HI-CSA is the highest amount of CSA + ECSA allocated to the IRLM during this initialization. The value for HI-CSA is displayed as *xxxK* for kilobytes or *xxxM* for megabytes.

The HI-ACCT-CSA is the highest amount of CSA + ECSA allocated to the IRLM for lock control blocks. The value for HI-ACCT-CSA is displayed as *xxxK* for kilobytes or *xxxM* for megabytes.

System action: The IRLM terminated processing.

Operator response: None is required. Enter the *S irImproc* command to restart the IRLM.

DXR122E *irlmx* ABEND UNDER IRLM TCB/SRB
IN MODULE *xxxxxxx* ABEND CODE
zzzz

Explanation: The IRLM experienced an unrecoverable programming error while processing under an IRLM execution unit. Global sharing with the IRLM issuing the message is inhibited.

xxxxxxx The name of the module that detected the failure.

zzzz The abend code associated with the failure.

System action: The IRLM is performing abnormal termination processing. An MVS SYS1.LOGREC entry and an SDUMP were requested. An abend is issued to terminate the IRLM job-step task.

Operator response: Notify the system programmer. Ensure that the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed.

System programmer response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR123E *irlmx* ABEND UNDER DBMS TCB/SRB
IN MODULE *xxxxxxx* ABEND
CODE=*zzzz* ERROR ID=*wwwww*

Explanation: The IRLM experienced an unrecoverable programming error while processing a request

executing under a DBMS execution unit. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry and an SDUMP were requested.

xxxxxxx The name of the module that detected the failure

zzzz The abend code associated with the failure

wwwww The error ID or dump sequence number for the associated LOGREC entry.

System action: The IRLM is performing abnormal termination processing.

Operator response: Notify the system programmer. Ensure the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed. Follow IRLM restart procedures.

System programmer response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR124E *irlmx* ABENDED VIA MODIFY
COMMAND

Explanation: The IRLM terminated as a result of receiving an *F irImproc,ABEND* command. Global sharing with the IRLM issuing the message is inhibited. An MVS SYS1.LOGREC entry was requested. If the NODUMP parameter was omitted from the MODIFY command, an SDUMP was requested. If the NODUMP option is included & the command is issued twice or there is no DBMS identified to the IRLM, a dump is taken and this message is also issued.

System action: The IRLM is performing abnormal termination processing.

Operator response: If an SDUMP was taken, ensure that the SYS1.DUMPxx data set containing the SDUMP is not overwritten before the dump is analyzed. Notify the system programmer.

System programmer response: Use the IPCS service aid to analyze the dump to determine the cause of the failure.

DXR131I *irlmx* OUT OF *xxxx* STORAGE
DETECTED DURING DEADLOCK.
DEADLOCK PROCESS DELAYED.

Explanation: IRLM detected an out-of-storage condition during deadlock detection of resolution processing. Rather than abending the IRLM, the deadlock process for this deadlock detection interval was ended before completely detecting or resolving deadlocks. If this condition is permitted to persist, undetected deadlocks might occur.

xxxx The type of storage IRLM was attempting to get when the out-of-storage condition was

detected. It is either ECSA for extended CSA, or PRIVATE for IRLM private storage.

System action: The IRLM cleans up deadlock data structures before completing deadlock detection or resolution. Deadlock detection or resolution is attempted in one local deadlock cycle as specified on the IRLM startup procedure parameter.

Operator response: Stop and restart the IRLM specifying a larger region size on the IRLM startup procedure. IRLM need not be stopped immediately and can remain up indefinitely if the volume of requests to the IRLM is reduced by limiting DBMS activity.

DXR132I *irlmx* **SUCCESSFULLY JOINED THE DATA SHARING GROUP WITH *yyyyy*M LOCK TABLE ENTRIES AND *nnnnnnnn* RECORD LIST ENTRIES.**

Explanation: The IRLM successfully connected to the data sharing group. This action includes a successful join to the XCF cross-system coupling facility (XCF) group and a successful connection to the lock structure. The IRLM can now participate in intersystem data sharing.

The value *yyyyy* represents the number of lock table entries in units of 1048576, and *nnnnnnnn* represents the number of record list entries available in the coupling facility. If the number of lock table entries is less than 1048576, *yyyyy* is zero. The first IRLM to connect to the group causes structure allocation and dictates these values for the group.

System action: The IRLM continues operation.

DXR133I *irlmx* **TIMEOUT DURING GLOBAL INITIALIZATION WAITING FOR *nnnnnnnn***

Explanation: A timeout occurred while the IRLM was attempting global initialization. This problem usually occurs because incorrect lock structure or XCF group names were specified on the LOCKTAB and IRLMGRP parameters. (XCF is the cross-system coupling facility component of MVS.) However, anything that delays global initialization for at least 30 seconds causes this message to be issued. The value for '*nnnnnnnn*' may be either the *irlmnm+irlmid* values for an existing peer member or '*NOEVENT*'.

System action: IRLM continues to issue this message until one of the following occurs:

- Global initialization completes.
- The system programmer takes some action to abend the IRLM.
- IRLM abends with U2025 after an internal limit of timeout messages is reached.

Operator response: Notify the system programmer

System programmer response: Investigate what is

delaying initialization based on the value for *nnnnnnnn*. If this is the name of a peer irlm, then that member is not sending the required XCF messages to the new member joining. This may be due to XCF messaging problems, processing problems such as DXR167E, or lack of XCF EVENTS. If the new joining member had failed prior, make sure that each existing member has issued the msgDXR137I recovery message. If '*nnnnnnnn*' is NOEVENT, then the problem is most likely restricted to the new joining member, and only a dump of this member and XCFAS is likely to be needed. Check the lock structure and XCF group names to ensure that the names specified for this IRLM match the names used by all group members. You can use XCF commands to display the current members in the XCF group to see if this IRLM joined successfully. If necessary, take dumps to assist in failure analysis. Since this message can be issued because of missing interaction with other members, you may need dumps of peer SYSPLEX IRLM members, along with XCFAS. If '*nnnnnnnn*' is a peer irlm, then take dumps of that member and the joining member. If you wish to get the new member to successfully join, you must terminate any peer member whose name appears for '*nnnnnnnn*' before attempting to start the new member.

DXR134E *irlmx* **JOIN XCF GROUP *wwwwwwww* FAILED FOR GLOBAL INITIALIZATION, RETURN=*xx*, REASON=*yyyyy***

Explanation: The IRLM cannot successfully join the XCF group. (XCF is the cross-system coupling facility component of MVS.)

wwwwwwww

The IRLMGRP name specified on the IRLM startup procedure

System action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

Operator response: Notify the system programmer.

System programmer response: Try to determine why the IRLM cannot join. See the IXCJOIN section of *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

DXR135E *irlmx* **CONNECT TO LOCK TABLE *wwwwwwww* FAILED FOR GLOBAL INITIALIZATION, RETURN=*xx*, REASON=*yyyyy***

Explanation: The IRLM cannot successfully connect to the lock table.

wwwwwww

The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

System action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

Operator response: Notify the system programmer.

System programmer response: Try to determine why the IRLM cannot connect. See the IXLCONN section of *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the return and reason codes. If the reason for the connection failure was corrected, restart the IRLM and reidentify the DBMS to it.

DXR136I *irlmx* **HAS DISCONNECTED FROM THE DATA SHARING GROUP**

Explanation: The IRLM left the data sharing group by disconnecting from both the XCF group and the lock structure. (XCF is the cross-system coupling facility component of MVS.) IRLM takes this action when all identified DBMSs have issued a QUIT request to the IRLM to terminate their active data sharing activity.

This IRLM message may also be issued by a new member that is attempting to JOIN the sysplex group while a lock structure rebuild is occurring. In this case, the disconnect is temporary, and the IRLM should connect to the group when the rebuild is completed. If it does not, a dump should be taken, and the IRLM should be terminated.

System action: This IRLM disconnected from the data sharing group.

DXR137I *irlmy* **GROUP STATUS CHANGED.**
 irlmy **HAS BEEN DISCONNECTED FROM THE DATA SHARING GROUP**

Explanation: IRLM *irlmy* lost connectivity to the data sharing group.

irlmy The ID of the disconnected IRLM as explained in Part 4, "IRLM messages and codes," on page 685.

All surviving IRLMs issue this message. The disconnected IRLM might issue the DXR136I message.

System action: IRLM *irlmy* was disconnected from the data sharing group.

Operator response: None is required on this MVS system. See the DXR136I message for the proper operator response on the disconnected system.

DXR138E *irlmx* **QUERY STRUCTURE FOR LOCK TABLE** *wwwwwww* **FAILED FOR GLOBAL INITIALIZATION, RETURN=xx, REASON=yyyy**

Explanation: This message is issued when IRLM gets a nonzero return code from a QUERY to XCF for the lock structure size.

wwwwwww

The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure

IRLM is unable to connect to the data sharing group if it does not have a valid structure size.

System action: IRLM does not connect to the data sharing group. The identify request for the DBMS attempting to identify is rejected.

Operator response: Try to determine from the return and reason codes specified in the message what the problem is with XCF. See the IXCQUERY section of *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the return and reason codes. Restart the DBMS when the problem is fixed.

System programmer response: If the operator is unable to find the problem, determine why the XCF QUERY request failed.

DXR139E *irlmx* **zzzzzzzz REQUEST FAILED, RETURN=xx, REASON=yyyy**

Explanation: An IRLM request to MVS failed with an unexpected return and reason code. The request type is zzzzzzzz.

System action: IRLM terminates with abend U2025.

Operator response: Notify the system programmer

System programmer response: Use the request type, reason and return codes to find out what caused the failure. See request type 'zzzzzzzz' of *MVS/ESA Programming: Sysplex Services Reference* for an explanation of the return and reason codes. Save the IRLM dump for analysis by IBM service.

DXR140E *irlmx* **IRLMID=zzz IS NOT UNIQUE FOR THE DATA SHARING GROUP IT ATTEMPTED TO JOIN**

Explanation: An IRLM attempted to join a data sharing group, but IRLMID *zzz* that was specified in the IRLM startup procedure was already in use by another IRLM in the group.

System action: IRLM terminates with abend U2025.

Operator response: Notify the system programmer.

System programmer response: Change the IRLMID in the startup procedure to a number from 1 through 255

that is not already in use by another IRLM in the data sharing group.

DXR141I *irlmx* THE LOCK TABLE *wwwwwwww*
 WAS ALLOCATED IN A *zzzzzzzz*
 FACILITY

Explanation: The MVS coupling facility containing the lock table being used by IRLM is executing in *zzzzzzzz* state.

zzzzzzzz

Volatile or Nonvolatile

The volatile state indicates that there is no battery backup for the facility if a power failure occurs.

wwwwwwww

The lock table name passed at identify time or the LOCKTAB name specified on the IRLM startup procedure.

System action: Data sharing continues normally.

Operator response: Notify the system programmer.

System programmer response: Take some action to move to a nonvolatile structure if that is desired for better availability.

DXR142E *irlmx* THE LOCK STRUCTURE
wwwwwwwww IS *zzz%* IN USE

Explanation: This message shows what percent of the available capacity of the lock structure is being used by the group and can indicate that some action is needed to relieve the storage.

wwwwwwwww

The lock table name currently in use by the IRLM.

zzz One of the following values: 80, 90, 100.

System action: This message stays on the console until the storage falls below 70% or until the operator removes the message. Data sharing continues, possibly with restrictions, depending on how full the lock structure is.

- At 80% full, data sharing continues with no restrictions, but storage is reaching a critical threshold.
- At 90% full, data sharing continues with restrictions. Only 'must-complete' type of requests that require lock structure storage are processed. All others that require lock structure storage are denied with an 'out of lock structure storage' reason code.
- At 100% full, data sharing continues with more restrictions. Any request that requires lock structure storage is denied with an 'out of lock structure storage' reason code.

Operator response: Notify the system programmer if

there is a concern about running out of space in the lock structure.

System programmer response: Take some action to increase the size of the lock structure if more space is needed. Force to completion update-type transactions to free modify locks which will in turn free some lock structure storage.

See *DB2 Data Sharing: Planning and Administration* for actions you can take in a DB2 environment to alleviate the storage shortage in the lock structure.

DXR143I *irlmx* REBUILDING LOCK
 STRUCTURE BECAUSE IT HAS
 FAILED OR AN IRLM LOST
 CONNECTION TO IT

Explanation: The lock structure failed or one or more IRLMs lost connections to it. The IRLM attempts to rebuild all the current information into the new lock structure without modifying any of the attributes.

System action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild does not succeed, IRLM disconnects from the data sharing group.

Operator response: Notify the system programmer to repair the failed structure or connections to it.

System programmer response: Determine the reason for the structure or connection failure and take actions to recover the failed structure.

DXR144I *irlmx* REBUILDING LOCK
 STRUCTURE BECAUSE ALL
 CONNECTIONS TO IT ARE IN USE

Explanation: The last available connection to the lock structure was allocated. IRLM attempts to rebuild into another structure and modify the lock structure attributes to allow more connections.

System action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally with more connections available for the group. If rebuild does not succeed, data sharing continues but new members are not able to join the group.

Operator response: Determine whether the group needs to be able to handle more members, and if so, change the MAXUSRS parameter on the IRLMPROC.

System programmer response: Determine the reason why rebuild failed. Take actions to make a bigger structure available to handle the bigger group.

DXR145I *irlmx* REBUILDING LOCK
 STRUCTURE AT OPERATORS
 REQUEST

Explanation: The operator started rebuild with an

MVS SETXCF command. IRLM attempts to rebuild into another structure without modifying any of the lock structure attributes.

System action: Data sharing is stopped while rebuild is in progress. After rebuild completes successfully, data sharing continues normally. If rebuild failed, data sharing still continues normally.

Operator response: Ensure that rebuild completes successfully. Notify the system programmer if any problem occurs during rebuild. If rebuild failed, contact the system programmer to determine why.

System programmer response: Determine the reason why rebuild failed. Take actions to make the desired structure available.

DXR146I *irlmx* REBUILD OF LOCK STRUCTURE COMPLETED SUCCESSFULLY WITH *yyyyyM* LOCK TABLE AND *nnnnnnnn* RECORD LIST ENTRIES

Explanation: The lock structure was successfully moved to another coupling facility structure. The value *yyyyy* represents the number of lock table entries in units of 1048576, and *nnnnnnnn* represents the number of record list entries available in the coupling facility. If the number of lock table entries is less than 1048576, *yyyyy* is zero. The first IRLM to connect to the group causes structure allocation and dictates these values for the group.

System action: Data sharing continues normally.

DXR147I *irlmx* REBUILD OF THE LOCK STRUCTURE WAS STOPPED

Explanation: The lock structure could not be moved to another coupling facility structure. Rebuild process was terminated.

System action: Data sharing continues normally if the old lock structure is still available. If the lock structure failed, IRLM disconnects from the group.

Operator response: Contact the system programmer to determine why rebuild was stopped.

System programmer response: Determine why rebuild was stopped. Take actions to make a suitable coupling facility structure available for rebuild.

DXR148I *irlmx* REBUILD OF LOCK STRUCTURE WAS STOPPED BY THE OPERATOR

Explanation: The operator issued a console command to stop the rebuild.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

Operator response: If IRLM DISCONNECT from the

group, follow local recovery procedures.

System programmer response: Determine why the rebuild was stopped and take appropriate action to restore rebuild capability.

DXR149I *irlmx* REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF A REQUIRED IRLM IN THE GROUP

Explanation: Rebuild was stopped because one of the IRLMs involved in the rebuild has failed.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

Operator response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System programmer response: Determine why the IRLM failed and take appropriate action to restore rebuild capability.

DXR150I *irlmx* REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE OF THE NEW STRUCTURE

Explanation: Rebuild was stopped because the NEW STRUCTURE failed.

Operator response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

System programmer response: Determine what failure occurred on the new structure and take appropriate action to restore rebuild capability.

DXR151I *irlmx* REBUILD OF LOCK STRUCTURE WAS STOPPED DUE TO FAILURE ON QUERY OR CONNECT OF THE NEW STRUCTURE

Explanation: Rebuild was stopped because IRLM received a bad return code on the IXCQUERY or IXLCONN request to XCF for the new structure.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

Operator response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System programmer response: Determine why the bad return code was received and take appropriate action to restore rebuild capability.

**DXR152I *irlmx* REBUILD OF LOCK STRUCTURE
WAS STOPPED DUE TO AN OUT OF
SPACE CONDITION ON THE NEW
STRUCTURE**

Explanation: Rebuild was stopped because the new structure contains insufficient space to hold all of the data from the old structure or from the RESTART.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

Operator response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System programmer response: Determine why the new structure was not large enough to contain all of the data from the old structure or restart. Take appropriate action to restore rebuild capability.

**DXR153I *irlmx* REBUILD OF LOCK STRUCTURE
WAS STOPPED DUE TO AN
UNEXPECTED RETURN CODE FROM
XES SERVICES**

Explanation: Rebuild was stopped because IRLM received a bad return code on a request to SLM.

System action: The REBUILD is stopped and IRLM will either DISCONNECT from the group or continue to process under the old structure, depending on the reason rebuild was initiated.

Operator response: If IRLM DISCONNECT from the group, follow local recovery procedures.

System programmer response: Determine why the return code was received from SLM and take appropriate action to restore rebuild capability.

**DXR154I *irlmx* REBUILD OF LOCK STRUCTURE
WAS STOPPED DUE TO SUCCESSFUL
COMPLETION OF GROUP FUNCTION
LEVEL CHANGE**

Explanation: IRLM started a REBUILD to establish a new group function level because a new member with a different service level is joining the group. The IRLM rebuild process then checks to see if a complete rebuild is needed to complete the group function level change. This message is issued when a complete rebuild is not needed for a successful group function level change.

System action: The REBUILD is stopped and the new IRLM member joins the group.

**DXR155I *irlmx* REBUILD OF LOCK STRUCTURE
WAS STOPPED DUE TO
UNSUCCESSFUL COMPLETION OF
GROUP FUNCTION LEVEL CHANGE**

Explanation: IRLM started a REBUILD to establish a

new group function level because a new member with a different service level is joining the group. The IRLM rebuild process then checks to see if a complete rebuild is needed to complete the group function level change. This message is issued from the existing members when a joining member can not coexist with one or more of the existing members of the group.

System action: The REBUILD is stopped and the new IRLM member does not join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed. Message DXR157I is issued by the member that was trying to join the group or message DXR158I is issued by other members in the joining member's behalf.

System programmer response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the IRLM modify command "f irlmproc,status,alli" on all of the IRLMs involved.

**DXR156I *irlmx* REBUILDING LOCK
STRUCTURE TO CHANGE THE
GROUP FUNCTION LEVEL**

Explanation: This message is issued when IRLM starts a REBUILD to establish a new group function level when a new member with a different service level is joining the group. Later messages describe further actions IRLM takes during the process of changing the group function level.

System action: The REBUILD is started. This allows IRLM to process a group function level change.

**DXR157I *irlmx* FAILED TO JOIN THE DATA
SHARING GROUP BECAUSE IT
CANNOT COEXIST WITH AT LEAST
ONE OF THE EXISTING MEMBERS**

Explanation: The IRLM member, *irlmx*, could not coexist with one or more existing members of the group because of differences in service levels.

System action: The REBUILD is stopped and the new IRLM member does not join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed.

System programmer response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,alli" on all the IRLMs involved.

DXR158I *irlmx* CANNOT COEXIST WITH AT LEAST ONE EXISTING MEMBER. ALL DBMS IDENTIFY REQUESTS TO THAT IRLM WILL BE DENIED.

Explanation: The IRLM member, *irlmx*, could not coexist with one or more existing members of the group because it does not have the service level that includes coexistence support.

System action: The REBUILD is stopped and the new IRLM member is not allowed to join the group. The DBMS that was identifying itself to the new IRLM member is notified that the IDENTIFY failed.

System programmer response: Compare the service level of the IRLM member that failed to join the group with the service level of the other IRLM members in the group. The pertinent service levels can be found by issuing the MVS modify command "f irlmproc,status,alli" on all the IRLMs involved.

DXR162I *irlmx* CYCLE NUMBER *nnnnnnnn* PROCESSED FOR TIMEOUT

Explanation: A TIMEOUT candidate has been detected on at least one IRLM. If an incompatible blocker was found, the IMS TIMEOUT EXIT has been driven to present WAITER/BLOCKER information.

System action: IRLM processing continues normally. DXR162I is issued only by the Global Deadlock Manager (GDM), the IRLM with the lowest IRLMID in the IRLMPROC. The message will be issued once per minute if there is at least one candidate waiter found during the global deadlock cycle. If a cycle occurs and no timeout waiter is found during that time, the flag is reset and DXR162I will be issued the next time a candidate waiter is present.

Operator response: Based on local operational guidelines, use RMF™ to generate a report from the 79.15 (4F 0F) SMF records with cycle number *nnnnnnnn*. If the message is issued and no 79.15 records are found, one of these errors is likely to have occurred:

1. SMF has not been enabled for the 79.15 to be cut to the MAN* data set. Check the *.IEFU84 member for MODNAME(ERBDSSMF) on each system.
2. SMF has not presented the 79.15 to the RMF data space due to a set-up error in the data space. Make sure the dataspace has been defined. Enable the 79.15 to the RMF with:
RMF,SMFBUF(RECTYPE(79))
3. The 79.15 record with cycle number *nnnnnnnn* was delayed in writing. Request the same cycle number again.
4. IRLM did not find an incompatible blocker

If the waiter cannot be identified and you wish to consult IBM SERVICE, start the IRLM *INTERNAL* CTRACE for subtype XCF on each member, then collect

MVS CONSOLE dumps of the IRLM(s) and their IMS DLI and any suspicious dependent regions. If this is in a SYSPLEX environment, you must take and save dumps of all IRLMs with XESDATA and associated DBMS regions. Once the dumps are captured, you may turn off XCF tracing. If it appears to be an invalid WAIT condition and this is a SYSPLEX environment, issue a SETXCF REBUILD to attempt recovery. If this fails to resume the waiter, follow local operation guidelines.

System programmer response: Determine if the wait is caused by application logic, operator error, or other factors. The most common cause is incorrect dispatch priority. If unable to determine the cause of the wait, contact IBM support with the documentation above.

DXR164E *irlmx* CANNOT RECOVER FOR A FAILED MEMBER DUE TO LOSS OF CONNECTIVITY TO THE LOCK STRUCTURE

Explanation: IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.

System action: Disconnect from the data sharing group.

User response: Notify the system programmer to correct the problem with the coupling facility.

Problem determination: See IXC messages to determine the root cause of the failure and the appropriate corrective action.

DXR165I *irlmx* TERMINATED VIA IRLM MODIFY COMMAND

Explanation: An operator issued a MODIFY IRLM,ABEND command.

System action: IRLM shuts down.

DXR166E *irlmx* CONNECT TO LOCK STRUCTURE FAILED FOR GLOBAL INITIALIZATION

Explanation: IRLM detects loss of connectivity to the lock structure during member recovery or global initialization. IRLM is longer able to support data sharing without the retained lock information.

System action: Disconnect from the data sharing group.

User response: Notify the system programmer to correct the problem with the coupling facility.

Problem determination: See IXC messages to determine the root cause of the failure and the appropriate corrective action.

DXR167E

DXR167E *irlmx* IRLM HAS DETECTED A DELAY
IN COMPLETION OF *vvvvvvvv*
PROCESS.

Explanation: IRLM has detected a delay in some process that might prevent other database manager or IRLM processes from running. *vvvvvvvv* is one of the following values:

ASIDxxxx

ASIDxxxx is issued when IRLM is unable to process main latch activity for some period and finds a database manager agent that does not appear to be operating. This condition might cause any of the symptoms that are listed under System action.

DPRIORTY

DPRIORTY is issued when IRLM is unable to get its main latch for some period, but the IRLM health check routine cannot identify any delayed request. This condition can cause any of the symptoms that are listed under System action.

MAIN_SRB

MAIN_SRB is issued in sysplex when irlm detects that some main latch process has been active for an extended period. This condition can cause any of the symptoms that are listed under System action.

MAXCYCLE

MAXCYCLE is issued when IRLM is unable to process all of the waiters during a deadlock cycle because the number of waiting relationships created would require excessive SRB execution time. This condition can cause any of the symptoms that are labelled S2, which are listed under System action.

NOTIFY_G

NOTIFY_G is issued in a sysplex when irlm detects that a peer notify has not returned for some period. This condition can cause any of the symptoms that are labelled S2, which are listed under System action.

NOTIFY_L

NOTIFY_L is issued when IRLM finds a NOTIFY exit drive to its database manager subsystem has not returned for some period. This condition can cause any of the symptoms that are labelled S2, which are listed under System action.

System action: The IRLM continues operation. This message stays on the console until that delay is no longer detected. When all DXR167E delays are corrected, irlm issues DXR168I. The delayed completion might prevent other IRLM or database manager processes from running. These delayed processes might cause any of the following symptoms:

- A new database manager cannot identify.

- New members might not be able to join a data sharing group. They time out during global initialization and eventually terminate abnormally.
- A terminated database manager is not resumed.
- Failed members might not get properly partitioned from the group because recovery actions for them cannot run.
- Transactions do not deadlock or time out
- REBUILD of the IRLM group will not run.
- (S2) A transaction hangs.
- (S2) Other processes contending with the hung process might also hang, potentially causing a chain reaction.
- (S2) The whole group might hang.

Operator response: Notify the system programmer.

System programmer response: This delayed process might not cause a noticeable problem to users.

If no problems are observed or reported, monitor the system for the completion of the delayed process.

If problems with the system are observed, take the following actions based on the variable term in the message. If you plan to pursue the problem with IBM Software Support, *always* capture the appropriate documentation before taking recovery actions.

ASIDxxxx

This is usually the result of low dispatch priority for some task on an over committed CPU. You can identify the task using *xxxx*, which is the home ASID in HEX of the detected task. IRLM will attempt to boost the task priority so that it gets CPU cycles to complete. The priority will be returned to original when exiting IRLM. If the DXR167E with this ASID remains displayed and DXR168I is not seen, then this task should be terminated to allow IRLM to return to normal processing.

To pursue any question with IBM Service, take dumps of the database managers, IRLM, and ASID *xxxx* before DXR168I is issued. Also include the text of the DXR167E message from the MVS console when opening the problem report.

DRPRIORTY

This is usually the result of having an incorrect dispatch priority set for the IRLM when compared to the rest of the application tasks or database manager address spaces. Determine if this is the case, and correct the dispatching priority order.

Take dumps of this database managers and IRLM asids before taking any action.

MAIN_SRB

This is usually caused when there are too many waiters in a sysplex such that the IRLM deadlock SRB must execute for long periods in

order to resolve all of the waiting relationships. You can continue to wait for it to complete, terminate the database manager or IRLM with the most WAITers as shown by the modify command, F irImproc,STATUS, or try to terminate WAITing tasks.

Take dumps of *all* database managers and IRLM ASIDs before taking any action.

MAXCYCLE

This is usually the result of an application problem or a temporary hang that allowed the number of waiters in the sysplex to become excessive (typically in the hundreds). This hang could be the result of an application deadlock occurring and not being broken quickly because global deadlock is running too slow. If the transaction rate is high, a deadlock occurs on key resources and is not detected and broken quickly, it can result in many tasks being suspended and involved in deadlocks. You might wish to consider lowering the first value of the DEADLOK parameter in the irImproc. You should issue MODIFY irImproc,STATUS on each member and if the message persists, terminate the IRLM with the largest number of waiters.

Take dumps of *all* database managers and IRLM ASIDs before taking any action.

NOTIFY_G

This is a problem with the peer database manager or IRLM member which should issue the DXR167E with NOTIFY_L. Terminate the IRLM or database manager which issued the NOTIFY_L message.

Take dumps of all database managers and IRLMs where the DXR167E message is issued. If only NOTIFY_G is seen, then take dumps of all database manager and IRLM asids.

NOTIFY_L

This is a problem with *this* database manager. If this is a sysplex, then each peer member that sent a NOTIFY to this member should issue NOTIFY_G. Terminate the database manager or IRLM where NOTIFY_L is seen.

Take dumps of all database managers and IRLMs where the DXR167E message is issued. If only NOTIFY_G is seen, then take dumps of all database manager and IRLM asids.

DXR168I *irlmx* **DELAYED PROCESSES NO LONGER DETECTED.**

Explanation: This message appears if all situations reported by previous DXR167E messages have been resolved.

System action: The IRLM continues operation.

Operator response: Notify the system programmer.

System programmer response: Try to determine what might have caused the temporary problem based on the information in the DXR167E message.

DXR169I *irlmx* **THE STORAGE SHORTAGE FOR LOCK STRUCTURE *wwwwwww* HAS BEEN RELIEVED.**

Explanation: This message indicates that the storage shortage indicated by a previously reported DXR142E message is relieved. The amount of the lock structure in use has dropped below 70%.

wwwwwww

The lock table name currently in use by the IRLM.

System action: IRLM resumes normal data sharing with no restrictions.

DXR170I *irlmx* **THE LOCK STRUCTURE *wwwwwww* IS *zz%* IN USE**

Explanation: This message shows what percent of the available capacity of the lock structure is being used by the group. The values are 50%, 60% and 70%. This message is issued only once at each of the three levels of usage and gives an indication of peak usage during the execution of an IRLM subsystem.

wwwwwww

The lock table name currently in use by the IRLM.

zz One of the following values: 50, 60, 70.

System action: The IRLM continues operation.

Operator response: Notify the system programmer.

System programmer response: This message is a warning that there is a potential to overcommit the storage for the lock structure named in the message. Track the occurrences of this message to determine a growth trend. If a growth pattern is detected, increase the storage size specifications for the lock structure in the coupling facility policy and activate the revised policy.

DXR171I *irlmx xxxxxxxx* **ARM REGISTRATION FAILED, MVS ARM RETURN CODE = *yyyyyyyy*, MVS ARM REASON CODE = *xxxxxxx***

Explanation: IRLM encountered an error using the specified MVS automatic restart manager (ARM) function. The *xxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name and the IRLM ID. For non-datasharing environments, it is the IRLM subsystem name and the IRLM ID.

System action: IRLM continues. However, if IRLM abnormally terminates, the MVS ARM cannot automatically restart IRLM.

System programmer response: Refer to *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR172I *irlmx xxxxxxxx* **ARM READY COMPLETED. MVS ARM RETURN CODE = *yyyyyyyyyy*, MVS ARM REASON CODE = *xxxxxxx***

Explanation: IRLM initialization has progressed, enabling the automatic restart manager (ARM) to restart dependent element types such as SYSDB2 or SYSIMS. *xxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name, and the IRLM ID. For non-data sharing environments, it is the IRLM subsystem name and the IRLM ID. If the return and reason codes are not zero, IRLM encountered an error using the specified MVS ARM function.

System action: IRLM continues. However, if the return and reason codes are not zero, and IRLM abnormally terminates, the MVS ARM cannot automatically restart IRLM.

System programmer response: Refer to *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR173I *irlmx xxxxxxxx* **ARM DEREGISTRATION FAILED. MVS ARM RETURN CODE = *yyyyyyyyyy*, MVS ARM REASON CODE = *xxxxxxx***

Explanation: IRLM encountered an error using the specified MVS automatic restart manager (ARM) function. *xxxxxxx* is the IRLM ARM element name. For data sharing environments, it is a concatenation of the IRLM group name, the IRLM subsystem name, and the IRLM ID. For non-data sharing environments, it is the IRLM subsystem name and the IRLM ID.

System action: IRLM continues. However, if IRLM terminates normally or abnormally, the MVS ARM automatically restarts IRLM.

System programmer response: Refer to *z/OS MVS Programming: Sysplex Services Reference* for the function, return code, and reason code from the IXCARM request.

DXR174E *irlmx xxxxxxxx csect-name* **ARM EVENT EXIT FAILED**

Explanation: IRLM automatic restart manager (ARM) event exit encountered an error while attempting to define the IRLM subsystem to MVS.

System action: The automatic restart of the IRLM subsystem stops.

System programmer response: Refer to *z/OS MVS Programming: Assembler Services Reference, Volumes 1 and 2* for return and reason codes from the IEFSSI request. To start IRLM manually, use the START irlmproc command on any system where the IRLM subsystem is defined. If IRLM is not active and AUTO START = *yes* for IRLM defined in DSNZPARM, then DB2 will attempt to start IRLM when DB2 is started.

DXR175E *irlmx* **IRLM IS UNABLE TO OBTAIN STORAGE - *storage-type***

Explanation: IRLM is attempting to acquire storage from CSA, ECSA, or extended private storage. The storage type needed is exhausted, or the monitored threshold was exceeded.

The value in field *storage-type* specifies the cause of the error:

MCSA MAXCSA has been exceeded.

Possible causes are:

- The value for the IRLM startup parameter is too low.
- The IRLM workload has an unexpected peak.

CSA CSA has been exhausted.

Possible causes are:

- The system was generated with too little CSA.
- The demand for CSA storage by jobs and tasks had an unexpected peak.

ECSA System ECSA has been exhausted.

Possible causes are:

- The system was generated with too little ECSA.
- The demand for ECSA storage by jobs and tasks had an unexpected peak.

PVT The extended private storage threshold has been reached.

Possible causes are:

- An application did not issue enough COMMITs.
- An application is caught in a loop.
- The IRLM region size is too small.
- A failed subsystem is not recovering retained locks.

System action: The IRLM continues to operate. This message stays on the console until IRLM is able to acquire the needed storage. Some database manager requests might be processed successfully, some might be rejected with out-of-storage return and reason codes, and some might hang.

Operator response: Notify the system programmer.

Try to reduce the work load on the system or the number of transactions running in the database manager.

When the out-of-storage condition is relieved, normal IRLM operation resumes. Because storage is unavailable, the following symptoms might occur:

- Transactions might abend with out of storage indications.
- Message DXR167E might be issued.
- Transactions might hang.
- Other processes contending with a hung process also hang, potentially causing a chain reaction.
- The system hangs.
- In a data sharing environment:

The whole group might hang.

New members might not be able to join. They will time out during global initialization and eventually terminate abnormally.

Failed members might not get properly partitioned from the group because recovery actions for them cannot run.

System programmer response: Take one of the following actions, depending on the value of *storage-type*:

MCSA Specify a larger value for MAXCSA, or change the PC parameter to YES.

CSA or ECSA

Generate more CSA or ECSA into the system or reduce the number of running tasks that are dependent on CSA or ECSA.

PVT Issue MODIFY *irlmproc,STATUS* to determine how many locks are held or if there are retained locks. Issue MODIFY *irlmproc,STATUS,STOR* to determine how much private region storage is available. The storage threshold can be increased by issuing MODIFY *irlmproc,SET,PVT*. Ensure that the amount of private region storage that you specify is less than or equal to the amount of private region storage that is available. IRLM does not validate that the specified amount of storage is available. See *DB2 Command Reference* for instructions on how to issue these commands.

If the condition is from an operational error that can be corrected without shutting down IRLM, correct it as soon as possible. Otherwise, shut down IRLM, correct the problem, and restart IRLM.

DXR176I *irlmx* IRLM STORAGE SHORTAGE RELIEVED

Explanation: This message appears if a situation reported in a previous DXR175E message has been resolved.

System action: The IRLM continues operation.

Operator response: Notify the system programmer.

System programmer response: Try to determine what might have caused the temporary problem as reported in a previous DXR175E message. The most likely reasons is insufficient CSA or ECSA for the combined tasks running in MVS. If possible, correct the problem without shutting down IRLM.

DXR177I *irlmx* THE VALUE FOR *nnnnnnnn* IS SET TO *xxxx*

Explanation: This message is issued in response to any successful IRLM MODIFY *irlmproc,SET,cccc* command.

Values for *nnnnnnnn* include:

- DEADLOCK
- LTE
- PVT
- TIMEOUT
- TRACE

System action:

DEADLOCK

xxxx is a value between 100 and 5000 that represents the number of milliseconds used for the IRLM deadlock interval. The value displayed is in even 100 millisecond increments.

If this IRLM is connected to the group, this message appears on each member currently connected as the member updates its control block during deadlock processing. The deadlock interval frequency is changed to the number of milliseconds displayed in the message. The global deadlock interval is aborted and global deadlock processing re-initialized to synchronize all members.

LTE

xxxx is a value between 0 and 1024 that represents the number of lock table entries available in the coupling facility. The value must be zero or a power of two. Each increment represents 1048576 entries.

If this IRLM is connected to the group, this message appears on each member currently connected as the member updates its control block during deadlock processing. The value specified with the SET command does not take effect unless the IRLM is the first to join the group.

An IRLM is the first to join a group during normal group startup or during a rebuild. If the value specified is zero or too large for the IXCQUERY policy size that was returned, the LTE value in the IRLMPROC is used. If the LTE value in the IRLMPROC is blank, zero, or too large, the number of entries is calculated

by IRLM to the nearest power of two after the returned size is divided by two.

PVT The value of PVT is set to *xxxx* megabytes.

PVT controls the storage that is used for lock structures. The system automatically adjusts *xxxx* to a number between 1 and 1800 if the number specified is not in this range. If the new PVT value is smaller than the value that is already in use, the command receives an error message, DXR106E. No validation of the value is done to see that the address space contains the storage that is specified.

TIMEOUT

xxxx is a value between 1 and 3600 seconds. This value must be a multiple of the local deadlock parameter. If the value entered by the user is not an even multiple, the next higher multiple is used. If the value specified is out of range, the maximum or minimum is used. Because serialization is needed to change the internal timeout value, it is done during the next deadlock cycle. The DXR177I message is not issued until the input has been validated and the value has been changed during a deadlock cycle. The message also displays the name of the database subsystem whose timeout value was changed.

TRACE

xxxx is a value between 10 and 255. Each trace buffer requires 64 KB of ECSA storage. IRLM can use a maximum of 255 and a minimum number of 10 trace buffers for each trace type. The system automatically adjusts *xxxx* to the maximum or minimum allowed if the value specified is out of range. The value specified does not apply if the EXTERNAL CTRACE write is active. If the number of trace buffers set by the command is less than the current buffer allocation, IRLM frees the oldest buffers until the number allocated equals the number set by the command.

DXR179I *irlmx* TRACE USAGE TRACE BUFFER STORAGE IN USE: *nnnnn*KB
MAXIMUM NUMBER OF TRACE
BUFFERS ALLOWED PER TRACE
TYPE: *nnn* TRACE TYPE ACTIVE
BUFFERS IN USE CTRACE WRITER

Explanation: This message is issued in response to the following command:

F *irlmproc*,STATUS,TRACE

The message indicates the maximum number of 64KB buffers that IRLM can use for each of its subcomponent trace types.

TRACE TYPE

The trace types are:

SLM Traces interactions with MVS locking component. Applicable only for data sharing

XIT Traces asynchronous interactions with the MVS locking component. Applicable only for data sharing

XCF Traces interactions with MVS cross-system coupling services. Applicable only for data sharing.

DBM Traces interactions with the DBMS identified to this IRLM.

EXP Traces exception conditions.

INT Traces member and group events outside normal locking activity.

ACTIVE

Whether the trace is active. (You cannot deactivate the EXP and INT traces.)

BUFFERS IN USE

How many 64KB buffers are currently being used by this trace.

CTRACE WRITE

Whether the external CTRACE writer is on.

System action: Processing continues normally.

Operator response: Trace buffers can be set via 'modify *irlmproc*,set,trace=*nnn*' command. You can activate or deactivate traces by using the TRACE CT command of MVS. You cannot turn off the EXP and INT traces. The XIT, EXP and INT are automatically activated when you start IRLM. All traces are automatically activated when TRACE=YES is specified on the IRLMPROC.

DXR180I *irlmx* AUTOMATIC RESTART MANAGER IS NOT ENABLED

Explanation: IRLM attempts to utilize the MVS Automatic Restart Manager (ARM) function, but either the system does not have access to an ARM couple data set or the ARM is not set up in the user's environment.

System action: IRLM continues; however, if IRLM abnormally terminates, the MVS ARM cannot automatically restart IRLM.

Operator response: Notify the system programmer.

System programmer response: Determine why the system does not have access to an automatic restart manager couple data set. If there is no automatic restart manager couple data set defined, determine if the ARM should be set up so that IRLM can take advantage of the MVS ARM function. The purpose of using the ARM is to reduce the time IRLM is down. When IRLM stops abnormally, the MVS ARM will restart it automatically.

**DXR181I *irlmx* RUNTIMEO COMMAND
DISABLED**

Explanation: The IRLMs are doing automatic timeout detection and the command is not needed.

System action: IRLM processing continues.

**DXR182I *irlmx* MODIFY DIAG COMMAND
PROCESSED**

Explanation: This message is issued in response to an IRLM MODIFY *irlmproc*,DIAG command.

System action: IRLM processing continues.

Chapter 32. IRLM return and reason codes

The IRLM return and reason codes are listed below. The database management system (DBMS) referred to throughout the return and reason codes is either DB2 or IMS. Some return and reason codes do not apply to DB2 operation.

The values in the 'return code' column show the request completion status:

- | | |
|-----------|--|
| 00 | The request completed successfully. |
| 04 | The request completed successfully, but the state of lock remained unchanged. |
| 08 | The request completed unsuccessfully because of a system error or condition, not a problem in the request. |
| 12 | The request completed unsuccessfully because of a logic error in the request. |
| 16 | The request completed unsuccessfully because of an invalid request specification. |
| 20 | The request completed unsuccessfully because IRLM resources are not available. |

This section contains information about the following topics:

- | | |
|--------------------------------|----------------------------------|
| • "CHANGE request" on page 708 | • "QUIT request" on page 717 |
| • "IDENT request" on page 711 | • "RETLOCK request" on page 718 |
| • "LOCK request" on page 712 | • "STAT request" on page 718 |
| • "NOTIFY request" on page 714 | • "SYNC request" on page 718 |
| • "PLEXIT request" on page 715 | • "TAKEOVER request" on page 719 |
| • "PURGE request" on page 715 | • "UNLOCK request" on page 719 |
| • "QUERY request" on page 716 | • "VERIFY request" on page 720 |

CHANGE request

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
04	X'80'		Ownership or duration was specified, but no locks were changed for one of these reasons: <ul style="list-style-type: none"> • The 'set of locks' specified included no held locks. • All specified locks had a duration value greater than or equal to the specified duration. • PSTATE=TSTATE was specified.
	X'20'		Other holders of the lock exist.
	X'10'		From-duration was specified on a CHANGE ALL request, but the from-duration did not match the held-duration for at least one lock. The mismatched lock is not altered, but other locks might have been altered.
	X'08'		This lock was involved in a deadlock condition, but was not selected as the victim.
	X'02'		The CHANGE STATE request specified a 'tstate' value less restrictive than the current held state of the lock.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
08	X'80'		A nonrecoverable system error occurred while processing this request.
	X'40'		The lock is not available in the requested state. MODE=COND was specified.
	X'20'		The request was rejected because of a deadlock.
	X'10'		The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.
	X'08'		The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait.
	X'01'		There is insufficient storage for the IRLM to process the CHANGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
		X'80'	This request was involved in lock negotiation with other DBMSs and was denied.
		X'10'	No more record list entries are available.
		X'08'	An environmental error occurred in the System Lock Manager(SLM) component of MVS.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
12	X'80'		An invalid request to change a work unit's Compatibility Class Token was issued. The value in RLPOLDCT did not match what had been specified on a previous lock or change request for this work unit.
	X'40'		The work unit does not hold the lock.
	X'20'		No lock exists for the specified resource hash and name values.
	X'10'		From-duration was specified on a change single request, but the from-duration did not match the held-duration for that lock. The lock is not altered.
	X'08'		The lock is not held in the state specified by 'fstate'.
	X'04'		The resource is not locked by the work unit in the specified class.
	X'02'		A suspended LOCK or CHANGE request exists against the lock. If ownership or duration change of a group of locks was requested, some locks might have changed before this condition was detected.
	X'01'		The target work unit (TWU) already holds a lock or is waiting for a lock on a resource for which this request is attempting to transfer lock ownership. Ownership or duration change of other locks specified by this request might have occurred before this condition was detected.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
16	X'80'		An invalid 'tstate' was specified. The value is greater than 11.
	X'40'		The CLASS is invalid. The value is greater than 31.
	X'20'		The count-by-state lock has a valid 'tstate', but the 'fstate' is zero.
	X'10'		Both STATE and TWU were specified.
	X'08'		STATE was specified, but TOKEN and RNA were omitted.
	X'04'		The TOKEN is invalid. It cannot be resolved to a lock held by the specified owning work unit.
	X'02'		The resource name length is invalid. The length is less than 2 or greater than 32 bytes.
	X'01'		The 'fstate' is invalid for a count-by-state lock. The value is greater than 11.
		X'40'	A target work unit was given but no owner was specified or the target & owner are the same.
		X'20'	Repeatable reader was specified and no token or resource name was given.
20	N/A		IRLM services are not available.

IDENT request

Return Code	Reason Code	Description
04	X'80'	Scope=NoDiscon specified on the irlmproc, identify is successful.
	X'40'	IRLM is ARM registered
	X'10'	Locks are held from the previous IDENT request. Locks held by the identifying DBMS from a previous failure are still in protected status.
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'40'	An MVS subsystem interface (SSI) error occurred during identification. Ensure that the 4-character IRLM name used by the subsystem to identify to the IRLM was defined as an MVS subsystem, and that the IRLM subsystem with the same name was started.
	X'04'	Identify for recovery (SSTYPE=RECON) was requested, but this IRLM has no retained information about this DBMS.
	X'01'	There is insufficient storage for the IRLM to process the IDENT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.

Return Code	Reason Code	Description
16	X'80'	The lock table name is invalid. It probably contains blanks.
	X'40'	The SSNAME is invalid. An active DBMS in the data sharing group is already using this name.
	X'20'	A required exit is missing. If a TIMEOUT exit is specified, TIMEV must be greater than 0. TIMEV is specified in the installation process.
	X'10'	A read-only request is not allowed. Locks are retained for this DBMS.
	X'08'	This request violates the single DB2/IRLM rule.
	X'04'	The address of the BACKUP subsystem name pointed to inaccessible storage.
	X'02'	This IRLM does not support the requested function level. A probable cause is the version/release of this IRLM does not support this version/release of DB2. IRLM is back-level.
	X'01'	The IRLM failed to connect to the data sharing group and abended. After fixing the connection error, reconnect the IRLM to the data sharing group.
20	N/A	IRLM services are not available.

LOCK request

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
04	X'80'		A restart lock successfully reacquired a retained lock.
	X'40'		Modify lock granted but no record list entry created.
	X'20'		Other lock holders exist.
	X'10'		The lock is already held.
	X'08'		This lock was involved in a deadlock, but was not selected as a victim.
	X'04'		Another work unit holds the lock private.
		X'04'	At least one other work unit holds the lock with the repeatable read (RR) attribute.
		X'02'	The work unit that submitted this lock request holds the lock with the repeatable read (RR) attribute.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
08	X'80'		A nonrecoverable system error occurred while processing this request.
	X'40'		The lock is not available in the requested state. MODE=COND was specified.
	X'20'		The request was rejected because of a deadlock or timeout.
	X'10'		The lock request cannot be granted because of the failure of another DBMS that holds a retained lock in a state incompatible with the requested state of this request. This subcode is also issued when the lock cannot be granted because of an incompatibility with a lock in NOWAIT status. A lock is placed in this status when a QUIT,HELD=WORKUNIT is issued to the IRLM.
	X'08'		The DBMS is operating in CLEANUP mode because a system failure occurred or because retained locks were deleted without a guarantee that database recovery was done. The DBMS must issue a PURGE request before any global lock request is allowed to wait. The same reason code is presented if the LOCK request is canceled by a SYNC request.
	X'04'		Another holder holds the restart lock in an incompatible state.
	X'02'		The maximum number of locks that can be held by this work unit was exceeded. The LOCKMAX parameter specifies the maximum.
	X'01'		There is insufficient storage for the IRLM to process the LOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
		X'80'	This request was involved in lock negotiation with other DBMSs and was denied.
		X'10'	No more record list entries are available.
		X'08'	An environmental error occurred in the System Lock Manager (SLM) component of MVS.
		X'04'	The lock is held by at least one other work unit with the repeatable read (RR) attribute.
		X'02'	The lock is held with the repeatable read (RR) attribute by the work unit that submitted this request.

Return Code	Reason Code Byte 1	Reason Code Byte 2	Description
12	X'80'	X'80'	An INDOUBT request was specified but either the retained lock for this does not exist, or this is a child resource.
			A work unit within this IRLM already holds the P-lock. Only one owning work unit is allowed to hold interest in a P-lock within an IRLM.
16	X'40'		An illegal attempt was made to change a Compatibility Class Token (CCT). A previous lock or change request had specified a CCT (non-zero) and the most recent request specified a CCT that did not match.
	X'40'		The CLASS is invalid. The value is greater than 31.
	X'20'		The STATE is invalid. The value is 0 or greater than 11.
	X'08'		The SCOPE is invalid. A previous request defined a different SCOPE for the resource.
	X'04'		The TOKEN or PARENT TOKEN is invalid.
	X'02'		The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'		An invalid retained state was specified. The retained state is greater than the requested state. If the lock was granted and then retained, it could exist in an incompatible state with other holders.
	X'0080'		TYPE=SINGLE lock request specified but: <ul style="list-style-type: none"> • It is not a P-lock or • a Compatibility class token was also specified or • a parent was also specified
20	N/A		IRLM services are not available.

NOTIFY request

Return Code	Reason Code	Description
04	X'80'	An asynchronous request was accepted.
	X'40'	The receiver returned additional return code information to the requester.
	X'20'	A selective notify request was made, but there were no DBMSs with the right qualifications to receive this request.
	X'02'	One or more DBMSs holding locks failed and could not be notified.

Return Code	Reason Code	Description
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the NOTIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'08'	NOTIFY request is purged by sync.
	X'40'	The lock is not held by the specified owning work unit.
	X'20'	No lock exists for the specified resource hash and name values.
	X'10'	The target DBMS name is not known to IRLM.
16	X'80'	The message area address is invalid.
	X'08'	The message length is zero.
	X'04'	The TOKEN is invalid.
	X'02'	An invalid resource name was specified. The length is less than 2 or greater than 32 bytes.
20	N/A	IRLM services are not available.

PLEXIT request

Return Code	Reason Code	Description
4	X'80'	The P-lock exit was already enabled.
	X'40'	The P-lock exit was already disabled.
8	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the PLEXIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'40'	The P-lock exit was not defined at IDENTIFY time.
20	N/A	IRLM services are not available.

PURGE request

Return Code	Reason Code	Description
04	X'10'	The locks are already released.
	X'08'	The PURGE-required count was decremented.

Return Code	Reason Code	Description
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the PURGE request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'80'	A PURGE TYPE=TAKEOVER was issued, but the requester did not issue a corresponding TAKEOVER request.
	X'40'	A PURGE TYPE=SFAIL was issued, but this IRLM is still part of the data sharing group. An IRLM cannot be in system failed state while it is part of a data sharing group. This code indicates that IMS has invalid information about its status in the group.
	X'20'	A PURGE-BY-WORK-UNIT was issued but no owning work unit was specified.
	X'10'	A PURGE-BY-WORK-UNIT was issued but is not supported by all members.
16	X'01'	A GENERIC PURGE request was made but the resource name is zero or the name length is out of range.
20	N/A	IRLM services are not available.

QUERY request

Return Code	Reason Code	Description
04	X'80'	There is no information meeting the criteria of the specified parameters.
	X'01'	The QUERY request did not specify an area large enough to contain all the data requested.
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the QUERY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.

Return Code	Reason Code	Description
16	X'80'	The AREA address is invalid or zero.
	X'40'	An invalid continuation token was specified.
	X'08'	The AREA length is invalid. The AREA length is less than 4.
	X'04'	The TOKEN is invalid. The TOKEN value does not correspond to an existing lock, or the lock is not held by the designated work unit.
	X'02'	The resource name length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'	The DATA=RETAIN parameter is invalid. SCOPE=WU, OWU, or TOKEN was specified.
20	N/A	IRLM services are not available.

QUIT request

Return Code	Reason Code	Description
04	X'10'	Modify locks are retained.
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the QUIT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'80'	The owing work unit (OWU) specified on a HELD=WORKUNIT request was not found.
	X'40'	The owning work unit (OWU) parameter was not specified on a HELD=WORKUNIT request.
	X'20'	A QUIT HELD=RETAIN request was already processed.
	X'10'	This IRLM has no knowledge of this DBMS. Either a QUIT HELD=RELEASE was already processed or the DBMS was never identified to this IRLM.
20	N/A	IRLM services are not available.

RETLOCK request

Return Code	Reason Code	Description
04	X'20'	The child retained lock was not created because it is covered by the parent retained lock specified in PTOKEN or PNAME.
	X'40'	A retained lock on the resource in a different state already exists. The states were merged and the resultant state was used to update the existing retained lock.
	X'80'	A retained lock already exists for this resource by this DBMS.
16	X'80'	DBMS name specified on the request is either zero or blank.

STAT request

Return Code	Reason Code	Description
8	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the STAT request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'80'	The SSNAME specified a subsystem not identified to this IRLM.
16	X'80'	The AREA address is invalid or zero.
	X'08'	The AREA length is invalid.
20	N/A	IRLM services are not available.

SYNC request

Return Code	Reason Code	Description
04	X'08'	At least one request matched the cancel criteria and was canceled by IRLM.
	X'01'	There is insufficient storage for the IRLM to process the SYNC request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
08	X'80'	A nonrecoverable system error occurred while processing this request.

Return Code	Reason Code	Description
12	X'80'	CANCEL=YES was specified, but the work unit held no locks.
	X'40'	The caller specified RESUME=NO but did not give the TAGET RLPL of the request to cancel.
14	X'10'	The work unit was not found.
20	N/A	IRLM services are not available.

TAKEOVER request

Return Code	Reason Code	Description
00	N/A	Takeover completed successfully for a DBMS that was identified either to this IRLM or to the IRLM in PTB communication with . Restart locks might be requested.
04	X'80'	Takeover completed successfully for a DBMS that was not known to this IRLM.
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the TAKEOVER request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'80'	The DBMS that issued the request was not identified as an alternate DBMS.
	X'40'	The DBMS being taken over identified itself as an alternate DBMS, or another DBMS already issued a takeover request.
20	N/A	IRLM services are not available.

UNLOCK request

Return Code	Reason Code	Description
04	X'80'	One or more locks are held. Some locks did not satisfy the generic resource specification.
	X'20'	Additional locks are held in other states. This applies only to count-by-state locks.
	X'10'	The IRLM cannot release one or more parent locks because child locks exist.
	X'08'	The lock was not fully released.
	X'04'	The work unit holds locks in other classes.
	X'02'	Locks could not be released because the duration specified on the request was lower than the duration previously set.

Return Code	Reason Code	Description
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'40'	A P-lock conditional request would have had to wait on a held resource latch. The resource latch could have been held by an in-progress P-lock negotiation or a Notify with Latch request.
	X'01'	There is insufficient storage for the IRLM to process the UNLOCK request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
12	X'40'	The work unit does not hold the lock.
	X'20'	No lock exists for the specified resource hash and name values.
	X'10'	The IRLM cannot release the parent lock because child locks exist.
	X'08'	The lock is not held in the specified STATE.
	X'04'	The lock is not held in the specified class.
16	X'40'	The CLASS is invalid. The value is greater than 31.
	X'20'	The STATE is invalid. The value is greater than 11.
	X'10'	The owning work unit (OWU) parameter is not specified.
	X'04'	The TOKEN is invalid.
	X'02'	The resource name (RNA) length is invalid. The length specified is less than 2 or greater than 32 bytes.
	X'01'	TYPE=GENERIC was specified, but no resource name (RNA) was specified.
20	N/A	IRLM services are not available.

VERIFY request

Return Code	Reason Code	Description
00	X'80'	At least one entry in the VERIFY list was not known to IRLM.
	X'40'	IRLM recognized at least one entry in the VERIFY list, but the entry did not have matching DBRC RECON status.
08	X'80'	A nonrecoverable system error occurred while processing this request.
	X'01'	There is insufficient storage for the IRLM to process the VERIFY request. After all other subsystems identified to the IRLM have quit, terminate the IRLM and increase the storage available to the IRLM before restarting it.
16	X'80'	The VERIFY SSNAREA area address is invalid.

Return Code	Reason Code	Description
20	N/A	IRLM services are not available.

Chapter 33. IRLM abend codes

This section describes the abend codes issued by the internal resource lock manager (IRLM). The database management system (DBMS) referred to throughout the abend codes is either DB2 or IMS. Some abend codes do not apply to DB2 operations.

2017

Explanation: This is an internal error. IRLM processing of a request from a database management system (DBMS) failed. The IRLM issues console message DXR123E containing the error ID.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and check the error ID in the message. Contact the IBM Support Center for help in determining the problem.

Problem determination: The problem usually is a program check within the IRLM code. The dump title includes a module name and an offset into the module where the ABEND was issued.

2018

Explanation: An unrecoverable error occurred during IRLM initialization. The IRLM issues console message DXR116E containing an error code.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested for some of the error codes.

System programmer response: Analyze the error code in message DXR116E to determine the reason for this failure. If you are unable to resolve the problem, contact the IBM Support Center.

2019

Explanation: This is an internal error. The IRLM detected either a destroyed storage pool or an invalid request. The IRLM issues message DXR122E to the console.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2020

Explanation: The MVS operator requested an abnormal termination of the IRLM. The IRLM issues message DXR124E to the console.

System action: The IRLM is terminated abnormally. If the NODUMP parameter was omitted from the command, an SDUMP is requested.

System programmer response: The SDUMP shows the status of the IRLM.

2022

Explanation: This is an internal error. IRLM issues this abend because one of its subtasks abended. The IRLM issues message DXR122E to the console.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2023

Explanation: The IRLM encountered an out-of-storage condition either from a logic error, a subsystem definition error, or an error from an MVS service that must be performed for the IRLM to continue processing. The IRLM message DXR175E is issued to the console to help identify the error, followed by the DXR122E message describing the abend.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested and will be issued unless superseded or suppressed.

System programmer response: From the information in message DXR175E, determine what storage was in error and what the probable cause is. If IBM Service is required, obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2024

Explanation: This is an internal error. The database management system (DBMS) parameter list is invalid.

System action: The requesting DBMS is abended with user abend 2024. The IRLM continues processing.

System programmer response: Obtain the dump of the requesting DBMS and contact the IBM Support Center for assistance.

2025

Explanation: This is an internal error. An IRLM request to MVS failed with an unexpected reason code. The IRLM issues message DXR139E to the console with the failing return and reason codes. Message DXR122I is also issued.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2027

Explanation: This is an internal error. The IRLM detected a logical inconsistency in either its processing or the local lock structure. IRLM issues message DXR122E to the console.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

2031

Explanation: This is an internal error. The IRLM requested that MVS terminate the IRLM address space because of a previous error. The IRLM issues message DXR122E to the console.

System action: The IRLM terminates abnormally. An SDUMP of the IRLM address space is requested.

System programmer response: Obtain the SDUMP and contact the IBM Support Center for help in determining the problem.

Problem determination: The dump title includes a module name and an offset into the module where the ABEND was issued.

Part 5. Appendixes

Appendix A. Abend codes for CICS transactions

DSNC

Explanation: The CICS attachment facility has detected an error and returns a 4-character abend code. This abend code is usually associated with one of the other CICS attachment facility X'04E' abends.

System action: The CICS attachment facility processing proceeds as defined for the X'04E' system abend associated with the dump. If diagnostic information is required and the CICS attachment facility determines that the transaction should also be abended, EXEC CICS ABEND is issued using AD2 or AD3 as the abend code. Otherwise dump continue, EXEC CICS DUMP, is issued with AD2 or AD3 as the dump code, and a return code is placed in the application's SQLCA.

User response: Notify the system programmer.

Operator response: Notify the system programmer.

System programmer response: The Problem Determination section of this message provides information in addition to the information that is related to the associated CICS attachment facility abend. Use it to assist you in determining the cause of the error.

Problem determination: The reason for the error can be determined by the codes in the CLOTCLFG field of the CLOT control block, included in the dump. The following list contains explanations of codes in this field:

00	Normal, no error.
04	RCT entry has been corrupted or overlaid. See message DFHDB2044.
08	Attach Installation error.
0C	Shutdown is in progress.
10	Abend because of 'no threads available'.
14	Serious error (system abend X'04E', reason code '00C30001').
18	The thread subtask has abended; see subtask dump.
1C	Sign-on failed.
20	Resource is unavailable.
24	Create thread failed for a reason other than resource contention.
28	Unknown CICS call type.
2C	Indoubt condition lost to CICS cold start.

30	Unit of recovery (UR) token for resolve indoubt is not in the indoubt list.
34	DB2 UR indoubt is inconsistent—CICS indicates that it should not be indoubt.
38	UR resolution is inconsistent—CICS indicates abort, but DB2 indicates commit.
3C	DB2 resolve indoubt failed.
40	Deadlock; roll back the transaction.
44	Unknown CICS resource manager call.
48	TWA size too small for CICS attachment facility command processor program (DSNCCOM1).
4C	Unable to interpret SQL call.
50	Shutdown during commit or abort.
54	Abort is the only valid request.
58	Wrong language interface used with instrumentation facility interface application.
5C	Cannot link to dynamic plan exit.
60	Single phase commit failed.
64	Task was purged under CICS.

If the thread subtask has abended, a reason code has been put into the CLOTWRK1 field and the abend code put into the CLOTWRK2 field. The reason code can also be found in the CICS trace table, at TRACE ID X'C0', FIELD B.

Collect the subtask SNAP dump and refer to the reason code found in *DB2 Codes*. The Problem Determination section of some reason codes refers to register contents at the time of the abend. The register contents can be found in the SNAP dump under RTM2WA SUMMARY. Register contents can also be found in the SYS1.LOGREC record.

Appendix B. SNA sense codes

This section describes the SNA sense codes issued by the DB2 product when an error is detected on an LU6.2 conversation. We have also included some SNA sense codes which DB2 does not issue but users often have trouble diagnosing.

There are many SNA sense codes that are not described here. For information concerning the SNA sense codes that are not included, refer to *SNA Formats*.

080F6051

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the remote site did not accept the security information contained in the SNA FMH5.

System action: The attempt to access the remote database resource fails, and the failure is reported to the application.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User response: Notify the communications database administrator.

System programmer response: If the remote site is a DB2 subsystem, refer to the DSNL030I message at the remote site for the cause of the security failure. Additionally, an ALERT is recorded in NetView (if the NetView product is available) to describe the security failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the security failure at the remote site.

Verify each of the following:

- The USERNAMES column of the SYSIBM.LUNAMES table at the local DB2 system must specify either 'O' or 'B', if you intend authorization IDs and PASSWORDs to be sent on LU6.2 ALLOCATE requests to the remote site.
- The authorization ID and PASSWORD sent on the LU6.2 ALLOCATE request are specified correctly in the SYSIBM.USERNAMES table.
- If you intend to translate the authorization IDs, insure the NEWAUTHID column of the SYSIBM.USERNAMES table is the authorization ID to be used at the remote site.
- If password encryption is used (ENCRYPTPSWDS='Y' in the SYSIBM.LUNAMES table), the remote site must be a DB2 subsystem. The ENCRYPTPSWDS column of the SYSIBM.LUNAMES table must be correctly set at both the local and remote DB2 subsystems.
- The correct password is set to the remote site.

1. For encrypted passwords, the password sent to the remote DB2 subsystem is obtained by extracting the password from the local security subsystem of the authorization ID in the NEWAUTHID column of the SYSIBM.USERNAMES.
2. If password encryption is not used, the password is taken from the PASSWORD column of the SYSIBM.USERNAMES table.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

080F6052

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the security subfields in the FMH5 were not formatted as required by the LU6.2 architecture.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

Programmer response: Contact the administrator for the client system. The client system might have a software defect.

080FFF00

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the password supplied to the server has expired.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

Programmer response: Change the password at the remote database server, so that the password is no longer expired.

Problem determination: If updating the password does not correct the problem, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

080FFF01

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the password supplied to the server was incorrect.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

User response: Supply the correct password on the connection request.

Problem determination: If supplying the correct password does not fix the problem, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

080FFF02

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the userid specified on the request was revoked at the server system.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

User response: Contact the security administrator at the server to have your userid re-activated.

Problem determination: If reactivating the userid does not correct the problem, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

080FFF03

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because the userid supplied to the server was invalid.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

User response: Supply a valid userid on your connection request.

Problem determination: If the problem cannot be correct by changing the userid, collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

080FFF04

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because no userid was present in the connection request.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

Programmer response: Contact the administrator of the client system. The client must be configured to include a userid on connection requests.

080FFF05

Explanation: An attempt to allocate a VTAM LU6.2 conversation failed because a password was not supplied in the connection request.

System action: The attempt to access the remote database resource fails, and the failure is reported to the SQL application.

Programmer response: Contact the administrator of the client system. The client must be configured to transmit a password in the connection request.

This is known in LU6.2 as SECURITY=PGM on the ALLOCATE verb.

08120000

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

User response: Notify the systems programmer.

System programmer response: If the site issuing this sense code is a DB2 subsystem, refer to the DSNL030I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

084B0000

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

User response: Notify the systems programmer.

System programmer response: If the site issuing this sense code is a DB2 system, refer to the DSNL500I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

084B6031

Explanation: A VTAM LU6.2 conversation was terminated due to a resource shortage.

System action: The LU6.2 conversation is terminated.

User response: Notify the systems programmer.

System programmer response: If the server site issuing this sense code is a DB2 system, refer to the DSNL030I message at the DB2 site for the cause of the failure.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the resource shortage at the remote site.

Problem determination: Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 1.

08570008

Explanation: A VTAM LU6.2 conversation is not allowed because the LU session required for the processing of the request is not active.

System action: The LU6.2 conversation is terminated.

User response: Notify the system programmer about the network failure.

System programmer response: If the server site issuing this sense code is a DB2 subsystem, make sure DDF is started.

If the remote site is not a DB2 subsystem, obtain any diagnostic information about the inactive LU at the remote site.

Problem determination: Collect the following diagnostic item listed in Appendix C, "Problem determination," on page 735: 1.

08640000

Explanation: A DEALLOCATE TYPE(ABEND_PROG) verb was issued to terminate the LU6.2 conversation. This occurs when an unrecoverable error was detected during distributed database processing.

System action: An error was encountered which required the LU6.2 conversation to be terminated abnormally. The conversation is terminated using DEALLOCATE TYPE(ABEND_PROG), which is detected as a communication error at the remote site.

User response: Notify the systems programmer.

System programmer response: Look for messages or SVC dumps at the site which issued the DEALLOCATE TYPE(ABEND_PROG).

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

08640001

Explanation: A DEALLOCATE TYPE(ABEND_SVC) verb was issued to terminate the LU6.2 conversation. This occurs when a remote system encounters an unrecoverable error in attempting to satisfy a distributed database request.

System action: An error was encountered which required the LU6.2 conversation to be terminated abnormally. The conversation is terminated using DEALLOCATE TYPE(ABEND_SVC), which is detected as a communication error at the remote site.

User response: If the site issuing the DEALLOCATE TYPE(ABEND_SVC) is a DB2 subsystem, that DB2 site is in the process of stopping the distributed data facility (DDF). You must retry your request once DDF is restarted at that site.

System programmer response: If the site issuing DEALLOCATE TYPE(ABEND_SVC) was not coming down, look for messages or SVC dumps at that site that would cause the conversation to be terminated.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1.

08640002

Explanation: An SNA conversation was terminated with an SNA ABEND_TIMER indication.

System action: When communication with the coordinator of a unit of work fails and the commit/abort decision has not yet been received, DB2 uses the X'08640002' SNA sense code to terminate conversations with all other LUs involved in the unit of work. This informs the other LUs in the unit of work that a 2-phase commit communication outage occurred. All LUs involved in the unit of work are still able to determine the outcome of the unit of work, because either DB2 or the remote system performs the SNA resynchronization protocol to determine the coordinator's decision (commit or abort) for the unit of work.

System programmer response: No action is required.

10086011

Explanation: An invalid LUWID value was detected in the data received from a remote site. When a remote site sends a request using application-directed access, the first portion of the data contains an SNA FMH5 header. This header contains the invalid LUWID.

System action: The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User response: Notify the systems programmer.

System programmer response: The remote site is required to send a valid LUWID value when using application-directed access.

Verify that the remote site issuing this request is indeed attempting to start a conversation using

application-directed access. It is possible that the remote site mistakenly attempted to start a conversation with DB2, using the transaction program name (TPN).

If the remote site is attempting to start a conversation using application-directed access, contact the support group for the remote site to determine why an invalid LUWID is being transmitted.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

10086021

Explanation: A remote site sent a request that specifies an unknown transaction program name (TPN). The first message in the request contains an SNA FMH5 header, which specifies the TPN to be used.

System action: The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User response: Notify the systems programmer.

System programmer response: This error is usually caused by one of these errors:

- DB2 returns this sense code to an application at a remote site when the application mistakenly routes an LU6.2 ALLOCATE request to DB2. In most cases, the remote site selected the wrong partner LU name (DB2's LU name) on the LU6.2 ALLOCATE verb.
- A DB2 server received an invalid Transaction Program Name (TPN) from a DRDA requester. The only DRDA TPN that DB2 considers valid is X'07F6C4C2'.
- If DB2 receives this sense code from a remote site, one of the following can potentially be the cause:
 1. If you are using application-directed access, the remote site does not support application-directed access. This can occur if the remote site is a DB2 Version 2 Release 2 system, which does not support application-directed access.
 2. If you are using system-directed access, the remote site issues this sense code if it is not another DB2 site. System-directed access is only supported between DB2 subsystems. Other systems do not support this function.
 3. The SYSIBM.LOCATIONS table does not specify the correct LUNAME value for your intended destination. This causes VTAM to route your request to the wrong site, which probably does not support distributed database functions.
 4. The remote site does not support distributed two-phase commit protocols, but the VTAM APPL definition for the remote LU specifies that two-phase commit protocols are supported. This

can occur if the remote site is a DB2 Version 2 system which has SYNCLVL=SYNCPPOINT specified in its VTAM APPL definition. For DB2 Version 2 systems, the VTAM APPL definition statement should specify SYNCLVL=CONFIRM (the default), since DB2 Version 2 systems do not support distributed two-phase commit protocols.

If none of the above explains the failure, you must contact the support group for the remote site to determine why an invalid TPN is being transmitted.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

10086031

Explanation: A remote site rejected a request using system-directed access because it contained program initialization parameters (PIP) in the SNA FMH-5 header. This error indicates the remote site is not another DB2 subsystem.

System action: The attempt to allocate an APPC conversation is rejected.

User response: The failing SQL statement specified an SQL object that was either:

- An ALIAS for a remote object
- Or a three-part name identifying a remote object.

This access method can only be used when the remote object resides on another DB2 subsystem.

If the remote object resides on a different relation database system, you must use application-directed access to access the remote object.

System programmer response: If DB2 receives this sense code when attempting to start a conversation, the SYSIBM.LOCATIONS table probably has an incorrect LUNAME value for the failing site. If the wrong LUNAME is provided, VTAM routes the request to the wrong network destination.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59.

10086034

Explanation: An SNA FMH5 was received that requested an APPC conversation type (MAPPED or BASIC), which was not consistent with the transaction program name (TPN) specified.

System action: The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User response: Notify the systems programmer.

System programmer response: The conversation type must be BASIC.

If DB2 sends this sense code to a remote site, an APPC application probably mistakenly routed an APPC ALLOCATE request to DB2.

If DB2 receives this sense code from a remote site, the DB2 SYSIBM.LOCATIONS table might have an incorrect LUNAME value for the failing LOCATION. This causes VTAM to route the request to the wrong destination, which can potentially be flagged in this manner.

If none of the above explains the failure, contact the support group for the remote site to determine why the conversation type is being sent incorrectly.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

10086041

Explanation: An SNA FMH5 was received that requested a SYNC_LEVEL that was not consistent with the transaction program name (TPN) specified.

System action: The attempt to allocate an APPC conversation is rejected.

A DSNL032I message might have been written to the console. Refer to the description of this message for further information.

User response: Notify the systems programmer.

System programmer response: The SYNC_LEVEL must be NONE.

When DB2 sends this sense code, it is usually caused by an APPC application that mistakenly routed an APPC ALLOCATE request to DB2.

If DB2 receives this sense code, the DB2 SYSIBM.LOCATIONS table probably has an incorrect LUNAME value for the failing LOCATION. This causes VTAM to route the request to the wrong destination, which can potentially be flagged in this manner.

If none of the above explains the failure, you must contact the support group for the remote site to determine why the SYNC_LEVEL is being sent incorrectly.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58, 59, 83.

800A0000

Explanation: A distributed database message was truncated during transmission through the network. When the data is being transmitted, the data is broken up into smaller pieces, based on the SNA RU size

specified by your Communications Administrator. This error indicates that one or more device in your network could not accept messages of the size specified in the chosen RU size.

This abend reason code is issued by the following CSECT: None

System action: The conversation is terminated.

User response: Notify the systems programmer.

System programmer response: The data flowing to the failing destination specified an RU size that was too large for the network connections used to route the data. One of two actions must be taken:

1. The network connections along the path must be changed to support the largest PIU being transmitted (a PIU is 29 bytes longer than the RU size you specify).

For VTAM channel-to-channel connections, the MAXBFRU parameter on the VTAM LINE statement is used to control this function.

MAXBFRU specifies the number of 4KB buffers used to pass data over the channel. Since a PIU includes a 29 byte header, MAXBFRU must be at least 2 in order to support an RU size of 4096.

For connections to NCP, the MAXDATA parameter on the PCCU macro must be large enough to hold an entire PIU.

2. If you would rather not change the MAXBFRU and MAXDATA values, a smaller RU size must be specified. This can be accomplished by reducing the RUSIZES parameter for each MODEENT macro used by DB2 in your LOGMODE table.

Problem determination: Collect the following diagnostic items listed in Appendix C, "Problem determination," on page 735: 1, 58.

Appendix C. Problem determination

This section contains the following topics about problem determination:

- “Diagnostic items”
- “Resource types” on page 738
- “ABEND codes associated with DSN1COPY misuse” on page 740
- “Explanations” on page 743

Diagnostic items

1. Console output from the system on which the job was run, and a listing of the SYSLOG data set for the period of time spanning the failure.
2. Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E/04F abends).
3. SVC dump (or system dump), taken to SYS1.DUMPxx data set, as result of an operator initiated dump command or SLIP trap exit.
4. SYSABEND, SYSUDUMP, or SYSMDUMP output.
5. Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1.
6. Listing of DB2 log output.
7. Link pack area map (LPAMAP) and nucleus load module map, obtained by executing AMBLIST.
8. Listing of the procs used to initialize DB2 address spaces.
9. Listing of DSNZPARM module used.
10. IDCAMS LISTCAT output for the ICF (VSAM) catalog containing the DB2 subsystem catalog that defined the failing index or table.
11. IDCAMS LISTCAT output showing the attributes of all of the active log data sets for the member of the DB2 member that failed.
12. VTOC listing of the DASD volume on which the failing operation occurred.
13. Dump of the index or table space that failed.
14. Listing of the results produced by the SQL statements.
15. Listing of DB2 catalog tables.
16. Contents of the BSDS (both copies if dual BSDS in use) obtained by using the DB2 print log map (DSNJU004) utility.
17. Source listing of the failing application program.
18. IRLM trace output.
19. Output of the GTF trace (if requested by IBM).
20. Listing of the DSNTRACE data set for the DSN (TSO attachment facility) session involved in the problem.
21. Listing of the ISPF log for the session involved in the problem.
22. CICS trace listing.
23. CICS attach MVS SNAP dump.
24. CICS transaction dump.
25. IMS trace output.
26. IMS dependent region and/or control region dump.
27. IMS/VS Version 1 system log information, for the period of time spanning the failure.
28. VVDS dump of the volumes containing the data set.
29. DB2 Repair dump of the requested page.
30. DSN1LOGP detail report containing log records associated with the damaged page.
31. Detailed description of events immediately prior to and during the abend.

32. SYSPRINT output, including JCL, for the application program or batch job and system messages that were issued. Make sure that MSGLEVEL=(1,1) on the JOB statement so that all diagnostic information is sent to SYSPRINT.
33. DB2 log output, including any DB2 Recovery Log Archive Tapes.
34. DB2 dump of the requested page.
35. Definitions of views and tables involved in the error.
36. Listing of the IRLM procedure.
37. Definitions of table spaces, tables, and indexes involved in the error.
38. Results from SELECT * from SYSIBM.SYSDATABASE.
39. Use IDCAMS to print from BSDS the record with key of X'16000001'.
40. DB2 Repair dump of the pages identified in DSN1014I messages.
41. CHECK utility output.
42. DB2 Repair dump of the pages identified in DSN1013I messages.
43. A copy via (DSN1COPY) of the index space or table space identified in the DSN1013I messages on tape.
44. DB2 Repair dump of the header page (page 0) for each index identified in the DSN1013I messages.
45. IMS console log.
46. UTPRINT output produced by utility invocation of SORT.
47. Repair dump of all SYSUTIL pages.
48. Dump of page set from DUMP option of REPAIR.
49. All dumps taken by the attachment facility or requesting application.
50. Console output from the system on which the job was run, and a listing of the MVS SYSLOG data set for the period from the last IPL to the time of the failure.
51. An MVS stand-alone dump.
52. Precompiler listing of failing application program with SOURCE(YES) and XREF(YES) specified.
53. Listing of SYSIBM.SYSLGRNX and/or SYSLGRNG, and SYSIBM.SYSCOPY.
54. A copy of the DDITV02 SYSIN data set.
55. A copy of the DDOTV02 output data set.
56. The console output and the listing of the SYSLOG data set from each connected site for the period of time spanning the failure.
57. The listings of the SYS1.LOGREC data set, obtained by executing IFCEREP1 at each connected site.
58. A listing of the contents of the SYSIBM.IPNAMES and SYSIBM.LUNAMES tables at the local DB2 system and the remote DB2 system.
59. A listing of the contents of the SYSIBM.USERNAMES table at the local DB2 system and the remote DB2 system.
60. Dynamic dump, taken to SYS1.DUMPxx data set, by DB2 (04E/04F abends). Availability of this dump is dependent upon the failing environment.
61. SYSABEND, SYSUDUMP, or SYSMDUMP output. Availability of these dumps is dependent upon the failing environment.
62. A copy (via DSN1COPY) on tape of the page set containing the DB2 Directory. Alternatively, request a dump (produced by the REPAIR Utility, DSN1COPY or DSN1PRNT) of the DBD for each database identified in the DSN1013I messages.
63. Listing of SYS1.LOGREC data set, obtained by executing IFCEREP1 and ISDASDA0.
64. A copy of the table and index taken via DSN1COPY before any recover is performed.
65. Detailed description of events prior to the abend such as recovery or other activity affecting DSNDB06.SYSDBASE, DSNDB01.DSD01, or the subject table spaces.

66. Definitions of table spaces, tables, and indexes involved in the error. The record identifiers (OBIDs) identified with each table in the table space with the error can be obtained from SYSIBM.SYSTABLES.
67. Listing of the entire table space.
68. Listing of the DBD, obtained by executing UTILITY DIAGNOSE OBD.
69. Unformatted DSN1PRNT output of the DSNDB01.DBD01 page set. Use the method described in Part 5 of *DB2 Diagnosis Guide and Reference* to locate the inconsistent DBD in the DSNDB01.DBD01 page set.
70. The results of the following SQL:
 - SELECT * FROM SYSIBM.SYSINDEXES WHERE DBID=dbid ORDER BY OBID; Where dbid is the DBID of the damaged DBD.
 - SELECT * FROM SYSIBM.SYSINDEXES WHERE DBID=dbid ORDER BY ISOBID;
 - SELECT * FROM SYSIBM.SYSLINKS WHERE DBID=dbid ORDER BY OBID;
 - SELECT * FROM SYSIBM.SYSTABLES WHERE DBID=dbid ORDER BY OBID;
 - SELECT * FROM SYSIBM.SYSTABLESPACE WHERE DBID=dbid ORDER BY OBID;
 - SELECT * FROM SYSIBM.SYSTABLESPACE WHERE DBID=dbid ORDER BY PSID.

Use the results to compare the information in the DB2 Catalog with the DBD. Determine which OBDs are inconsistent with the DB2 Catalog. Use Part 5 of *DB2 Diagnosis Guide and Reference* to analyze the DBD.
71. DSN1LOGP output with DBID (1) OBID (1F) covering the period of time in which the DBD inconsistency may have occurred. This period of time is roughly from the time of the ABEND back to the time when the DB2 Catalog and DBD were believed to be consistent.
72. A copy of the log for this period so that additional DSN1LOGP reports can be produced for problem determination.
73. The location used in the alias entry in SYSIBM.SYSTABLES.
74. The contents of the SYSIBM.LOCATIONS table.
75. The AUTHORIZATION ID, PLANNAME, and LUNAME of the thread used to select the MODENAME in the SYSIBM.MODESELECT table.
76. The contents of the SYSIBM.LOCATIONS table and the SYSIBM.MODESELECT.
77. Listing of the contents of SYSIBM.LUMODES in the communications database.
78. System log printout (obtained via MVS WRITELOG operator command) showing related VSAM/media manager messages that may appear there (usually needed only if you have a message or reason code that indicates a media manager services problem occurred).
79. A hexadecimal print of the first record of the failing DBRM.
80. The listing from the precompile job that generated the DBRM.
81. Output from the BIND attempt.
82. IMS or CICS trace and any dumps.
83. Statistics Class 4 trace record for the LUWID associated with the failing request.
84. All dumps created by this failure.
85. Job output
86. Print the contents of the SYSIBM.IPNames table.
87. Print the contents of the SYSIBM.IPLIST table.

Resource types

Table 3. Resource Types

TYPE Code	Type of Resource	Name, Content, Format
00000100	Database	DB
00000200	Table space	DB.SP
00000201	Index space	DB.SP
00000202	Table space	RD.DB.TS
00000205	Compression Dictionary	DB.SP
00000210	Partition	DB.SP.PT
00000220	Data set	DSN
00000230	Temporary file	SZ
00000240	Database procedure	DBP
00000300	Page	DB.SP.PG
00000301	Index minipage	DB.SP.PG.MP
00000302	Table space page	DB.SP.PG
00000303	Index space page	DB.SP.PG
00000304	Table space RID	DB.SP.RID
00000305	Index access/table space RID	DB.SP.RID
00000306	Index access/table space page	DB.SP.PG
00000307	Index space EOF	DB.SP.01
00000400	ICF catalog	IC
00000401	Authorization function	
00000402	Security Server	SAF/RACF return/reason codes
00000500	Storage group	SG
00000600	EDM pool space	
00000602	EDM DBD Space	
00000603	EDM DYNAMIC STATEMENT Space	
00000700	Buffer pool space	BP
00000701	Group buffer pool	GBP
00000800	Plan	PL
00000801	Package	COLLECTION. PACKAGE. CONTOKEN
00000802	BINDLOCK	BINDLOCK
00000900	32KB data area	
00000901	Sort storage	
00000903	Hash anchor	DB.SP.PG.AI
00000904	RIDLIST storage	
00000905	IRLM storage	
00000906	DB2	MEMBER
00000907	Data Space	MEMBER
00000908	Basic Floating Point Extensions Facility	
00000909	Extended Time-of-Day (TOD) Clock	
0000A00	Table	RD.CR.TB
0000A10	Alias	RELDEP. OWNER. ALIAS
0000A11	Distinct type	SC.DT
0000A12	User-defined function	SC.SN
0000A13	Stored procedure	SC.SN
0000A14	Sequence	
0000B00	View	RD.CR.VW
0000C00	Index	RD.CR.IX
0000C01	Index	CR.IX
0000D00	DBID/OBID	RD.DI.OI
0000D01	DBID/OBID	DI.OI
0000D02	OBID	OI

Table 3. Resource Types (continued)

TYPE Code	Type of Resource	Name, Content, Format
0000E00	SU limit exceeded	CN
0000F00	Auxiliary column	DI.OI. ROWID. COLN
0000F01	LOB lock	DIX.PIX. ROWID. VRSN
00001000	DDF	LOCATION
00001001	System conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001002	Agent conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001003	CNOS processing	LU. MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001004	CDB (Communication database)	LOCATION. AUTHORIZATION ID. PL
00001005	DB access agent	LOCATION
00001007	TCP/IP domain name	LINKNAME. DOMAIN. ERRNO
00001008	TCP/IP service name	LOCATION. SERVICE. ERRNO
00001102	Bootstrap data set (BSDS)	MEMBER
00002000	Table space CS-claim class	DB.SP
00002001	Table space RR-claim class	DB.SP
00002002	Table space write-claim class	DB.SP
00002003	Index space CS-claim class	DB.SP
00002004	Index space RR-claim class	DB.SP
00002005	Index space write-claim class	DB.SP
00002006	Table space partition CS-claim class	DB.SP.PT
00002007	Table space partition RR-claim class	DB.SP.PT
00002008	Table space partition write-claim class	DB.SP.PT
00002009	Index space partition CS-claim class	DB.SP.PT
00002010	Index space partition RR-claim class	DB.SP.PT
00002011	Index space partition Write-claim class	DB.SP.PT
00002100	Table space DBET entry	DB.SP
00002101	Index space DBET entry	DB.SP
00002102	Table space partition DBET entry	DB.SP.PT
00002103	Index space partition DBET entry	DB.SP.PT
00002104	DBET hash chain lock timeout	INTERNAL LOCK NN
00002105	Logical partition DBET entry	DB.SP.PT
00002200	Routine Parameter Storage	DB.SP.PT
00002300	ICSF encryption and decryption facilities	
00003000	Code (release maintenance_level or system parameter)	REL, APAR, ZPARM
00003002	Number of Stored Procedures	
A10X	Alias	RD.CR.AL

The following table contains the definitions for the acronyms provided for the Name, Content, Format column of Table 3 on page 738.

Table 4. Definitions for resource type name, content, and format.

Where	Stands for
AI	Hash anchor ID
ALIAS	Alias owner
APAR	APAR number
AUTHORIZATION ID	DB2 authorization identifier

Table 4. Definitions for resource type name, content, and format. (continued)

Where	Stands for
BP	Buffer pool identifier
CN	Column name
COLLECTION	Collection-ID of the package
COLN	Column number within the base table of the LOB column that has been marked invalid.
CONTOKEN	Consistency token of the package
CR	Creator of the object
DB	Database name
DBP	Database procedure name
DI	DBID in decimal of resource
DIX	DBID in hexadecimal
DSN	Data set name
FDBK2	VTAM secondary return code
GBP	Group buffer pool name
IC	ICF catalog alias name
IX	Index name
LOCATION	Location in which the specified resource is not available
LU	Logical unit name
MEMBER	Group member name
MODE	Logical unit mode name
MP	Hexadecimal mini-page number
NN	decimal number of the hash chain
OI	OBID in decimal of resource
OWNER	Alias owner
PACKAGE	Package identifier
PG	Hexadecimal page number
PIX	PSID in hexadecimal
PL	Plan identifier
PT	Decimal partition number
RCPRI	APPC primary return code
RCSEC	APPC secondary return code
RD	DB2 release dependency mark
REL	DB2 release name
RELDEP	DB2 release dependency mark
RID	Record Identifier
RTNCD	VTAM primary return code
SENSE	SNA sense codename
SG	Storage group name
SP	Space name
SZ	Temporary file page size
TB	Table name
TS	Table space name
VW	View name

Note: DB status can also refer to DI, SP, TS, and TB can also refer to OI. This can occur when DB2 does not have access to the resource name, thus the DBID or OBID is used instead.

ABEND codes associated with DSN1COPY misuse

The following table represents the possible combinations of ABEND reason codes, CSECT-names, and ERQUAL's that can result from the improper use of DSN1COPY. An improper use includes, but is not limited to:

- Specifying the wrong OBIDXLAT values

- Not restoring all the datasets of the table space or index space to the same level
- Restoring datasets to a level that does not match the definition in the catalog and directory
- Restoring one table space type to a different type (e.g. segmented to simple).

This table is not meant to be exhaustive, but contains the more common codes, or those that are likely to have been caused by DSN1COPY misuse. However, this does not eliminate the possibility that the occurrence of these ABEND codes can be caused by other errors, such as an inconsistent DBD, or a DB2 internal error. The numbers under 'Explanation' refer to the notes following the table.

Table 5. ABEND Reason Codes Associated with DSN1COPY Use

ABEND Reason Code	CSECT-name: ERQUAL	Explanation
00C90101	DSNICKEY:5005	8
	DSNICKEY:5006	8
	DSNICSEL:5003	1
	DSNICSEL:5008	3
	DSNICUMW:5004	4
	DSNICUMW:5005	2
	DSNIDEFR:5005	13
	DSNIDLOD:501B	6
	DSNIIMSI:5006	3
	DSNIIMSI:5008	3
	DSNIIMSI:500A	3
	DSNIISF:5001	3
	DSNILPG:5013	6
	DSNIMOFR:500B	1
	DSNIMOFR:500C	1
	DSNIMRST:5001	1
	DSNIMRST:5002	1
	DSNIMRST:5003	1
	DSNIMSMS:5004	2
	DSNINXTP:5008	6
	DSNIOSEL:5002	2
	DSNIOSEL:5003	2
	DSNIOSEL:53DD	3
	DSNIOSEL:53DE	3
	DSNIPOCR:5005	2
	DSNIPOCR:5007	2
	DSNIPOCR:5009	2
	DSNIPOCR:500B	2
	DSNIPOCR:500D	2
	DSNIPOCR:500F	2
	DSNIPTYM:5006	6
	DSNIRECU:5002	2
	DSNIREDR:5007	1
	DSNIREDR:5008	1
	DSNIREDR:5009	1
	DSNIRELF:5011	2
	DSNIRELK:5001	1
	DSNIRLPG:500B	2
	DSNIRLPG:500C	1
	DSNIRLPG:5011	2
	DSNIRNXT:53D3	3
	DSNIRNXT:53DD	3

Table 5. ABEND Reason Codes Associated with DSN1COPY Use (continued)

ABEND Reason Code	CSECT-name: ERQUAL	Explanation
	DSNIRNXT:53DE	3
	DSNISEGD:5002	2
	DSNISEGD:5005	6
	DSNISEGF:5002	2
	DSNISEGR:500A	6
	DSNISEGR:500C	2
	DSNISEL:5006	1
	DSNISEL:5007	1
	DSNISEL:500A	3
	DSNISEL:500D	3
	DSNISESE:5001	1
	DSNISESE:5002	1
	DSNISESE:5003	1
	DSNISESR:5001	2
	DSNISESR:5002	1
	DSNISESR:5004	1
	DSNISESR:5005	1
	DSNISFS:53DD	3
	DSNISFS:53DE	3
	DSNISFX:5008	2
	DSNISGNS:5003	2
	DSNISGNS:5004	2
	DSNISGSS:5001	1
	DSNISMRS:5001	1
	DSNISRID:53DD	3
	DSNISRID:53DE	3
	DSNISRTI:5004	1
	DSNIWLPG:5003	6
	DSNKCKIS:5003	11
	DSNKFIND:5001	11
	DSNKFPNT:5003	12
	DSNKLVLN:5006	11
	DSNKLVLN:5007	11
	DSNKMDLE:5005	10
	DSNKMDLE:5007	10
	DSNKNEXT:5001	11
	DSNKNEXT:5004	11
	DSNKPOCI:5004	11
00C90105	DSNIBROK:0CA4	6
00C90206	DSNIIDIS:5002	4
00C90210	DSNKFIND:5002	11
	DSNKFIND:5005	11
	DSNKFIND:500B	11
00C90212	DSNKDNEX:5005	11
00C90213	DSNIRSET:500C	2
00C90214	DSNKISRT:5005	8

Table 5. ABEND Reason Codes Associated with DSN1COPY Use (continued)

ABEND Reason Code	CSECT-name: ERQUAL	Explanation
	DSNKISRT:5006	11
	DSNKLOD:500F	8
	DSNKLOD:5011	11
00C90215	DSNKFIND:5006	9
	DSNKFIND:5007	9
00C90216	DSNIRFNX:5008	1
00C90218	DSNIDLOD:5014	6
	DSNISEGD:5007	6
	DSNISGSC:5001	6
	DSNISNPG:5004	6
00C90219	DSNIDLOD:5015	2
	DSNISEGD:5008	2
	DSNISGSC:5002	2
	DSNISNPG:5005	2
00C9021A	DSNIRFNX:500A	2
	DSNIRFNX:500B	2
	DSNISFS:5007	2
	DSNISFS:5008	2
00C90221	DSNISGAU:5007	6
00C9021C	DSNIRFNX:5006	6
	DSNISNPG:5007	6

Explanations

The following explanations are groups of inconsistencies that relate to the ABEND codes, separated by user table spaces and user index spaces. Within each group are examples of specific inconsistencies representing each group.

User Table Spaces

- Record or field length in the data does not match the length in the OBD
 - Either the fixed lengths do not match, or the variable length of the record is greater than the maximum allowed in the OBD
- Record OBID in the data does not agree with the OBD
 - OBD corresponding to the OBID from the data cannot be found in the DBD, or the OBD in the DBD is of a different type.
- Number of columns in the data row does not match the OBD definition
 - An ALTER ADD COLUMN was performed, but the copy of the data is downlevel with respect to the ALTER ADD DBD.
- Index does not match the data
 - Either the index entry does not exist for the data record, or the index entry points to a missing or bad data record.
- Data in one table space is inconsistent with related data in another table space

- Referential integrity; parent and dependent are in different table spaces.
- 6. Table space definition in the OBD is inconsistent with the data
 - SEGSIZES do not match
 - Table space type is different (simple restored into segmented)
 - Segment anchor in the OBD points to an invalid first segment (segment not allocated).
- 7. Table space is inconsistent within itself
 - Not all datasets are restored to the same level
 - Broken segment chains
 - Base and overflow records are not consistent.

User Index Spaces

- 8. Total key length in the index page or entry does not match the key length in the OBD
 - Index data restored with the wrong index or downlevel index.
- 9. Key length derived from data passed into the Index Manager does not match the length in the index page or entry
 - Data or index restored to inconsistent states.
- 10. Index OBID in the index does not agree with the OBD
 - OBD corresponding to the OBID from the index cannot be found in the DBD, or the OBD in the DBD is of a different type.
- 11. Index space definition in the OBD is inconsistent with the index data
 - Inconsistent subpage directory
 - Cannot find the key in the partition high-key directory
 - Keys not found.
- 12. Index space is inconsistent within itself
 - Not all datasets are restored to the same level
 - Index entry not connected to the root page.
- 13. Log RBA is unavailable for the associated table space or index space.

Appendix D. SQLSTATE values - common error codes

The information in this section is General-use Programming Interface and Associated Guidance Information, as defined in “Notices” on page 779.

This section contains a summary of the SQLSTATE values that are produced by DB2 as an application server or requester. The SQLSTATE values are based on the SQLSTATE specifications contained in the standards: *ISO/IEC 9075:1992, Database Language SQL* and *ANSI X3.135-1992 Database Language SQL*.

SQLSTATE values are returned to the application in the last five bytes of the SQLCA. Each five-character value is a return code that indicates the outcome of the most recently executed SQL statement.

SQLSTATE values are designed so that application programs can test for specific errors or classes of errors. The first character of an SQLSTATE value indicates whether the SQL statement was executed successfully or unsuccessfully (equal to or not equal to zero, respectively).

SQLSTATE values are comprised of a two-character class code value, followed by a three-character subclass code value. Class code values represent classes of successful and unsuccessful execution conditions. An application might define classes beginning with the characters '7' through '9' or 'I' through 'Z' and subclasses for any class beginning with the characters 'I' through 'Z'.

Table 6 identifies the SQLSTATE class codes.

Table 6. SQLSTATE Class Codes

Class Code	Meaning	For subcodes, refer to...
00	Unqualified Successful Completion	Table 7 on page 746
01	Warning	Table 8 on page 746
02	No Data	Table 9 on page 749
07	Dynamic SQL Error	Table 10 on page 749
08	Connection Exception	Table 11 on page 749
09	Triggered Action Exception	Table 12 on page 749
0A	Feature Not Supported	Table 13 on page 750
0F	Invalid Token	Table 14 on page 750
21	Cardinality Violation	Table 15 on page 750
22	Data Exception	Table 16 on page 750
23	Constraint Violation	Table 17 on page 751
24	Invalid Cursor State	Table 18 on page 752
25	Invalid Transaction State	Table 19 on page 752
26	Invalid SQL Statement Identifier	Table 20 on page 752
2D	Invalid Transaction Termination	Table 21 on page 752
34	Invalid Cursor Name	Table 22 on page 753
35	Invalid Condition Number	Table 23 on page 753

Table 6. SQLSTATE Class Codes (continued)

Class Code	Meaning	For subcodes, refer to...
36	Cursor Sensitivity Exception	Table 24 on page 753
38	External Function Exception	Table 25 on page 753
39	External Function Call Exception	Table 26 on page 753
3B	Savepoint Exception	Table 27 on page 754
40	Transaction Rollback	Table 28 on page 754
42	Syntax Error or Access Rule Violation	Table 29 on page 754
44	WITH CHECK OPTION Violation	Table 30 on page 760
46	Java Errors	Table 31 on page 760
51	Invalid Application State	Table 32 on page 760
53	Invalid Operand or Inconsistent Specification	Table 33 on page 761
54	SQL or Product Limit Exceeded	Table 34 on page 762
55	Object Not in Prerequisite State	Table 35 on page 763
56	Miscellaneous SQL or Product Error	Table 36 on page 763
57	Resource Not Available or Operator Intervention	Table 37 on page 765
58	System Error	Table 38 on page 766

Table 7. Class Code 00: Unqualified Successful Completion

SQLSTATE Value	Meaning
00000	Execution of the SQL statement was successful and did not result in any type of warning or exception condition.

Table 8. Class Code 01: Warning

SQLSTATE Value	Meaning
01003	Null values were eliminated from the argument of a column function.
01004	The value of a string was truncated when assigned to a host variable.
01005	Insufficient number of entries in an SQLDA.
0100C	One or more ad hoc result sets were returned from the procedure.
0100E	The procedure returned too many result sets.
01503	The number of result columns is larger than the number of host variables provided.
01504	The UPDATE or DELETE statement does not include a WHERE clause.
01505	The statement was not executed because it is unacceptable in this environment.
01506	An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.
01507	One or more non-zero digits were eliminated from the fractional part of a number used as the operand of a multiply or divide operation.
01514	The tablespace has been placed in the check-pending state.

Table 8. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning
01515	The null value has been assigned to a host variable, because the non-null value of the column is not within the range of the host variable.
01516	An inapplicable WITH GRANT OPTION has been ignored.
01517	A character that could not be converted was replaced with a substitute character.
01518	The definition of the table has been changed to incomplete.
01519	The null value has been assigned to a host variable, because a numeric value is out of range.
01520	The null value has been assigned to a host variable, because the characters cannot be converted.
01521	A specified server-name is undefined but is not needed until the statement is executed or the alias is used.
01522	The local table or view name used in the CREATE ALIAS statement is undefined.
01523	ALL was interpreted to exclude ALTER, INDEX, REFERENCES, and TRIGGER, because these privileges cannot be granted to a remote user.
01524	The result of a column function does not include the null values that were caused by evaluating the arithmetic expression implied by the column of the view.
01525	The number of INSERT values is not the same as the number of columns.
01527	A SET statement references a special register that does not exist at the AS.
01528	WHERE NOT NULL is ignored, because the index key cannot contain null values.
01529	As a result of the DROP INDEX, the UNIQUE constraint is no longer enforced.
01530	Definition change may require a corresponding change on the read-only systems.
01532	An undefined object name was detected.
01533	An undefined column name was detected.
01537	An SQL statement cannot be EXPLAINed, because it references a remote object.
01538	The table cannot be subsequently defined as a dependent, because it has the maximum number of columns.
01539	Connection is successful but only SBCS characters should be used.
01540	A limit key has been truncated to 40 bytes.
01542	Authorization ID does not have the privilege to perform the operation as specified.
01543	A duplicate constraint has been ignored.
01545	An unqualified column name has been interpreted as a correlated reference.
01546	A column of the explanation table is improperly defined.
01548	The authorization ID does not have the privilege to perform the specified operation on the identified object.
01551	A table in a partitioned tablespace is not available, because its partitioned index has not been created.

Table 8. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning
01552	An ambiguous qualified column name was resolved to the first of the duplicate names in the FROM clause.
01553	Isolation level RR conflicts with a tablespace locksize of page.
01554	Decimal multiplication may cause overflow.
01558	A distribution protocol has been violated.
01560	A redundant GRANT has been ignored.
01561	An update to a data capture table was not signaled to the originating subsystem.
01566	The index has been placed in a recover-pending state.
01568	The dynamic SQL statement ends with a semicolon.
01569	The statement will be executed at a DB2 system that does not support character conversion.
01590	Type 2 indexes do not have subpages.
01591	The result of the positioned UPDATE or DELETE may depend on the order of the rows.
01594	Insufficient number of entries in an SQLDA for ALL information (i.e. not enough descriptors to return the distinct name).
01596	Comparison functions were not created for a distinct type based on a long string data type.
01597	Specific and non-specific volume IDs are not allowed in a storage group.
01602	The optimization level has been reduced.
01608	An unsupported value has been replaced.
01612	The part clause of a LOCK TABLE statement is not valid.
01614	There are fewer locators than the number of result sets.
01616	The estimated CPU cost exceeds the resource limit.
01624	The GBPCACHE specification is ignored because the bufferpool does not allow caching.
01625	The schema name appears more than once in the CURRENT PATH.
01628	The user-specified access path hints are invalid. The access path hints are ignored.
01629	User-specified access path hints were used during access path selection.
01635	Statements in the same program have duplicate QUERYNOs.
01638	SUBPAGES greater than one are not supported for Type 1 indexes in a data sharing environment.
01644	DEFINE NO is not applicable for a lob space or data sets using the VCAT option.
01659	A non-atomic statement successfully processed all requested rows with one or more warning conditions.
01663	NOT PADDED clause is ignored for indexes created on auxiliary tables.
01664	Option not specified following the ALTER PARTITION CLAUSE.
01666	The last partition's limit key value is set to the highest or lowest possible value.

Table 8. Class Code 01: Warning (continued)

SQLSTATE Value	Meaning
01668	A rowset FETCH statement returned one or more rows of data, with one or more bind out processing error conditions. Use GET DIAGNOSTICS for more information.
01Hxx	Valid warning SQLSTATEs returned by a user-defined function or external procedure CALL.

Table 9. Class Code 02: No Data

SQLSTATE Value	Meaning
02000	One of the following exceptions occurred: <ul style="list-style-type: none"> • The result of the SELECT INTO statement or the subselect of the INSERT statement was an empty table. • The number of rows identified in the searched UPDATE or DELETE statement was zero. • The position of the cursor referenced in the FETCH statement was after the last row of the result table.
02502	Delete or update hole detected.
02504	FETCH PRIOR ROWSET returned a partial rowset.

Table 10. Class Code 07: Dynamic SQL Error

SQLSTATE Value	Meaning
07001	The number of host variables is not the same as the number of parameter markers.
07002	The call parameter list or control block is invalid.
07003	The statement identified in the EXECUTE statement is a select-statement, or is not in a prepared state.
07005	The statement name of the cursor identifies a prepared statement that cannot be associated with a cursor.
07501	The option specified on PREPARE is not valid.

Table 11. Class Code 08: Connection Exception

SQLSTATE Value	Meaning
08001	The application requester is unable to establish the connection.
08002	The connection already exists.
08003	The connection does not exist.
08004	The application server rejected establishment of the connection.

Table 12. Class Code 09: Triggered Action Exception

SQLSTATE Value	Meaning
09000	A triggered SQL statement failed.

Table 13. Class Code 0A: Feature Not Supported

SQLSTATE Value	Meaning
0A001	The CONNECT statement is invalid, because the process is not in the connectable state.

Table 14. Class Code 0F: Invalid Token

SQLSTATE Value	Meaning
0F001	The locator value does not currently represent any value.

Table 15. Class Code 21: Cardinality Violation

SQLSTATE Value	Meaning
21000	The result of a SELECT INTO is a result table of more than one row, or the result of the subquery of a basic predicate is more than one value.
21501	A multiple-row INSERT into a self-referencing table is invalid.
21502	A multiple-row UPDATE of a primary key is invalid.

Table 16. Class Code 22: Data Exception

SQLSTATE Value	Meaning
22001	Character data, right truncation occurred; for example, an update or insert value is a string that is too long for the column, or a datetime value cannot be assigned to a host variable, because it is too small.
22002	A null value, or the absence of an indicator parameter was detected; for example, the null value cannot be assigned to a host variable, because no indicator variable is specified.
22003	A numeric value is out of range.
22007	An invalid datetime format was detected; that is, an invalid string representation or value was specified.
22008	Datetime field overflow occurred; for example, an arithmetic operation on a date or timestamp has a result that is not within the valid range of dates.
22011	A substring error occurred; for example, an argument of SUBSTR is out of range.
22012	Division by zero is invalid.
22018	The character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid.
22019	The LIKE predicate has an invalid escape character.
22021	A character is not in the coded character set.
22023	A parameter or host variable value is invalid.
22024	A NUL-terminated input host variable or parameter did not contain a NUL.
22025	The LIKE predicate string pattern contains an invalid occurrence of an escape character.
22501	The length control field of a variable length string is negative or greater than the maximum.
22503	The string representation of a name is invalid.

Table 16. Class Code 22: Data Exception (continued)

SQLSTATE Value	Meaning
22504	A mixed data value is invalid.
22505	The local date or time length has been increased, but the executing program relies on the old length.
22506	A reference to a datetime special register is invalid, because the TOD clock is malfunctioning or the operating system timezone parameter is out of range.
22508	CURRENT PACKAGESET is blank.
22511	ADT length exceeds maximum column length. The value for a ROWID or reference column is not valid.
22512	A host variable in a predicate is invalid, because its indicator variable is negative.
22522	A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme.
22525	Partitioning key value is not valid.
22529	A non-atomic statement successfully completed for at least one row, but one or more errors occurred.
22530	A non-atomic statement attempted to process multiple rows of data, but no row was inserted and one or more errors occurred.

Table 17. Class Code 23: Constraint Violation

SQLSTATE Value	Meaning
23502	An insert or update value is null, but the column cannot contain null values.
23503	The insert or update value of a foreign key is invalid.
23504	The update or delete of a parent key is prevented by a NO ACTION update or delete rule.
23505	A violation of the constraint imposed by a unique index or a unique constraint occurred.
23506	A violation of a constraint imposed by an edit or validation procedure occurred.
23507	A violation of a constraint imposed by a field procedure occurred.
23508	A violation of a constraint imposed by the DDL Registration Facility occurred.
23509	The owner of the package has constrained its use to environments which do not include that of the application process.
23510	A violation of a constraint on the use of the command imposed by the RLST table occurred.
23511	A parent row cannot be deleted, because the check constraint restricts the deletion.
23512	The check constraint cannot be added, because the table contains rows that do not satisfy the constraint definition.
23513	The resulting row of the INSERT or UPDATE does not conform to the check constraint definition.
23515	The unique index could not be created or unique constraint added, because the table contains duplicate values of the specified key.
23522	The range of an identity column has been exhausted.
23523	An invalid value has been provided for the SECURITY LABEL column.

Table 18. Class Code 24: Invalid Cursor State

SQLSTATE Value	Meaning
24501	The identified cursor is not open.
24502	The cursor identified in an OPEN statement is already open.
24504	The cursor identified in the UPDATE, DELETE, SET, or GET statement is not positioned on a row.
24506	The statement identified in the PREPARE is the statement of an open cursor.
24512	The result table does not agree with the base table.
24513	FETCH NEXT, PRIOR, CURRENT, or RELATIVE is not allowed, because the cursor position is not known.
24516	A cursor has already been assigned to a result set.
24517	A cursor was left open by an external function.
24518	A cursor is not defined to handle row sets, but a rowset was requested.
24519	A hole was detected on a multiple row FETCH statement, but indicator variables were not provided.
24520	The cursor identified in the UPDATE or DELETE statement is not positioned on a rowset.
24521	A positioned DELETE or UPDATE statement specified a row of a rowset, but the row is not contained within the current rowset.
24522	The fetch orientation is inconsistent with the definition of the cursor and whether rowsets are supported for the cursor.

Table 19. Class Code 25: Invalid Transaction State

SQLSTATE Value	Meaning
25000	An update operation is invalid for the application execution environment.

Table 20. Class Code 26: Invalid SQL Statement Identifier

SQLSTATE Value	Meaning
26501	The statement identified does not exist.

Table 21. Class Code 2D: Invalid Transaction Termination

SQLSTATE Value	Meaning
2D521	SQL COMMIT or ROLLBACK are invalid in the current operating environment.
2D528	Dynamic COMMIT or COMMIT ON RETURN procedure is invalid for the application execution environment
2D529	Dynamic ROLLBACK is invalid for the application execution environment.

Table 22. Class Code 34: Invalid Cursor Name

SQLSTATE Value	Meaning
34000	Cursor name is invalid.

Table 23. Class Code 35: Invalid Condition Number

SQLSTATE Value	Meaning
35000	Condition number is invalid.

Table 24. Class Code 35: Cursor Sensitivity Exception

SQLSTATE Value	Meaning
36001	A SENSITIVE cursor cannot be defined for the specified select-statement.

Table 25. Class Code 38: External Function Exception

SQLSTATE Value	Meaning
38xxx	Valid error SQLSTATEs returned by a user-defined function, external procedure, or trigger.
38001	The external routine is not allowed to execute SQL statements.
38002	The external routine attempted to modify data, but the routine was not defined as MODIFIES SQL DATA.
38003	The statement is not allowed in a routine.
38004	The external routine attempted to read data, but the routine was not defined as READS SQL DATA.
38503	A user-defined function or procedure has abnormally terminated (abend).
38505	An SQL statement is not allowed in user-defined function on a FINAL CALL.
38H01	An MQSeries function failed to initialize.
38H02	MQSeries Application Messaging Interface failed to terminate the session.
38H03	MQSeries Application Messaging Interface failed to terminate the session.
38H04	MQSeries Application Messaging Interface failed in sending a message.
38H05	MQSeries Application Messaging Interface failed to read/receive a message.
38H06	An MQSeries Application Messaging Interface message was truncated.

Table 26. Class Code 39: External Function Call Exception

SQLSTATE Value	Meaning
39001	A user-defined function has returned an invalid SQLSTATE.
39004	A null value is not allowed for an IN or INOUT argument when using PARAMETER STYLE GENERAL.
39501	An output argument value returned from a function or a procedure was too long.

Table 27. Class Code 3B: Savepoint Exception

SQLSTATE Value	Meaning
3B001	The savepoint is not valid.
3B501	A duplicate savepoint name was detected.
3B002	A RELEASE or ROLLBACK TO SAVEPOINT was specified, but a savepoint does not exist.
3B003	A SAVEPOINT, RELEASE SAVEPOINT, or ROLLBACK TO SAVEPOINT is not allowed in a trigger, function, or global transaction.

Table 28. Class Code 40: Transaction Rollback

SQLSTATE Value	Meaning
40001	Deadlock or timeout with automatic rollback occurred.

Table 29. Class Code 42: Syntax Error or Access Rule Violation

SQLSTATE Value	Meaning
42501	The authorization ID does not have the privilege to perform the specified operation on the identified object.
42502	The authorization ID does not have the privilege to perform the operation as specified.
42503	The authorization ID specified in SET CURRENT SQLID is not one of the authorization IDs of the application process.
42504	A specified privilege cannot be revoked from a specified authorization-name.
42505	Connection authorization failure occurred.
42506	Owner authorization failure occurred.
42509	SQL statement is not authorized, because of the DYNAMICRULES option.
42510	The authorization ID does not have the privilege to create functions or procedures in the WLM environment.
42512	The SECURITY LABEL is not valid.
42513	The authorization ID does not have the MLS WRITE-DOWN privilege.
42601	A character, token, or clause is invalid or missing.
42602	A character that is invalid in a name has been detected.
42603	An unterminated string constant has been detected.
42604	An invalid numeric or string constant has been detected.
42605	The number of arguments specified for a scalar function is invalid.
42606	An invalid hexadecimal constant has been detected.
42607	An operand of a column function is invalid.
42609	All operands of an operator or predicate are parameter markers.
42610	A parameter marker is not allowed.
42611	The column or argument definition is invalid.
42612	The statement string is an SQL statement that is not acceptable in the context in which it is presented.
42613	Clauses are mutually exclusive.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42614	A duplicate keyword is invalid.
42615	An invalid alternative was detected.
42617	The statement string is blank or empty.
42618	A host variable is not allowed.
42620	Read-only SCROLL was specified with the UPDATE clause.
42621	The check constraint is invalid.
42622	A name or label is too long.
42625	A CASE expression is invalid.
42626	A column specification is not allowed for a CREATE INDEX that is built on an auxiliary table.
42701	A duplicate column name in an INSERT or UPDATE statement was detected.
42702	A column reference is ambiguous, because of duplicate names.
42703	An undefined column or parameter name was detected.
42704	An undefined object or constraint name was detected.
42705	An undefined server-name was detected.
42707	A column name in ORDER BY does not identify a column of the result table.
42708	The locale specified in a SET LOCALE or locale sensitive function was not found.
42709	A duplicate column name in a PRIMARY, UNIQUE, or FOREIGN KEY clause was detected.
42710	A duplicate object or constraint name was detected.
42711	A duplicate column name was detected in the object definition or ALTER TABLE statement.
42712	A duplicate table designator was detected in the FROM clause. or REFERENCING clause of a CREATE TRIGGER statement.
42713	A duplicate object was detected in a list or is the same as an existing object.
42714	A host variable can be defined only once.
42718	The local server name is not defined.
42721	The special register name is unknown at the server.
42723	A function with the same signature already exists in the schema.
42724	Unable to access an external program used for a user-defined function or a procedure.
42725	A function was referenced directly (not by either signature or by specific instance name), but there is more than one specific instance of that function.
42726	Duplicate names for common table expressions were detected.
42734	A duplicate parameter-name was detected.
42801	Isolation level UR is invalid, because the result table is not read-only.
42802	The number of insert or update values is not the same as the number of columns.
42803	A column reference in the SELECT or HAVING clause is invalid, because it is not a grouping column; or a column reference in the GROUP BY clause is invalid.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42804	The result expressions in a CASE expression are not compatible.
42805	An integer in the ORDER BY clause does not identify a column of the result table.
42806	A value cannot be assigned to a host variable, because the data types are not compatible.
42807	The INSERT, UPDATE, or DELETE is not permitted on this object.
42808	A column identified in the INSERT or UPDATE statement is not updateable.
42809	The identified object is not the type of object to which the statement applies.
42810	A view is identified in a FOREIGN KEY clause.
42811	The number of columns specified is not the same as the number of columns in the SELECT clause.
42813	WITH CHECK OPTION cannot be used for the specified view.
42815	The data type, length, scale, value, or CCSID is invalid.
42816	A datetime value or duration in an expression is invalid.
42818	The operands of an operator or function are not compatible.
42819	An operand of an arithmetic operation or an operand of a function that requires a number is not a number.
42820	A numeric constant is too long, or it has a value that is not within the range of its data type.
42821	A data type for an assignment to a column is not compatible with the column data type.
42822	An expression in the ORDER BY clause or GROUP BY clause is not valid.
42823	The SELECT clause of a subquery specifies multiple columns.
42824	An operand of LIKE is not a string, or the first operand is not a column.
42825	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have compatible columns.
42826	The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have the same number of columns.
42827	The table identified in the UPDATE or DELETE is not the same table designated by the cursor.
42828	The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.
42829	FOR UPDATE OF is invalid, because the result table designated by the cursor cannot be modified.
42830	The foreign key does not conform to the description of the parent key.
42831	A column of a primary or unique key cannot allow null values.
42832	The operation is not allowed on system objects.
42834	SET NULL cannot be specified, because the foreign key does not allow null values.
42835	Cyclic references cannot be specified between named derived tables.
42836	The specification of a recursive, named derived table is invalid.
42837	The column cannot be altered, because its attributes are not compatible with the current column attributes.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42842	A column definition is invalid, because a specified option is inconsistent with the column description.
42845	An invalid use of a NOT DETERMINISTIC or EXTERNAL ACTION function was detected.
42846	Cast from source type to target type is not supported.
42849	The specified option is not supported for external functions.
42852	The privileges specified in GRANT or REVOKE are invalid or inconsistent. (For example, GRANT ALTER on a view.)
42855	The assignment of the LOB to this host variable is not allowed. The target host variable for all fetches of this LOB value for this cursor must be a locator or LOB variable.
42856	The alter of a CCSID to the specified CCSID is not valid.
42866	The data type in either the RETURNS clause or the CAST FROM clause in the CREATE FUNCTION statement is not appropriate for the data type returned from the sourced function or RETURN statement in the function body.
42872	FETCH statement clauses are incompatible with the cursor definition.
42873	An invalid number of rows was specified in a multiple-row FETCH or multiple-row INSERT.
42877	The column name cannot be qualified.
42878	An invalid function or procedure name was used with the EXTERNAL keyword.
42879	The data type of one or more input parameters in the CREATE FUNCTION statement is not appropriate for the corresponding data type in the source function.
42880	The CAST TO and CAST FROM data types are incompatible, or would always result in truncation of a fixed string.
42882	The specific instance name qualifier is not equal to the function name qualifier.
42883	No function was found with a matching signature.
42884	No function or procedure was found with the specified name and compatible arguments.
42885	The number of input parameters specified on a CREATE FUNCTION statement does not match the number provided by the function named in the SOURCE clause.
42886	The IN, OUT, or INOUT parameter attributes do not match.
42887	The function is not valid in the context where it occurs.
42888	The table does not have a primary key.
42889	The table already has a primary key.
42890	A column list was specified in the references clause, but the identified parent table does not have a unique constraint with the specified column names.
42893	The object or constraint cannot be dropped or authorities cannot be revoked from the object, because other objects are dependent on it.
42894	The DEFAULT value is invalid.
42895	For static SQL, an input host variable cannot be used, because its data type is not compatible with the parameter of a procedure or user-defined function.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42898	An invalid correlated reference or transition table was detected in a trigger.
42899	Correlated references and column names are not allowed for triggered actions with the FOR EACH STATEMENT clause.
428B3	An invalid SQLSTATE was specified on RAISE_ERROR.
428B4	The part clause of a LOCK TABLE statement is not valid.
428C1	Only one ROWID column can be specified for a table.
428C4	The number of elements on each side of the predicate operator is not the same.
428C7	A ROWID or reference column specification is not valid.
428C9	A ROWID column cannot be specified as the target column of an INSERT or UPDATE.
428D2	AS LOCATOR cannot be specified for a non-LOB parameter.
428D3	GENERATED was specified with a data type that is not a ROWID or a distinct type based on a ROWID.
428EC	The fullselect specified for the materialized query table is not valid.
428EK	The qualifier for a declared global temporary table name or an index on a declared global temporary table must be SESSION.
428EW	The table cannot be converted to or from a materialized query table.
428F4	The SENSITIVITY specified on FETCH is not allowed for the cursor.
428F5	The invocation of a function is ambiguous.
428F9	A sequence expression cannot be specified in this context.
428FA	The scale of the decimal number must be zero.
428FB	Sequence-name must not be a sequence generated by the system for an identity column.
428FC	The length of the encryption password is not valid.
428FE	The data is not a result of the ENCRYPT function.
428FL	An INSERT statement is not allowed in the context in which it was specified.
428FM	An INSERT statement within a SELECT specified a view which is not a symmetric view.
428FR	A column cannot be altered as specified.
428FS	A column cannot be added to an index.
428FT	The table is not compatible with the specified data partitioning operation.
428FW	A column cannot be added, dropped, or altered in a materialized query table.
428GB	A character could not be converted and substitution characters are not allowed.
428GC	An invalid string length unit was specified for a function.
42901	A column function does not include a column name.
42902	The object of the INSERT, UPDATE, or DELETE is also identified (possibly implicitly through a view) in a FROM clause.
42903	A WHERE, VALUES, GROUP BY, HAVING, or SET clause includes an invalid reference, such as a column or OLAP function.
42905	DISTINCT is specified more than once in a subselect.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42906	A column function in a subquery of a HAVING clause includes an expression that applies an operator to a correlated reference.
42907	The string is too long.
42908	The statement does not include a required column list.
42909	CREATE VIEW includes an operator or operand that is not valid for views. For example, UNION or UNION ALL.
42911	A decimal divide operation is invalid, because the result would have a negative scale.
42912	A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.
42914	The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.
42915	An invalid referential constraint has been detected.
42917	The object cannot be explicitly dropped.
42918	A user-defined data type cannot be created with a system-defined data type name (for example, INTEGER).
42920	A GROUP BY or HAVING clause is implicitly or explicitly specified in a SELECT INTO or a subquery of a basic predicate.
42924	An alias resolved to another alias rather than a table or view at the remote location.
42925	Recursive named derived tables cannot specify SELECT DISTINCT and must specify UNION ALL.
42927	The function cannot be altered to NOT DETERMINISTIC or EXTERNAL ACTION because it is referenced by one or more existing views.
42932	The program preparation assumptions are incorrect.
42939	The object cannot be created, because the specified identifier is reserved for system use.
42945	ALTER CCSID is not allowed on a tablespace or database that contains a view.
42961	The server name specified does not match the current server.
42962	A long column, LOB column, structured type column or datalink column cannot be used in an index, a key, or a constraint.
42963	Invalid specification of a security label column.
42969	The package was not created and the current unit of work was rolled back, because of internal limitations or an invalid section number.
42972	An expression in a join-condition references columns in more than one of the operand tables.
42986	The source table in a RENAME TABLE statement is referenced in a view, trigger, or constraint.
42987	The statement is not allowed in a trigger.
42988	The operation is not allowed with mixed ASCII data.
42993	The column, as defined, is too large to be logged.
42995	The requested function does not apply to global temporary tables.

Table 29. Class Code 42: Syntax Error or Access Rule Violation (continued)

SQLSTATE Value	Meaning
42997	Capability is not supported by this version of the DB2 application requester, DB2 application server, or the combination of the two.
429B1	A stored procedure specifying COMMIT ON RETURN cannot be the target of a nested CALL statement.
429BI	The condition area is full and cannot handle more errors for a NOT ATOMIC statement.
429BN	A CREATE statement cannot be processed when the value of CURRENT SCHEMA differs from CURRENT SQLID.
429BQ	The specified alter of the data type or attribute is not allowed.

Table 30. Class Code 44: WITH CHECK OPTION Violation

SQLSTATE Value	Meaning
44000	The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition.

Table 31. Class Code 44: Java Errors

SQLSTATE Value	Meaning
46002	The jar name specified on the install, replace, or remove of a Java procedure is not valid.
46003	The jar file cannot be removed, a class is in use by a procedure.
46007	A Java function has a Java method with an invalid signature.
46008	A Java function could not map to a single Java method.
46103	A Java routine encountered a ClassNotFoundException exception.
46501	The install or remove jar procedure specified the use of a deployment descriptor.
46502	A user-defined procedure has returned a DYNAMIC RESULT SET of an invalid class. The parameter is not a DB2 result set.

Table 32. Class Code 51: Invalid Application State

SQLSTATE Value	Meaning
51002	The package corresponding to an SQL statement execution request was not found.
51003	Consistency tokens do not match.
51004	An address in the SQLDA is invalid.
51005	The previous system error has disabled this function.
51006	A valid connection has not been established.
51015	An attempt was made to execute a section that was found to be in error at bind time.
51021	SQL statements cannot be executed until the application process executes a rollback operation.

Table 32. Class Code 51: Invalid Application State (continued)

SQLSTATE Value	Meaning
51024	SQL statements cannot be executed until the application process executes a rollback operation.
51030	The procedure referenced in a DESCRIBE PROCEDURE statement or an ALLOCATE CURSOR statement has not yet been called within the application process.
51032	A valid ASCII CCSID has not yet been specified for this DB2 UDB for OS/390 subsystem.
51033	The operation is not allowed because it operates on a result set that was not created by the current server.
51034	The function contains an insert, update, or delete which is not valid in the context in which it is invoked.
51035	A PREVIOUS VALUE expression cannot be used because a value has not been generated for the sequence yet in this session.
51036	An implicit connect to a remote server is not allowed because a savepoint is outstanding.
51039	The ENCRYPTION PASSWORD value is not set.

Table 33. Class Code 53: Invalid Operand or Inconsistent Specification

SQLSTATE Value	Meaning
53001	A clause is invalid, because the tablespace is a workfile.
53004	DSNDB07 is the implicit workfile database.
53014	The specified OBID is invalid.
53022	Host variable or parameter is not allowed.
53035	Key limits must be specified in the CREATE INDEX statement.
53036	The number of PART specifications is not the same as the number of partitions.
53037	A partitioned index cannot be created on a table in a non-partitioned tablespace.
53038	The number of key limit values is zero or greater than the number of columns in the key.
53039	The PART clause of the ALTER statement is omitted or invalid.
53040	The bufferpool cannot be changed to BP32K.
53041	BP32K cannot be used for an index.
53043	Columns with different field procedures cannot be compared.
53044	The columns have a field procedure, but the field types are not compatible.
53045	The data type of the key limit constant is not the same as the data type of the column.
53046	The index space is not valid.
53088	LOCKMAX is inconsistent with the specified LOCKSIZE.
53089	The number of host variable parameters for a stored procedure is not equal to the number of expected host variable parameters.
53090	Both ASCII and EBCDIC data cannot be referenced in the same SQL statement.

Table 33. Class Code 53: Invalid Operand or Inconsistent Specification (continued)

SQLSTATE Value	Meaning
53091	The encoding scheme specified is not the same as the encoding scheme currently in use for the containing tablespace.
53092	Type 1 index cannot be created for a table using the ASCII encoding scheme.
53093	The FOR ASCII clause is not supported for this database or tablespace.
53094	The PLAN_TABLE cannot be created with the FOR ASCII clause.
53095	A system tablespace cannot be created with an explicit ASCII or EBCDIC clause.
53096	The PART clause was specified on CREATE AUXILIARY TABLE, but the base table is not partitioned.
53097	LOBs cannot be specified as parameters when the NO WLM ENVIRONMENT is specified.
53098	The auxiliary table cannot be created because a column was specified that is not a LOB column.
53099	A WLM ENVIRONMENT name must be specified on the CREATE FUNCTION statement.
530A1	An ALTER TABLE statement specified FLOAT as the new data type for a column, but there is an existing index or constraint that restricts the use of FLOAT.
530A2	The VALUES clause is not allowed on the specified index.

Table 34. Class Code 54: SQL or Product Limit Exceeded

SQLSTATE Value	Meaning
54001	The statement is too long or too complex.
54002	A string constant is too long.
54004	The statement has too many table names or too many items in a SELECT or INSERT list.
54005	The sort key is too long, or has too many columns.
54006	The result of concatenation is too long.
54008	The key is too long, a column of the key is too long, or the key has too many columns.
54010	The record length of the table is too long.
54011	Too many columns were specified for a table or view.
54012	The FIELDPROC literal list is too long.
54021	Too many constraints, or the size of the constraint is too large.
54024	The check constraint is too long.
54025	The table description exceeds the maximum size of the object descriptor.
54027	The catalog has the maximum number of user-defined indexes.
54035	An internal object limit exceeded.
54038	Maximum depth of cascaded triggers exceeded.
54041	Only 32767 OBIDs are allowed.
54042	Only one index is allowed on an auxiliary table.
54051	Value specified on FETCH ABSOLUTE or RELATIVE is invalid.

Table 34. Class Code 54: SQL or Product Limit Exceeded (continued)

SQLSTATE Value	Meaning
54054	The combination of the number of table space partitions and the corresponding length of the partitioning limit key is too large.
54055	The maximum number of versions has been reached for a table or index.

Table 35. Class Code 55: Object Not in Prerequisite State

SQLSTATE Value	Meaning
55002	The explanation table is not defined properly.
55003	The DDL registration table is not defined properly.
55004	The database cannot be accessed, because it is no longer a shared database.
55006	The object cannot be dropped, because it is currently in use by the same application process.
55011	The operation is disallowed, because the workfile database is not in the stopped state.
55012	A clustering index already exists on the table.
55014	The table does not have an index to enforce the uniqueness of the primary key.
55015	The ALTER statement cannot be executed, because the pageset is not in the stopped state.
55016	The ALTER statement is invalid, because the pageset has user-managed data sets.
55017	The table cannot be created in the tablespace, because it already contains a table.
55020	A work file database is already defined for the member.
55023	An error occurred calling a procedure.
55030	A package specified in a remote BIND REPLACE operation must not have a system list.
55035	The table cannot be dropped, because it is protected.
55048	Encrypted data cannot be encrypted.

Table 36. Class Code 56: Miscellaneous SQL or Product Error

SQLSTATE Value	Meaning
56010	The subtype of a string variable is not the same as the subtype at bind time, and the difference cannot be resolved by character conversion.
56016	The partitioning keys are not specified in ascending or descending order.
56018	A column cannot be added to the table, because it has an edit procedure.
56023	An invalid reference to a remote object has been detected.
56025	An invalid use of AT ALL LOCATIONS in GRANT or REVOKE has been detected.
56027	A nullable column of a foreign key with a delete rule of SET NULL cannot be part of the key of a partitioned index.
56031	The clause or scalar function is invalid, because mixed and DBCS data are not supported on this system.

Table 36. Class Code 56: Miscellaneous SQL or Product Error (continued)

SQLSTATE Value	Meaning
56036	Specific and non-specific volume IDs are not allowed in a storage group.
56038	The requested feature is not supported in this environment.
56040	CURRENT SQLID cannot be used in a statement that references remote objects.
56045	The application must issue a rollback operation to back out the change that was made at the read-only application server.
56052	The remote requester tried to bind, rebind, or free a trigger package.
56053	The parent of a table in a read-only shared database must also be a table in a read-only shared database.
56054	User-defined datasets for objects in a shared database must be defined with SHAREOPTIONS(1,3).
56055	The database is defined as SHARE READ, but the tablespace or indexspace has not been defined on the owning system.
56056	The description of an object in a SHARE READ database must be consistent with its description in the OWNER system.
56057	A database cannot be altered from SHARE READ to SHARE OWNER.
56059	An error occurred when binding a triggered SQL statement.
56060	An LE function failed.
56062	A distributed operation is invalid, because the unit of work was started before DDF.
56064	The bind operation is disallowed, because the program depends on functions of a release from which fallback has occurred.
56065	The bind operation is disallowed, because the DBRM has been modified or was created for a different release.
56066	The rebind operation is disallowed, because the plan or package depends on functions of a release from which fallback has occurred.
56067	The rebind operation is disallowed, because the value of SYSPACKAGE.IBMREQD is invalid.
56072	Execution failed due to the function not supported by a downlevel server that will not affect the execution of subsequent SQL statements.
56073	Execution failed due to the function not supported by a downlevel server that will affect the execution of subsequent SQL statements.
56080	The data type is not allowed in DB2 private protocol processing.
56082	The statement cannot be executed, because it identifies a DB2 system that does not support character conversion.
56084	The data type is not supported.
56088	ALTER FUNCTION failed because functions cannot modify data when they are processed in parallel.
56089	Specified option requires type 2 indexes.
56090	The type of the index cannot be changed.
56095	A bind option is invalid.
56096	Bind options are incompatible.
560A1	The tablespace name is not valid.
560A2	A LOB table and its associated base table space must be in the same database.

Table 36. Class Code 56: Miscellaneous SQL or Product Error (continued)

SQLSTATE Value	Meaning
560A3	The table is not compatible with the database.
560A4	The operation is not allowed on an auxiliary table.
560A5	An auxiliary table already exists for the specified column or partition.
560A6	A table cannot have a LOB column unless it also has a ROWID column.
560A7	GBPCACHE NONE cannot be specified for a tablespace or index in GRECP.
560A8	An 8K or 16K bufferpool pagesize is invalid for a WORKFILE object.
560A9	An unsupported option was specified.
560AD	A view name was specified after LIKE in addition to the INCLUDING IDENTITY COLUMN ATTRIBUTES clause.
560AE	A view was specified for LIKE, but it includes a ROWID column.
560B1	Procedure failed because a result set was scrollable but the cursor was not positioned before the first row.
560B2	Open failed because the cursor is scrollable but the client does not support scrollable cursors.
560B3	Procedure failed because one or more result sets returned by the procedure are scrollable but the client does not support scrollable cursors.
560B5	Local special register is not valid as used.
560B8	The SQL statement cannot be executed because it was precompiled at a level that is incompatible with the current value of the ENCODING bind option or special register.
560B9	Hexadecimal constant GX is not allowed.
560BF	The encryption and decryption facility has not been installed.
560C5	The package must be rebound to be successfully executed.
560C6	A referential constraint cannot modify a row that was modified by an SQL data change statement within a fullselect.
560C7	ALTER VIEW failed.

Table 37. Class Code 57: Resource Not Available or Operator Intervention

SQLSTATE Value	Meaning
57001	The table is unavailable, because it does not have a primary index.
57002	GRANT and REVOKE are invalid, because authorization has been disabled.
57003	The specified bufferpool has not been activated.
57004	The table is unavailable, because it lacks a partitioned index.
57005	The statement cannot be executed, because a utility or a governor time limit was exceeded.
57006	The object cannot be created, because a DROP or CREATE is pending.
57007	The object cannot be used, because a DROP or ALTER is pending.
57008	The date or time local format exit has not been installed.
57010	A field procedure could not be loaded.
57011	Virtual storage or database resource is not available.

Table 37. Class Code 57: Resource Not Available or Operator Intervention (continued)

SQLSTATE Value	Meaning
57012	A non-database resource is not available. This will not affect the successful execution of subsequent statements.
57013	A non-database resource is not available. This will affect the successful execution of subsequent statements.
57014	Processing was canceled as requested.
57015	Connection to the local DB2 not established.
57017	Character conversion is not defined.
57018	A DDL registration table or its unique index does not exist.
57023	The DDL statement cannot be executed, because a DROP is pending of a DDL registration table.
57033	Deadlock or timeout occurred without automatic rollback.
57051	The estimated CPU cost exceeds the resource limit.
57053	A table is not available in a routine or trigger because of violated nested SQL statement rules.
57054	A table is not available until the auxiliary tables and indexes for its externally stored columns have been created.
57057	The SQL statement cannot be executed due to a prior condition in a DRDA chain of SQL statements.

Table 38. Class Code 58: System Error

SQLSTATE Value	Meaning
58001	The database cannot be created, because the assigned DBID is a duplicate.
58002	An exit has returned an error or invalid data.
58003	An invalid section number was detected.
58004	A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.
58005	A system error (that prevents the successful execution of subsequent SQL statements) occurred.
58006	A system error occurred during connection.
58008	Execution failed due to a distribution protocol error that will not affect the successful execution of subsequent DDM commands or SQL statements.
58009	Execution failed due to a distribution protocol error that caused deallocation of the conversation.
58010	Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.
58011	The DDM command is invalid while the bind process is in progress.
58012	The bind process with the specified package name and consistency token is not active.
58013	The SQLCODE is inconsistent with the reply message.
58014	The DDM command is not supported.
58015	The DDM object is not supported.
58016	The DDM parameter is not supported.

Table 38. Class Code 58: System Error (continued)

SQLSTATE Value	Meaning
58017	The DDM parameter value is not supported.
58018	The DDM reply message is not supported.
58026	The number of host variables in the statement is not equal to the number of host variables in SQLSTTVRB.

Appendix E. New, changed, and deleted codes

This section lists new, changed, and deleted codes to support DB2 Version 8. This list does not include editorial changes or updates to book references. Changes are categorized by whether the codes are new, changes, or deleted:

- “New codes” lists new SQL return codes, reason codes, and IRLM messages and codes.
- “Changed codes” on page 773 lists changed SQL return codes, reason codes, IRLM messages and codes, and SNA codes.
- “Deleted codes” on page 778 lists deleted SQL return codes, reason codes, and IRLM messages and codes.

New codes

This section lists new codes to support DB2 Version 8:

Successful SQL codes

- +252
- +347
- +354
- +20141
- +20237
- +20245
- +20270
- +20272
- +20367

Error SQL codes

- -58
- -111
- -227
- -230
- -242
- -246
- -247
- -248
- -249
- -253
- -254
- -270
- -336
- -342
- -345
- -348
- -353
- -356

	• -393
	• -575
	• -577
	• -589
	• -650
	• -845
	• -876
	• -952
	• -989
	• -1403
	• -4302
	• -4700
	• -4701
	• -4702
	• -4708
	• -5011
	• -20004
	• -20019
	• -20058
	• -20093
	• -20142
	• -20143
	• -20144
	• -20146
	• -20147
	• -20163
	• -20164
	• -20166
	• -20174
	• -20177
	• -20180
	• -20181
	• -20182
	• -20183
	• -20185
	• -20186
	• -20200
	• -20201
	• -20203
	• -20210
	• -20223
	• -20227
	• -20232
	• -20233
	• -20234

	• -20235
	• -20240
	• -20248
	• -20249
	• -20252
	• -20264
	• -20265
	• -20266
	• -20281
	• -20283
	• -20286
	• -20289
	• -20295
	• -20380
	• -20381
	• -30005
	• -30025
	• -30106
	X'C1.....' codes
	• 00C12023
	• 00C12207
	• 00C12022
	• 00C12211
	• 00C12221
	• 00C12850
	•
	X'C2.....' codes
	• 00C20111
	• 00C20112
	• 00C20113
	X'C9.....' codes
	• 00C90026
	• 00C9006D
	• 00C900BE
	• 00C900CF
	• 00C9010E
	• 00C90611
	• 00C90614
	X'D1.....' codes
	• 00D10150
	• 00D10319
	X'D3.....' codes
	• 00D31200

	• 00D31203
	• 00D34442
	• 00D34445
	• 00D34447
	• 00D34448
	• 00D34449
	• 00D3444A
	• 00D3444B
	• 00D3444C
	• 00D3444D
	• 00D35313
	• 00D35314
	• 00D35D1D
	• 00D35D1E
	• 00D35D1F
	• 00D35D20
	• 00D35D21
	• 00D35D22
	• 00D35E63
	X'D7.....' codes
	• 00D70009
	• 00D70029
	• 00D70046
	X'D9.....' codes
	• 00D90014
	• 00D96023
	X'E2.....' codes
#	• 00E20032
	X'E3.....' codes
	• 00E30063
	• 00E3007B
	• 00E30097
	• 00E30099
	• 00E3009A
	• 00E3009B
	X'E4.....' codes
	• 00E400D0
	• 00E400E0
	• 00E40196
	• 00E40197
	• 00E40355
	X'E5.....' codes
	• 00E50003
	• 00E50033

	X'E6.....' codes
	• 00E60889
	X'E7.....' codes
	• 00E70082
	• 00E7009A
	• 00E73006
	• 00E79000
	• 00E79010
	X'E8.....' codes
	• 00E80059
	• 00E8005A
	X'F3.....' codes
	• 00F300A0
	• 00F300A1
	• 00F300A2
	• 00F300A3
	• 00F300A4
	• 00F31100
	• 00F31104
	• 00F31105
	• 00F31106
	• 00F31107
	• 00F31108
	IRLM messages
	• DXR167E
	• DXR175E
	• DXR176I
	• DXR177I
	• DXR183I

Changed codes

This section lists updated codes to support DB2 Version 8:

	Successful SQL codes
	• +222
	• +231
	• +331
	• +394
	• +395
	• +585
	• +20002
	• +20007
	• +20272
	Error SQL codes

	• -102
	• -107
	• -109
	• -110
	• -112
	• -119
	• -120
	• -122
	• -126
	• -132
	• -133
	• -134
	• -136
	• -138
	• -142
	• -148
	• -150
	• -153
	• -154
	• -158
	• -159
	• -187
	• -189
	• -190
	• -205
	• -214
	• -225
	• -228
	• -229
	• -240
	• -243
	• -244
	• -245
#	• -249
	• -305
	• -330
	• -331
	• -332
	• -333
	• -350
	• -359
#	• -372
	• -373
	• -390
	• -397

	• -399
	• -401
	• -408
	• -419
	• -423
	• -435
	• -438
	• -440
	• -443
	• -444
	• -449
	• -450
	• -457
	• -476
	• -478
	• -483
	• -497
	• -508
	• -516
	• -532
	• -537
	• -551
	• -573
	• -577
	• -585
	• -586
	• -601
	• -602
	• -612
	• -613
	• -614
	• -623
	• -626
	• -628
	• -646
	• -650
	• -661
	• -665
	• -683
	• -694
	• -723
	• -750
	• -751
	• -766
	• -770

	• -802
	• -805
	• -845
	• -846
	• -873
	• -874
	• -878
	• -904
	• -923
	• -4302
	• -4700
	• -4701
	• -5012
	• -20005
	• -20006
	• -20058
	• -20071
	• -20073
	• -20074
	• -20102
	• -20106
	• -20165
	• -20174
	• -20177
	• -20180
	• -20181
	• -20182
	• -20183
	• -20200
	• -20201
	• -30072
	• -30082
	X'C1.....' codes
	• 00C12207
	X'C2.....' codes
	• 00C200E8
	• 00C20257
	X'C8.....' codes
	• 00C8901x
	X'C9.....' codes
	• 00C900A9
	• 00C900AD
	X'D1.....' codes
	• 00D10015

	• 00D10201
	• 00D10210
	X'D3.....' codes
	• 00D300F8
	• 00D31055
	X'D4.....' codes
	• 00D44056
	X'E3.....' codes
	• 00E3000A
	• 00E30700
	X'E4.....' codes
	• 00E40006
	• 00E40206
	• 00E40207
	• 00E40208
	• 00E40209
	• 00E40210
	• 00E40213
	• 00E40214
	• 00E40215
	• 00E40218
	X'E5.....' codes
	• 00E50033
	X'E6.....' codes
	• 00E60811
	X'E7.....' codes
#	• 00E7009A
	• 00E72058
	• 00E79002
	• 00E79109
	X'E8.....' codes
	• 00E80058
	X'F3.....' codes
	• 00F30106
	X'F7.....' codes
#	• 00F70407
	IRLM messages
	• DXR100I
	• DXR116I
	• DXR121I
	• DXR167E
	• DXR176I
	• DXR177I

- DSNX941I
- DSNX942I
- DSNX969I
- DSNX970I

Deleted codes

The following codes were deleted:

Error SQL codes

- -127
- -223
- -594

X'C2.....' codes

- 00C200CD
- 00C200EE

X'E6.....' codes

- 00E60000

IRLM messages

- DXR159I
- DXR160I
- DXR161I
- DXR163I
- DXR178I
- DXR181I

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This book also documents General-use Programming Interface and Associated Guidance Information provided by DB2 UDB for z/OS.

General-use programming interfaces allow the customer to write programs that obtain the services of DB2 UDB for z/OS.

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Glossary

The following terms and abbreviations are defined as they are used in the DB2 library.

A

abend. Abnormal end of task.

abend reason code. A 4-byte hexadecimal code that uniquely identifies a problem with DB2.

abnormal end of task (abend). Termination of a task, job, or subsystem because of an error condition that recovery facilities cannot resolve during execution.

access method services. The facility that is used to define and reproduce VSAM key-sequenced data sets.

access path. The path that is used to locate data that is specified in SQL statements. An access path can be indexed or sequential.

active log. The portion of the DB2 log to which log records are written as they are generated. The active log always contains the most recent log records, whereas the archive log holds those records that are older and no longer fit on the active log.

active member state. A state of a member of a data sharing group. The cross-system coupling facility identifies each active member with a group and associates the member with a particular task, address space, and z/OS system. A member that is not active has either a failed member state or a quiesced member state.

address space. A range of virtual storage pages that is identified by a number (ASID) and a collection of segment and page tables that map the virtual pages to real pages of the computer's memory.

address space connection. The result of connecting an allied address space to DB2. Each address space that contains a task that is connected to DB2 has exactly one address space connection, even though more than one task control block (TCB) can be present. See also *allied address space* and *task control block*.

| **address space identifier (ASID).** A unique
| system-assigned identifier for an address space.

administrative authority. A set of related privileges that DB2 defines. When you grant one of the administrative authorities to a person's ID, the person has all of the privileges that are associated with that administrative authority.

after trigger. A trigger that is defined with the trigger activation time AFTER.

agent. As used in DB2, the structure that associates all processes that are involved in a DB2 unit of work. An *allied agent* is generally synonymous with an *allied thread*. *System agents* are units of work that process tasks that are independent of the allied agent, such as prefetch processing, deferred writes, and service tasks.

| **aggregate function.** An operation that derives its
| result by using values from one or more rows. Contrast
| with *scalar function*.

alias. An alternative name that can be used in SQL statements to refer to a table or view in the same or a remote DB2 subsystem.

allied address space. An area of storage that is external to DB2 and that is connected to DB2. An allied address space is capable of requesting DB2 services.

allied thread. A thread that originates at the local DB2 subsystem and that can access data at a remote DB2 subsystem.

allocated cursor. A cursor that is defined for stored procedure result sets by using the SQL ALLOCATE CURSOR statement.

already verified. An LU 6.2 security option that allows DB2 to provide the user's verified authorization ID when allocating a conversation. With this option, the user is not validated by the partner DB2 subsystem.

| **ambiguous cursor.** A database cursor that is in a plan
| or package that contains either PREPARE or EXECUTE
| IMMEDIATE SQL statements, and for which the
| following statements are true: the cursor is not defined
| with the FOR READ ONLY clause or the FOR UPDATE
| OF clause; the cursor is not defined on a read-only
| result table; the cursor is not the target of a WHERE
| CURRENT clause on an SQL UPDATE or DELETE
| statement.

American National Standards Institute (ANSI). An organization consisting of producers, consumers, and general interest groups, that establishes the procedures by which accredited organizations create and maintain voluntary industry standards in the United States.

ANSI. American National Standards Institute.

APAR. Authorized program analysis report.

APAR fix corrective service. A temporary correction of an IBM software defect. The correction is temporary,

APF • basic sequential access method (BSAM)

because it is usually replaced at a later date by a more permanent correction, such as a program temporary fix (PTF).

APF. Authorized program facility.

API. Application programming interface.

APPL. A VTAM® network definition statement that is used to define DB2 to VTAM as an application program that uses SNA LU 6.2 protocols.

application. A program or set of programs that performs a task; for example, a payroll application.

application-directed connection. A connection that an application manages using the SQL CONNECT statement.

application plan. The control structure that is produced during the bind process. DB2 uses the application plan to process SQL statements that it encounters during statement execution.

application process. The unit to which resources and locks are allocated. An application process involves the execution of one or more programs.

application programming interface (API). A functional interface that is supplied by the operating system or by a separately orderable licensed program that allows an application program that is written in a high-level language to use specific data or functions of the operating system or licensed program.

application requester. The component on a remote system that generates DRDA® requests for data on behalf of an application. An application requester accesses a DB2 database server using the DRDA application-directed protocol.

application server. The target of a request from a remote application. In the DB2 environment, the application server function is provided by the distributed data facility and is used to access DB2 data from remote applications.

archive log. The portion of the DB2 log that contains log records that have been copied from the active log.

ASCII. An encoding scheme that is used to represent strings in many environments, typically on PCs and workstations. Contrast with *EBCDIC* and *Unicode*.

| **ASID.** Address space identifier.

attachment facility. An interface between DB2 and TSO, IMS, CICS, or batch address spaces. An attachment facility allows application programs to access DB2.

attribute. A characteristic of an entity. For example, in database design, the phone number of an employee is one of that employee's attributes.

authorization ID. A string that can be verified for connection to DB2 and to which a set of privileges is allowed. It can represent an individual, an organizational group, or a function, but DB2 does not determine this representation.

authorized program analysis report (APAR). A report of a problem that is caused by a suspected defect in a current release of an IBM supplied program.

authorized program facility (APF). A facility that permits the identification of programs that are authorized to use restricted functions.

| **automatic query rewrite.** A process that examines an
| SQL statement that refers to one or more base tables,
| and, if appropriate, rewrites the query so that it
| performs better. This process can also determine
| whether to rewrite a query so that it refers to one or
| more materialized query tables that are derived from
| the source tables.

auxiliary index. An index on an auxiliary table in which each index entry refers to a LOB.

auxiliary table. A table that stores columns outside the table in which they are defined. Contrast with *base table*.

B

backout. The process of undoing uncommitted changes that an application process made. This might be necessary in the event of a failure on the part of an application process, or as a result of a deadlock situation.

backward log recovery. The fourth and final phase of restart processing during which DB2 scans the log in a backward direction to apply UNDO log records for all aborted changes.

base table. (1) A table that is created by the SQL CREATE TABLE statement and that holds persistent data. Contrast with *result table* and *temporary table*.

(2) A table containing a LOB column definition. The actual LOB column data is not stored with the base table. The base table contains a row identifier for each row and an indicator column for each of its LOB columns. Contrast with *auxiliary table*.

base table space. A table space that contains base tables.

basic predicate. A predicate that compares two values.

basic sequential access method (BSAM). An access method for storing or retrieving data blocks in a continuous sequence, using either a sequential-access or a direct-access device.

| **batch message processing program.** In IMS, an application program that can perform batch-type processing online and can access the IMS input and output message queues.

before trigger. A trigger that is defined with the trigger activation time BEFORE.

binary integer. A basic data type that can be further classified as small integer or large integer.

| **binary large object (BLOB).** A sequence of bytes in which the size of the value ranges from 0 bytes to 2 GB–1. Such a string has a CCSID value of 65535.

binary string. A sequence of bytes that is not associated with a CCSID. For example, the BLOB data type is a binary string.

bind. The process by which the output from the SQL precompiler is converted to a usable control structure, often called an access plan, application plan, or package. During this process, access paths to the data are selected and some authorization checking is performed. The types of bind are:

automatic bind. (More correctly, *automatic rebind*) A process by which SQL statements are bound automatically (without a user issuing a BIND command) when an application process begins execution and the bound application plan or package it requires is not valid.

dynamic bind. A process by which SQL statements are bound as they are entered.

incremental bind. A process by which SQL statements are bound during the execution of an application process.

static bind. A process by which SQL statements are bound after they have been precompiled. All static SQL statements are prepared for execution at the same time.

| **bit data.** Data that is character type CHAR or VARCHAR and has a CCSID value of 65535.

BLOB. Binary large object.

block fetch. A capability in which DB2 can retrieve, or fetch, a large set of rows together. Using block fetch can significantly reduce the number of messages that are being sent across the network. Block fetch applies only to cursors that do not update data.

BMP. Batch Message Processing (IMS). See *batch message processing program*.

bootstrap data set (BSDS). A VSAM data set that contains name and status information for DB2, as well as RBA range specifications, for all active and archive log data sets. It also contains passwords for the DB2 directory and catalog, and lists of conditional restart and checkpoint records.

BSAM. Basic sequential access method.

BSDS. Bootstrap data set.

buffer pool. Main storage that is reserved to satisfy the buffering requirements for one or more table spaces or indexes.

built-in data type. A data type that IBM supplies. Among the built-in data types for DB2 UDB for z/OS are string, numeric, ROWID, and datetime. Contrast with *distinct type*.

built-in function. A function that DB2 supplies. Contrast with *user-defined function*.

business dimension. A category of data, such as products or time periods, that an organization might want to analyze.

C

cache structure. A coupling facility structure that stores data that can be available to all members of a Sysplex. A DB2 data sharing group uses cache structures as group buffer pools.

CAF. Call attachment facility.

call attachment facility (CAF). A DB2 attachment facility for application programs that run in TSO or z/OS batch. The CAF is an alternative to the DSN command processor and provides greater control over the execution environment.

call-level interface (CLI). A callable application programming interface (API) for database access, which is an alternative to using embedded SQL. In contrast to embedded SQL, DB2 ODBC (which is based on the CLI architecture) does not require the user to precompile or bind applications, but instead provides a standard set of functions to process SQL statements and related services at run time.

cascade delete. The way in which DB2 enforces referential constraints when it deletes all descendent rows of a deleted parent row.

CASE expression. An expression that is selected based on the evaluation of one or more conditions.

cast function. A function that is used to convert instances of a (source) data type into instances of a different (target) data type. In general, a cast function has the name of the target data type. It has one single argument whose type is the source data type; its return type is the target data type.

castout. The DB2 process of writing changed pages from a group buffer pool to disk.

castout owner. The DB2 member that is responsible for casting out a particular page set or partition.

catalog. In DB2, a collection of tables that contains descriptions of objects such as tables, views, and indexes.

catalog table. Any table in the DB2 catalog.

CCSID. Coded character set identifier.

CDB. Communications database.

CDRA. Character Data Representation Architecture.

CEC. Central electronic complex. See *central processor complex*.

central electronic complex (CEC). See *central processor complex*.

central processor (CP). The part of the computer that contains the sequencing and processing facilities for instruction execution, initial program load, and other machine operations.

central processor complex (CPC). A physical collection of hardware (such as an ES/3090™) that consists of main storage, one or more central processors, timers, and channels.

| **CFRM.** Coupling facility resource management.

CFRM policy. A declaration by a z/OS administrator regarding the allocation rules for a coupling facility structure.

character conversion. The process of changing characters from one encoding scheme to another.

Character Data Representation Architecture (CDRA). An architecture that is used to achieve consistent representation, processing, and interchange of string data.

character large object (CLOB). A sequence of bytes representing single-byte characters or a mixture of single- and double-byte characters where the size of the value can be up to 2 GB–1. In general, character large object values are used whenever a character string might exceed the limits of the VARCHAR type.

character set. A defined set of characters.

character string. A sequence of bytes that represent bit data, single-byte characters, or a mixture of single-byte and multibyte characters.

check constraint. A user-defined constraint that specifies the values that specific columns of a base table can contain.

check integrity. The condition that exists when each row in a table conforms to the check constraints that are defined on that table. Maintaining check integrity requires DB2 to enforce check constraints on operations that add or change data.

| **check pending.** A state of a table space or partition that prevents its use by some utilities and by some SQL statements because of rows that violate referential constraints, check constraints, or both.

checkpoint. A point at which DB2 records internal status information on the DB2 log; the recovery process uses this information if DB2 abnormally terminates.

| **child lock.** For explicit hierarchical locking, a lock that is held on either a table, page, row, or a large object (LOB). Each child lock has a parent lock. See also *parent lock*.

CI. Control interval.

| **CICS.** Represents (in this publication): CICS Transaction Server for z/OS: Customer Information Control System Transaction Server for z/OS.

CICS attachment facility. A DB2 subcomponent that uses the z/OS subsystem interface (SSI) and cross-storage linkage to process requests from CICS to DB2 and to coordinate resource commitment.

CIDF. Control interval definition field.

claim. A notification to DB2 that an object is being accessed. Claims prevent drains from occurring until the claim is released, which usually occurs at a commit point. Contrast with *drain*.

claim class. A specific type of object access that can be one of the following isolation levels:
 Cursor stability (CS)
 Repeatable read (RR)
 Write

claim count. A count of the number of agents that are accessing an object.

class of service. A VTAM term for a list of routes through a network, arranged in an order of preference for their use.

class word. A single word that indicates the nature of a data attribute. For example, the class word PROJ indicates that the attribute identifies a project.

clause. In SQL, a distinct part of a statement, such as a SELECT clause or a WHERE clause.

CLI. Call- level interface.

client. See *requester*.

CLIST. Command list. A language for performing TSO tasks.

CLOB. Character large object.

closed application. An application that requires exclusive use of certain statements on certain DB2

objects, so that the objects are managed solely through the application's external interface.

CLPA. Create link pack area.

| **clustering index.** An index that determines how rows are physically ordered (*clustered*) in a table space. If a clustering index on a partitioned table is not a partitioning index, the rows are ordered in cluster sequence within each data partition instead of spanning partitions. Prior to Version 8 of DB2 UDB for z/OS, the partitioning index was required to be the clustering index.

coded character set. A set of unambiguous rules that establish a character set and the one-to-one relationships between the characters of the set and their coded representations.

coded character set identifier (CCSID). A 16-bit number that uniquely identifies a coded representation of graphic characters. It designates an encoding scheme identifier and one or more pairs consisting of a character set identifier and an associated code page identifier.

code page. (1) A set of assignments of characters to code points. In EBCDIC, for example, the character 'A' is assigned code point X'C1' (2) , and character 'B' is assigned code point X'C2'. Within a code page, each code point has only one specific meaning.

code point. In CDRA, a unique bit pattern that represents a character in a code page.

| **code unit.** The fundamental binary width in a computer architecture that is used for representing character data, such as 7 bits, 8 bits, 16 bits, or 32 bits. Depending on the character encoding form that is used, each code point in a coded character set can be represented internally by one or more code units.

coexistence. During migration, the period of time in which two releases exist in the same data sharing group.

cold start. A process by which DB2 restarts without processing any log records. Contrast with *warm start*.

collection. A group of packages that have the same qualifier.

column. The vertical component of a table. A column has a name and a particular data type (for example, character, decimal, or integer).

| **column function.** See *aggregate function*.

"come from" checking. An LU 6.2 security option that defines a list of authorization IDs that are allowed to connect to DB2 from a partner LU.

command. A DB2 operator command or a DSN subcommand. A command is distinct from an SQL statement.

command prefix. A one- to eight-character command identifier. The command prefix distinguishes the command as belonging to an application or subsystem rather than to MVS.

command recognition character (CRC). A character that permits a z/OS console operator or an IMS subsystem user to route DB2 commands to specific DB2 subsystems.

command scope. The scope of command operation in a data sharing group. If a command has *member scope*, the command displays information only from the one member or affects only non-shared resources that are owned locally by that member. If a command has *group scope*, the command displays information from all members, affects non-shared resources that are owned locally by all members, displays information on sharable resources, or affects sharable resources.

commit. The operation that ends a unit of work by releasing locks so that the database changes that are made by that unit of work can be perceived by other processes.

commit point. A point in time when data is considered consistent.

committed phase. The second phase of the multisite update process that requests all participants to commit the effects of the logical unit of work.

common service area (CSA). In z/OS, a part of the common area that contains data areas that are addressable by all address spaces.

communications database (CDB). A set of tables in the DB2 catalog that are used to establish conversations with remote database management systems.

comparison operator. A token (such as =, >, or <) that is used to specify a relationship between two values.

composite key. An ordered set of key columns of the same table.

compression dictionary. The dictionary that controls the process of compression and decompression. This dictionary is created from the data in the table space or table space partition.

concurrency. The shared use of resources by more than one application process at the same time.

conditional restart. A DB2 restart that is directed by a user-defined conditional restart control record (CRCR).

connection. In SNA, the existence of a communication path between two partner LUs that allows information

connection context • coupling facility

to be exchanged (for example, two DB2 subsystems that are connected and communicating by way of a conversation).

connection context. In SQLJ, a Java™ object that represents a connection to a data source.

connection declaration clause. In SQLJ, a statement that declares a connection to a data source.

connection handle. The data object containing information that is associated with a connection that DB2 ODBC manages. This includes general status information, transaction status, and diagnostic information.

connection ID. An identifier that is supplied by the attachment facility and that is associated with a specific address space connection.

consistency token. A timestamp that is used to generate the version identifier for an application. See also *version*.

constant. A language element that specifies an unchanging value. Constants are classified as string constants or numeric constants. Contrast with *variable*.

constraint. A rule that limits the values that can be inserted, deleted, or updated in a table. See *referential constraint*, *check constraint*, and *unique constraint*.

context. The application's logical connection to the data source and associated internal DB2 ODBC connection information that allows the application to direct its operations to a data source. A DB2 ODBC context represents a DB2 thread.

contracting conversion. A process that occurs when the length of a converted string is smaller than that of the source string. For example, this process occurs when an EBCDIC mixed-data string that contains DBCS characters is converted to ASCII mixed data; the converted string is shorter because of the removal of the shift codes.

control interval (CI). A fixed-length area or disk in which VSAM stores records and creates distributed free space. Also, in a key-sequenced data set or file, the set of records that an entry in the sequence-set index record points to. The control interval is the unit of information that VSAM transmits to or from disk. A control interval always includes an integral number of physical records.

control interval definition field (CIDF). In VSAM, a field that is located in the 4 bytes at the end of each control interval; it describes the free space, if any, in the control interval.

conversation. Communication, which is based on LU 6.2 or Advanced Program-to-Program Communication (APPC), between an application and a remote

transaction program over an SNA logical unit-to-logical unit (LU-LU) session that allows communication while processing a transaction.

coordinator. The system component that coordinates the commit or rollback of a unit of work that includes work that is done on one or more other systems.

| **copy pool.** A named set of SMS storage groups that
| contains data that is to be copied collectively. A copy
| pool is an SMS construct that lets you define which
| storage groups are to be copied by using FlashCopy®
| functions. HSM determines which volumes belong to a
| copy pool.

| **copy target.** A named set of SMS storage groups that
| are to be used as containers for copy pool volume
| copies. A copy target is an SMS construct that lets you
| define which storage groups are to be used as
| containers for volumes that are copied by using
| FlashCopy functions.

| **copy version.** A point-in-time FlashCopy copy that is
| managed by HSM. Each copy pool has a version
| parameter that specifies how many copy versions are
| maintained on disk.

correlated columns. A relationship between the value of one column and the value of another column.

correlated subquery. A subquery (part of a WHERE or HAVING clause) that is applied to a row or group of rows of a table or view that is named in an outer subselect statement.

correlation ID. An identifier that is associated with a specific thread. In TSO, it is either an authorization ID or the job name.

correlation name. An identifier that designates a table, a view, or individual rows of a table or view within a single SQL statement. It can be defined in any FROM clause or in the first clause of an UPDATE or DELETE statement.

cost category. A category into which DB2 places cost estimates for SQL statements at the time the statement is bound. A cost estimate can be placed in either of the following cost categories:

- A: Indicates that DB2 had enough information to make a cost estimate without using default values.
- B: Indicates that some condition exists for which DB2 was forced to use default values for its estimate.

The cost category is externalized in the COST_CATEGORY column of the DSN_STATEMENT_TABLE when a statement is explained.

coupling facility. A special PR/SM™ LPAR logical partition that runs the coupling facility control program and provides high-speed caching, list processing, and locking functions in a Parallel Sysplex®.

| **coupling facility resource management.** A component of z/OS that provides the services to manage coupling facility resources in a Parallel Sysplex. This management includes the enforcement of CFRM policies to ensure that the coupling facility and structure requirements are satisfied.

CP. Central processor.

CPC. Central processor complex.

C++ member. A data object or function in a structure, union, or class.

C++ member function. An operator or function that is declared as a member of a class. A member function has access to the private and protected data members and to the member functions of objects in its class. Member functions are also called methods.

C++ object. (1) A region of storage. An object is created when a variable is defined or a new function is invoked. (2) An instance of a class.

CRC. Command recognition character.

CRCR. Conditional restart control record. See also *conditional restart*.

create link pack area (CLPA). An option that is used during IPL to initialize the link pack pageable area.

created temporary table. A table that holds temporary data and is defined with the SQL statement CREATE GLOBAL TEMPORARY TABLE. Information about created temporary tables is stored in the DB2 catalog, so this kind of table is persistent and can be shared across application processes. Contrast with *declared temporary table*. See also *temporary table*.

cross-memory linkage. A method for invoking a program in a different address space. The invocation is synchronous with respect to the caller.

cross-system coupling facility (XCF). A component of z/OS that provides functions to support cooperation between authorized programs that run within a Sysplex.

cross-system extended services (XES). A set of z/OS services that allow multiple instances of an application or subsystem, running on different systems in a Sysplex environment, to implement high-performance, high-availability data sharing by using a coupling facility.

CS. Cursor stability.

CSA. Common service area.

CT. Cursor table.

current data. Data within a host structure that is current with (identical to) the data within the base table.

current SQL ID. An ID that, at a single point in time, holds the privileges that are exercised when certain dynamic SQL statements run. The current SQL ID can be a primary authorization ID or a secondary authorization ID.

current status rebuild. The second phase of restart processing during which the status of the subsystem is reconstructed from information on the log.

cursor. A named control structure that an application program uses to point to a single row or multiple rows within some ordered set of rows of a result table. A cursor can be used to retrieve, update, or delete rows from a result table.

cursor sensitivity. The degree to which database updates are visible to the subsequent FETCH statements in a cursor. A cursor can be sensitive to changes that are made with positioned update and delete statements specifying the name of that cursor. A cursor can also be sensitive to changes that are made with searched update or delete statements, or with cursors other than this cursor. These changes can be made by this application process or by another application process.

cursor stability (CS). The isolation level that provides maximum concurrency without the ability to read uncommitted data. With cursor stability, a unit of work holds locks only on its uncommitted changes and on the current row of each of its cursors.

cursor table (CT). The copy of the skeleton cursor table that is used by an executing application process.

cycle. A set of tables that can be ordered so that each table is a descendent of the one before it, and the first table is a descendent of the last table. A self-referencing table is a cycle with a single member.

D

| **DAD.** See *Document access definition*.

| **disk.** A direct-access storage device that records data magnetically.

database. A collection of tables, or a collection of table spaces and index spaces.

database access thread. A thread that accesses data at the local subsystem on behalf of a remote subsystem.

database administrator (DBA). An individual who is responsible for designing, developing, operating, safeguarding, maintaining, and using a database.

database alias. The name of the target server if different from the location name. The database alias name is used to provide the name of the database server as it is known to the network. When a database alias name is defined, the location name is used by the application to reference the server, but the database alias name is used to identify the database server to be accessed. Any fully qualified object names within any SQL statements are not modified and are sent unchanged to the database server.

database descriptor (DBD). An internal representation of a DB2 database definition, which reflects the data definition that is in the DB2 catalog. The objects that are defined in a database descriptor are table spaces, tables, indexes, index spaces, relationships, check constraints, and triggers. A DBD also contains information about accessing tables in the database.

database exception status. An indication that something is wrong with a database. All members of a data sharing group must know and share the exception status of databases.

database identifier (DBID). An internal identifier of the database.

database management system (DBMS). A software system that controls the creation, organization, and modification of a database and the access to the data that is stored within it.

database request module (DBRM). A data set member that is created by the DB2 precompiler and that contains information about SQL statements. DBRMs are used in the bind process.

database server. The target of a request from a local application or an intermediate database server. In the DB2 environment, the database server function is provided by the distributed data facility to access DB2 data from local applications, or from a remote database server that acts as an intermediate database server.

data currency. The state in which data that is retrieved into a host variable in your program is a copy of data in the base table.

data definition name (ddname). The name of a data definition (DD) statement that corresponds to a data control block containing the same name.

data dictionary. A repository of information about an organization's application programs, databases, logical data models, users, and authorizations. A data dictionary can be manual or automated.

data-driven business rules. Constraints on particular data values that exist as a result of requirements of the business.

Data Language/I (DL/I). The IMS data manipulation language; a common high-level interface between a user application and IMS.

data mart. A small data warehouse that applies to a single department or team. See also *data warehouse*.

data mining. The process of collecting critical business information from a data warehouse, correlating it, and uncovering associations, patterns, and trends.

data partition. A VSAM data set that is contained within a partitioned table space.

data-partitioned secondary index (DPSI). A secondary index that is partitioned. The index is partitioned according to the underlying data.

data sharing. The ability of two or more DB2 subsystems to directly access and change a single set of data.

data sharing group. A collection of one or more DB2 subsystems that directly access and change the same data while maintaining data integrity.

data sharing member. A DB2 subsystem that is assigned by XCF services to a data sharing group.

data source. A local or remote relational or non-relational data manager that is capable of supporting data access via an ODBC driver that supports the ODBC APIs. In the case of DB2 UDB for z/OS, the data sources are always relational database managers.

data space. In releases prior to DB2 UDB for z/OS, Version 8, a range of up to 2 GB of contiguous virtual storage addresses that a program can directly manipulate. Unlike an address space, a data space can hold only data; it does not contain common areas, system data, or programs.

data type. An attribute of columns, literals, host variables, special registers, and the results of functions and expressions.

data warehouse. A system that provides critical business information to an organization. The data warehouse system cleanses the data for accuracy and currency, and then presents the data to decision makers so that they can interpret and use it effectively and efficiently.

date. A three-part value that designates a day, month, and year.

date duration. A decimal integer that represents a number of years, months, and days.

datetime value. A value of the data type DATE, TIME, or TIMESTAMP.

DBA. Database administrator.

DBCLOB. Double-byte character large object.

DBCS. Double-byte character set.

DBD. Database descriptor.

DBID. Database identifier.

DBMS. Database management system.

DBRM. Database request module.

DB2 catalog. Tables that are maintained by DB2 and contain descriptions of DB2 objects, such as tables, views, and indexes.

DB2 command. An instruction to the DB2 subsystem that a user enters to start or stop DB2, to display information on current users, to start or stop databases, to display information on the status of databases, and so on.

DB2 for VSE & VM. The IBM DB2 relational database management system for the VSE and VM operating systems.

DB2I. DB2 Interactive.

DB2 Interactive (DB2I). The DB2 facility that provides for the execution of SQL statements, DB2 (operator) commands, programmer commands, and utility invocation.

DB2I Kanji Feature. The tape that contains the panels and jobs that allow a site to display DB2I panels in Kanji.

DB2 PM. DB2 Performance Monitor.

DB2 thread. The DB2 structure that describes an application's connection, traces its progress, processes resource functions, and delimits its accessibility to DB2 resources and services.

DCLGEN. Declarations generator.

DDF. Distributed data facility.

ddname. Data definition name.

deadlock. Unresolvable contention for the use of a resource, such as a table or an index.

declarations generator (DCLGEN). A subcomponent of DB2 that generates SQL table declarations and COBOL, C, or PL/I data structure declarations that conform to the table. The declarations are generated from DB2 system catalog information. DCLGEN is also a DSN subcommand.

declared temporary table. A table that holds temporary data and is defined with the SQL statement DECLARE GLOBAL TEMPORARY TABLE. Information about declared temporary tables is not stored in the DB2 catalog, so this kind of table is not persistent and

can be used only by the application process that issued the DECLARE statement. Contrast with *created temporary table*. See also *temporary table*.

default value. A predetermined value, attribute, or option that is assumed when no other is explicitly specified.

deferred embedded SQL. SQL statements that are neither fully static nor fully dynamic. Like static statements, they are embedded within an application, but like dynamic statements, they are prepared during the execution of the application.

deferred write. The process of asynchronously writing changed data pages to disk.

degree of parallelism. The number of concurrently executed operations that are initiated to process a query.

delete-connected. A table that is a dependent of table P or a dependent of a table to which delete operations from table P cascade.

delete hole. The location on which a cursor is positioned when a row in a result table is refetched and the row no longer exists on the base table, because another cursor deleted the row between the time the cursor first included the row in the result table and the time the cursor tried to refetch it.

delete rule. The rule that tells DB2 what to do to a dependent row when a parent row is deleted. For each relationship, the rule might be CASCADE, RESTRICT, SET NULL, or NO ACTION.

delete trigger. A trigger that is defined with the triggering SQL operation DELETE.

delimited identifier. A sequence of characters that are enclosed within double quotation marks ("). The sequence must consist of a letter followed by zero or more characters, each of which is a letter, digit, or the underscore character (_).

delimiter token. A string constant, a delimited identifier, an operator symbol, or any of the special characters that are shown in DB2 syntax diagrams.

denormalization. A key step in the task of building a physical relational database design. Denormalization is the intentional duplication of columns in multiple tables, and the consequence is increased data redundancy. Denormalization is sometimes necessary to minimize performance problems. Contrast with *normalization*.

dependent. An object (row, table, or table space) that has at least one parent. The object is also said to be a dependent (row, table, or table space) of its parent. See also *parent row*, *parent table*, *parent table space*.

dependent row • drain lock

dependent row. A row that contains a foreign key that matches the value of a primary key in the parent row.

dependent table. A table that is a dependent in at least one referential constraint.

DES-based authenticator. An authenticator that is generated using the DES algorithm.

descendent. An object that is a dependent of an object or is the dependent of a descendent of an object.

descendent row. A row that is dependent on another row, or a row that is a descendent of a dependent row.

descendent table. A table that is a dependent of another table, or a table that is a descendent of a dependent table.

deterministic function. A user-defined function whose result is dependent on the values of the input arguments. That is, successive invocations with the same input values produce the same answer. Sometimes referred to as a *not-variant* function. Contrast this with an *nondeterministic function* (sometimes called a *variant function*), which might not always produce the same result for the same inputs.

DFP. Data Facility Product (in z/OS).

DFSMS. Data Facility Storage Management Subsystem (in z/OS). Also called *Storage Management Subsystem (SMS)*.

| **DFSMSdss™.** The data set services (dss) component of
| DFSMS (in z/OS).

| **DFSMSHsm™.** The hierarchical storage manager (hsm)
| component of DFSMS (in z/OS).

dimension. A data category such as time, products, or markets. The elements of a dimension are referred to as members. Dimensions offer a very concise, intuitive way of organizing and selecting data for retrieval, exploration, and analysis. See also *dimension table*.

dimension table. The representation of a dimension in a star schema. Each row in a dimension table represents all of the attributes for a particular member of the dimension. See also *dimension*, *star schema*, and *star join*.

directory. The DB2 system database that contains internal objects such as database descriptors and skeleton cursor tables.

| **distinct predicate.** In SQL, a predicate that ensures
| that two row values are not equal, and that both row
| values are not null.

distinct type. A user-defined data type that is internally represented as an existing type (its source type), but is considered to be a separate and incompatible type for semantic purposes.

distributed data. Data that resides on a DBMS other than the local system.

distributed data facility (DDF). A set of DB2 components through which DB2 communicates with another relational database management system.

Distributed Relational Database Architecture™ (DRDA). A connection protocol for distributed relational database processing that is used by IBM's relational database products. DRDA includes protocols for communication between an application and a remote relational database management system, and for communication between relational database management systems. See also *DRDA access*.

DL/I. Data Language/I.

DNS. Domain name server.

| **document access definition (DAD).** Used to define
| the indexing scheme for an XML column or the
| mapping scheme of an XML collection. It can be used
| to enable an XML Extender column of an XML
| collection, which is XML formatted.

domain. The set of valid values for an attribute.

domain name. The name by which TCP/IP applications refer to a TCP/IP host within a TCP/IP network.

domain name server (DNS). A special TCP/IP network server that manages a distributed directory that is used to map TCP/IP host names to IP addresses.

double-byte character large object (DBCLOB). A sequence of bytes representing double-byte characters where the size of the values can be up to 2 GB. In general, DBCLOB values are used whenever a double-byte character string might exceed the limits of the VARCHAR type.

double-byte character set (DBCS). A set of characters, which are used by national languages such as Japanese and Chinese, that have more symbols than can be represented by a single byte. Each character is 2 bytes in length. Contrast with *single-byte character set* and *multibyte character set*.

double-precision floating point number. A 64-bit approximate representation of a real number.

downstream. The set of nodes in the syncpoint tree that is connected to the local DBMS as a participant in the execution of a two-phase commit.

| **DPSI.** Data-partitioned secondary index.

drain. The act of acquiring a locked resource by quiescing access to that object.

drain lock. A lock on a claim class that prevents a claim from occurring.

DRDA. Distributed Relational Database Architecture.

DRDA access. An open method of accessing distributed data that you can use to connect to another database server to execute packages that were previously bound at the server location. You use the SQL CONNECT statement or an SQL statement with a three-part name to identify the server. Contrast with *private protocol access*.

DSN. (1) The default DB2 subsystem name. (2) The name of the TSO command processor of DB2. (3) The first three characters of DB2 module and macro names.

duration. A number that represents an interval of time. See also *date duration*, *labeled duration*, and *time duration*.

| **dynamic cursor.** A named control structure that an application program uses to change the size of the result table and the order of its rows after the cursor is opened. Contrast with *static cursor*.

dynamic dump. A dump that is issued during the execution of a program, usually under the control of that program.

dynamic SQL. SQL statements that are prepared and executed within an application program while the program is executing. In dynamic SQL, the SQL source is contained in host language variables rather than being coded into the application program. The SQL statement can change several times during the application program's execution.

| **dynamic statement cache pool.** A cache, located above the 2-GB storage line, that holds dynamic statements.

E

EA-enabled table space. A table space or index space that is enabled for extended addressability and that contains individual partitions (or pieces, for LOB table spaces) that are greater than 4 GB.

| **EB.** See *exabyte*.

EBCDIC. Extended binary coded decimal interchange code. An encoding scheme that is used to represent character data in the z/OS, VM, VSE, and iSeries™ environments. Contrast with *ASCII* and *Unicode*.

e-business. The transformation of key business processes through the use of Internet technologies.

| **EDM pool.** A pool of main storage that is used for database descriptors, application plans, authorization cache, application packages.

EID. Event identifier.

embedded SQL. SQL statements that are coded within an application program. See *static SQL*.

enclave. In Language Environment®, an independent collection of routines, one of which is designated as the main routine. An enclave is similar to a program or run unit.

encoding scheme. A set of rules to represent character data (ASCII, EBCDIC, or Unicode).

entity. A significant object of interest to an organization.

enumerated list. A set of DB2 objects that are defined with a LISTDEF utility control statement in which pattern-matching characters (*, %, _ or ?) are not used.

environment. A collection of names of logical and physical resources that are used to support the performance of a function.

environment handle. In DB2 ODBC, the data object that contains global information regarding the state of the application. An environment handle must be allocated before a connection handle can be allocated. Only one environment handle can be allocated per application.

EOM. End of memory.

EOT. End of task.

equijoin. A join operation in which the join-condition has the form *expression = expression*.

error page range. A range of pages that are considered to be physically damaged. DB2 does not allow users to access any pages that fall within this range.

escape character. The symbol that is used to enclose an SQL delimited identifier. The escape character is the double quotation mark ("), except in COBOL applications, where the user assigns the symbol, which is either a double quotation mark or an apostrophe (').

ESDS. Entry sequenced data set.

ESMT. External subsystem module table (in IMS).

EUR. IBM European Standards.

| **exabyte.** For processor, real and virtual storage capacities and channel volume:
| 1 152 921 504 606 846 976 bytes or 2⁶⁰.

exception table. A table that holds rows that violate referential constraints or check constraints that the CHECK DATA utility finds.

exclusive lock. A lock that prevents concurrently executing application processes from reading or changing data. Contrast with *share lock*.

executable statement. An SQL statement that can be embedded in an application program, dynamically prepared and executed, or issued interactively.

execution context. In SQLJ, a Java object that can be used to control the execution of SQL statements.

exit routine. A user-written (or IBM-provided default) program that receives control from DB2 to perform specific functions. Exit routines run as extensions of DB2.

expanding conversion. A process that occurs when the length of a converted string is greater than that of the source string. For example, this process occurs when an ASCII mixed-data string that contains DBCS characters is converted to an EBCDIC mixed-data string; the converted string is longer because of the addition of shift codes.

explicit hierarchical locking. Locking that is used to make the parent-child relationship between resources known to IRLM. This kind of locking avoids global locking overhead when no inter-DB2 interest exists on a resource.

exposed name. A correlation name or a table or view name for which a correlation name is not specified. Names that are specified in a FROM clause are exposed or non-exposed.

expression. An operand or a collection of operators and operands that yields a single value.

extended recovery facility (XRF). A facility that minimizes the effect of failures in z/OS, VTAM, the host processor, or high-availability applications during sessions between high-availability applications and designated terminals. This facility provides an alternative subsystem to take over sessions from the failing subsystem.

Extensible Markup Language (XML). A standard metalanguage for defining markup languages that is a subset of Standardized General Markup Language (SGML). The less complex nature of XML makes it easier to write applications that handle document types, to author and manage structured information, and to transmit and share structured information across diverse computing environments.

external function. A function for which the body is written in a programming language that takes scalar argument values and produces a scalar result for each invocation. Contrast with *sourced function*, *built-in function*, and *SQL function*.

external procedure. A user-written application program that can be invoked with the SQL CALL statement, which is written in a programming language. Contrast with *SQL procedure*.

external routine. A user-defined function or stored procedure that is based on code that is written in an external programming language.

external subsystem module table (ESMT). In IMS, the table that specifies which attachment modules must be loaded.

F

failed member state. A state of a member of a data sharing group. When a member fails, the XCF permanently records the failed member state. This state usually means that the member's task, address space, or z/OS system terminated before the state changed from active to quiesced.

fallback. The process of returning to a previous release of DB2 after attempting or completing migration to a current release.

false global lock contention. A contention indication from the coupling facility when multiple lock names are hashed to the same indicator and when no real contention exists.

fan set. A direct physical access path to data, which is provided by an index, hash, or link; a fan set is the means by which the data manager supports the ordering of data.

federated database. The combination of a DB2 Universal Database server (in Linux, UNIX®, and Windows® environments) and multiple data sources to which the server sends queries. In a federated database system, a client application can use a single SQL statement to join data that is distributed across multiple database management systems and can view the data as if it were local.

fetch orientation. The specification of the desired placement of the cursor as part of a FETCH statement (for example, BEFORE, AFTER, NEXT, PRIOR, CURRENT, FIRST, LAST, ABSOLUTE, and RELATIVE).

field procedure. A user-written exit routine that is designed to receive a single value and transform (encode or decode) it in any way the user can specify.

filter factor. A number between zero and one that estimates the proportion of rows in a table for which a predicate is true.

fixed-length string. A character or graphic string whose length is specified and cannot be changed. Contrast with *varying-length string*.

FlashCopy. A function on the IBM Enterprise Storage Server® that can create a point-in-time copy of data while an application is running.

foreign key. A column or set of columns in a dependent table of a constraint relationship. The key must have the same number of columns, with the same descriptions, as the primary key of the parent table.

Each foreign key value must either match a parent key value in the related parent table or be null.

| **forest.** An ordered set of subtrees of XML nodes.

forget. In a two-phase commit operation, (1) the vote that is sent to the prepare phase when the participant has not modified any data. The forget vote allows a participant to release locks and forget about the logical unit of work. This is also referred to as the read-only vote. (2) The response to the *committed* request in the second phase of the operation.

forward log recovery. The third phase of restart processing during which DB2 processes the log in a forward direction to apply all REDO log records.

free space. The total amount of unused space in a page; that is, the space that is not used to store records or control information is free space.

full outer join. The result of a join operation that includes the matched rows of both tables that are being joined and preserves the unmatched rows of both tables. See also *join*.

fullselect. A subselect, a values-clause, or a number of both that are combined by set operators. *Fullselect* specifies a result table. If UNION is not used, the result of the fullselect is the result of the specified subselect.

| **fully escaped mapping.** A mapping from an SQL identifier to an XML name when the SQL identifier is a column name.

| **function.** A mapping, which is embodied as a program (the function body) that is invocable by means of zero or more input values (arguments) to a single value (the result). See also *aggregate function* and *scalar function*.

| Functions can be user-defined, built-in, or generated by DB2. (See also *built-in function*, *cast function*, *external function*, *sourced function*, *SQL function*, and *user-defined function*.)

function definer. The authorization ID of the owner of the schema of the function that is specified in the CREATE FUNCTION statement.

function implementer. The authorization ID of the owner of the function program and function package.

function package. A package that results from binding the DBRM for a function program.

function package owner. The authorization ID of the user who binds the function program's DBRM into a function package.

function resolution. The process, internal to the DBMS, by which a function invocation is bound to a particular function instance. This process uses the function name, the data types of the arguments, and a

list of the applicable schema names (called the *SQL path*) to make the selection. This process is sometimes called *function selection*.

function selection. See *function resolution*.

function signature. The logical concatenation of a fully qualified function name with the data types of all of its parameters.

G

GB. Gigabyte (1 073 741 824 bytes).

GBP. Group buffer pool.

GBP-dependent. The status of a page set or page set partition that is dependent on the group buffer pool. Either read/write interest is active among DB2 subsystems for this page set, or the page set has changed pages in the group buffer pool that have not yet been cast out to disk.

generalized trace facility (GTF). A z/OS service program that records significant system events such as I/O interrupts, SVC interrupts, program interrupts, or external interrupts.

generic resource name. A name that VTAM uses to represent several application programs that provide the same function in order to handle session distribution and balancing in a Sysplex environment.

getpage. An operation in which DB2 accesses a data page.

global lock. A lock that provides concurrency control within and among DB2 subsystems. The scope of the lock is across all DB2 subsystems of a data sharing group.

global lock contention. Conflicts on locking requests between different DB2 members of a data sharing group when those members are trying to serialize shared resources.

governor. See *resource limit facility*.

graphic string. A sequence of DBCS characters.

gross lock. The *shared*, *update*, or *exclusive* mode locks on a table, partition, or table space.

group buffer pool (GBP). A coupling facility cache structure that is used by a data sharing group to cache data and to ensure that the data is consistent for all members.

group buffer pool duplexing. The ability to write data to two instances of a group buffer pool structure: a *primary group buffer pool* and a *secondary group buffer*

group level • image copy

pool. z/OS publications refer to these instances as the "old" (for primary) and "new" (for secondary) structures.

group level. The release level of a data sharing group, which is established when the first member migrates to a new release.

group name. The z/OS XCF identifier for a data sharing group.

group restart. A restart of at least one member of a data sharing group after the loss of either locks or the shared communications area.

GTF. Generalized trace facility.

H

handle. In DB2 ODBC, a variable that refers to a data structure and associated resources. See also *statement handle*, *connection handle*, and *environment handle*.

help panel. A screen of information that presents tutorial text to assist a user at the workstation or terminal.

heuristic damage. The inconsistency in data between one or more participants that results when a heuristic decision to resolve an indoubt LUW at one or more participants differs from the decision that is recorded at the coordinator.

heuristic decision. A decision that forces indoubt resolution at a participant by means other than automatic resynchronization between coordinator and participant.

| **hole.** A row of the result table that cannot be accessed
| because of a delete or an update that has been
| performed on the row. See also *delete hole* and *update hole*.

home address space. The area of storage that z/OS currently recognizes as *dispatched*.

host. The set of programs and resources that are available on a given TCP/IP instance.

host expression. A Java variable or expression that is referenced by SQL clauses in an SQLJ application program.

host identifier. A name that is declared in the host program.

host language. A programming language in which you can embed SQL statements.

host program. An application program that is written in a host language and that contains embedded SQL statements.

host structure. In an application program, a structure that is referenced by embedded SQL statements.

host variable. In an application program, an application variable that is referenced by embedded SQL statements.

| **host variable array.** An array of elements, each of
| which corresponds to a value for a column. The
| dimension of the array determines the maximum
| number of rows for which the array can be used.

HSM. Hierarchical storage manager.

HTML. Hypertext Markup Language, a standard method for presenting Web data to users.

HTTP. Hypertext Transfer Protocol, a communication protocol that the Web uses.

I

ICF. Integrated catalog facility.

IDCAMS. An IBM program that is used to process access method services commands. It can be invoked as a job or jobstep, from a TSO terminal, or from within a user's application program.

IDCAMS LISTCAT. A facility for obtaining information that is contained in the access method services catalog.

identify. A request that an attachment service program in an address space that is separate from DB2 issues thorough the z/OS subsystem interface to inform DB2 of its existence and to initiate the process of becoming connected to DB2.

identity column. A column that provides a way for DB2 to automatically generate a numeric value for each row. The generated values are unique if cycling is not used. Identity columns are defined with the AS IDENTITY clause. Uniqueness of values can be ensured by defining a unique index that contains only the identity column. A table can have no more than one identity column.

IFCID. Instrumentation facility component identifier.

IFI. Instrumentation facility interface.

IFI call. An invocation of the instrumentation facility interface (IFI) by means of one of its defined functions.

IFP. IMS Fast Path.

image copy. An exact reproduction of all or part of a table space. DB2 provides utility programs to make full image copies (to copy the entire table space) or incremental image copies (to copy only those pages that have been modified since the last image copy).

implied forget. In the presumed-abort protocol, an implied response of *forget* to the second-phase *committed* request from the coordinator. The response is implied when the participant responds to any subsequent request from the coordinator.

IMS. Information Management System.

IMS attachment facility. A DB2 subcomponent that uses z/OS subsystem interface (SSI) protocols and cross-memory linkage to process requests from IMS to DB2 and to coordinate resource commitment.

IMS DB. Information Management System Database.

IMS TM. Information Management System Transaction Manager.

in-abort. A status of a unit of recovery. If DB2 fails after a unit of recovery begins to be rolled back, but before the process is completed, DB2 continues to back out the changes during restart.

in-commit. A status of a unit of recovery. If DB2 fails after beginning its phase 2 commit processing, it "knows," when restarted, that changes made to data are consistent. Such units of recovery are termed *in-commit*.

independent. An object (row, table, or table space) that is neither a parent nor a dependent of another object.

index. A set of pointers that are logically ordered by the values of a key. Indexes can provide faster access to data and can enforce uniqueness on the rows in a table.

| **index-controlled partitioning.** A type of partitioning
| in which partition boundaries for a partitioned table are
| controlled by values that are specified on the CREATE
| INDEX statement. Partition limits are saved in the
| LIMITKEY column of the SYSIBM.SYSINDEXPART
| catalog table.

index key. The set of columns in a table that is used to determine the order of index entries.

index partition. A VSAM data set that is contained within a partitioning index space.

index space. A page set that is used to store the entries of one index.

indicator column. A 4-byte value that is stored in a base table in place of a LOB column.

indicator variable. A variable that is used to represent the null value in an application program. If the value for the selected column is null, a negative value is placed in the indicator variable.

indoubt. A status of a unit of recovery. If DB2 fails after it has finished its phase 1 commit processing and before it has started phase 2, only the commit coordinator knows if an individual unit of recovery is

to be committed or rolled back. At emergency restart, if DB2 lacks the information it needs to make this decision, the status of the unit of recovery is *indoubt* until DB2 obtains this information from the coordinator. More than one unit of recovery can be *indoubt* at restart.

indoubt resolution. The process of resolving the status of an *indoubt* logical unit of work to either the committed or the rollback state.

inflight. A status of a unit of recovery. If DB2 fails before its unit of recovery completes phase 1 of the commit process, it merely backs out the updates of its unit of recovery at restart. These units of recovery are termed *inflight*.

inheritance. The passing downstream of class resources or attributes from a parent class in the class hierarchy to a child class.

initialization file. For DB2 ODBC applications, a file containing values that can be set to adjust the performance of the database manager.

inline copy. A copy that is produced by the LOAD or REORG utility. The data set that the inline copy produces is logically equivalent to a full image copy that is produced by running the COPY utility with read-only access (SHRLEVEL REFERENCE).

inner join. The result of a join operation that includes only the matched rows of both tables that are being joined. See also *join*.

inoperative package. A package that cannot be used because one or more user-defined functions or procedures that the package depends on were dropped. Such a package must be explicitly rebound. Contrast with *invalid package*.

| **insensitive cursor.** A cursor that is not sensitive to
| inserts, updates, or deletes that are made to the
| underlying rows of a result table after the result table
| has been materialized.

insert trigger. A trigger that is defined with the triggering SQL operation INSERT.

install. The process of preparing a DB2 subsystem to operate as a z/OS subsystem.

installation verification scenario. A sequence of operations that exercises the main DB2 functions and tests whether DB2 was correctly installed.

instrumentation facility component identifier (IFCID). A value that names and identifies a trace record of an event that can be traced. As a parameter on the START TRACE and MODIFY TRACE commands, it specifies that the corresponding event is to be traced.

instrumentation facility interface (IFI). A programming interface that enables programs to obtain online trace data about DB2, to submit DB2 commands, and to pass data to DB2.

Interactive System Productivity Facility (ISPF). An IBM licensed program that provides interactive dialog services in a z/OS environment.

inter-DB2 R/W interest. A property of data in a table space, index, or partition that has been opened by more than one member of a data sharing group and that has been opened for writing by at least one of those members.

intermediate database server. The target of a request from a local application or a remote application requester that is forwarded to another database server. In the DB2 environment, the remote request is forwarded transparently to another database server if the object that is referenced by a three-part name does not reference the local location.

internationalization. The support for an encoding scheme that is able to represent the code points of characters from many different geographies and languages. To support all geographies, the Unicode standard requires more than 1 byte to represent a single character. See also *Unicode*.

internal resource lock manager (IRLM). A z/OS subsystem that DB2 uses to control communication and database locking.

| **International Organization for Standardization.** An international body charged with creating standards to facilitate the exchange of goods and services as well as cooperation in intellectual, scientific, technological, and economic activity.

invalid package. A package that depends on an object (other than a user-defined function) that is dropped. Such a package is implicitly rebound on invocation. Contrast with *inoperative package*.

invariant character set. (1) A character set, such as the syntactic character set, whose code point assignments do not change from code page to code page. (2) A minimum set of characters that is available as part of all character sets.

IP address. A 4-byte value that uniquely identifies a TCP/IP host.

IRLM. Internal resource lock manager.

ISO. International Organization for Standardization.

isolation level. The degree to which a unit of work is isolated from the updating operations of other units of work. See also *cursor stability*, *read stability*, *repeatable read*, and *uncommitted read*.

ISPF. Interactive System Productivity Facility.

ISPF/PDF. Interactive System Productivity Facility/Program Development Facility.

iterator. In SQLJ, an object that contains the result set of a query. An iterator is equivalent to a cursor in other host languages.

iterator declaration clause. In SQLJ, a statement that generates an iterator declaration class. An iterator is an object of an iterator declaration class.

J

| **Japanese Industrial Standard.** An encoding scheme that is used to process Japanese characters.

| **JAR.** Java Archive.

Java Archive (JAR). A file format that is used for aggregating many files into a single file.

JCL. Job control language.

JDBC. A Sun Microsystems database application programming interface (API) for Java that allows programs to access database management systems by using callable SQL. JDBC does not require the use of an SQL preprocessor. In addition, JDBC provides an architecture that lets users add modules called *database drivers*, which link the application to their choice of database management systems at run time.

JES. Job Entry Subsystem.

JIS. Japanese Industrial Standard.

job control language (JCL). A control language that is used to identify a job to an operating system and to describe the job's requirements.

Job Entry Subsystem (JES). An IBM licensed program that receives jobs into the system and processes all output data that is produced by the jobs.

join. A relational operation that allows retrieval of data from two or more tables based on matching column values. See also *equijoin*, *full outer join*, *inner join*, *left outer join*, *outer join*, and *right outer join*.

K

KB. Kilobyte (1024 bytes).

Kerberos. A network authentication protocol that is designed to provide strong authentication for client/server applications by using secret-key cryptography.

Kerberos ticket. A transparent application mechanism that transmits the identity of an initiating principal to its target. A simple ticket contains the principal's

identity, a session key, a timestamp, and other information, which is sealed using the target's secret key.

key. A column or an ordered collection of columns that is identified in the description of a table, index, or referential constraint. The same column can be part of more than one key.

key-sequenced data set (KSDS). A VSAM file or data set whose records are loaded in key sequence and controlled by an index.

keyword. In SQL, a name that identifies an option that is used in an SQL statement.

KSDS. Key-sequenced data set.

L

labeled duration. A number that represents a duration of years, months, days, hours, minutes, seconds, or microseconds.

large object (LOB). A sequence of bytes representing bit data, single-byte characters, double-byte characters, or a mixture of single- and double-byte characters. A LOB can be up to 2 GB–1 byte in length. See also *BLOB*, *CLOB*, and *DBCLOB*.

last agent optimization. An optimized commit flow for either presumed-nothing or presumed-abort protocols in which the last agent, or final participant, becomes the commit coordinator. This flow saves at least one message.

latch. A DB2 internal mechanism for controlling concurrent events or the use of system resources.

LCID. Log control interval definition.

LDS. Linear data set.

leaf page. A page that contains pairs of keys and RIDs and that points to actual data. Contrast with *nonleaf page*.

left outer join. The result of a join operation that includes the matched rows of both tables that are being joined, and that preserves the unmatched rows of the first table. See also *join*.

limit key. The highest value of the index key for a partition.

linear data set (LDS). A VSAM data set that contains data but no control information. A linear data set can be accessed as a byte-addressable string in virtual storage.

linkage editor. A computer program for creating load modules from one or more object modules or load

modules by resolving cross references among the modules and, if necessary, adjusting addresses.

link-edit. The action of creating a loadable computer program using a linkage editor.

list. A type of object, which DB2 utilities can process, that identifies multiple table spaces, multiple index spaces, or both. A list is defined with the LISTDEF utility control statement.

list structure. A coupling facility structure that lets data be shared and manipulated as elements of a queue.

LLE. Load list element.

L-lock. Logical lock.

| **load list element.** A z/OS control block that controls
| the loading and deleting of a particular load module
| based on entry point names.

load module. A program unit that is suitable for loading into main storage for execution. The output of a linkage editor.

LOB. Large object.

LOB locator. A mechanism that allows an application program to manipulate a large object value in the database system. A LOB locator is a fullword integer value that represents a single LOB value. An application program retrieves a LOB locator into a host variable and can then apply SQL operations to the associated LOB value using the locator.

LOB lock. A lock on a LOB value.

LOB table space. A table space in an auxiliary table that contains all the data for a particular LOB column in the related base table.

local. A way of referring to any object that the local DB2 subsystem maintains. A *local table*, for example, is a table that is maintained by the local DB2 subsystem. Contrast with *remote*.

locale. The definition of a subset of a user's environment that combines a CCSID and characters that are defined for a specific language and country.

local lock. A lock that provides intra-DB2 concurrency control, but not inter-DB2 concurrency control; that is, its scope is a single DB2.

local subsystem. The unique relational DBMS to which the user or application program is directly connected (in the case of DB2, by one of the DB2 attachment facilities).

| **location.** The unique name of a database server. An
| application uses the location name to access a DB2

location alias • LU

| database server. A database alias can be used to
| override the location name when accessing a remote
| server.

| **location alias.** Another name by which a database
| server identifies itself in the network. Applications can
| use this name to access a DB2 database server.

lock. A means of controlling concurrent events or access to data. DB2 locking is performed by the IRLM.

lock duration. The interval over which a DB2 lock is held.

lock escalation. The promotion of a lock from a row, page, or LOB lock to a table space lock because the number of page locks that are concurrently held on a given resource exceeds a preset limit.

locking. The process by which the integrity of data is ensured. Locking prevents concurrent users from accessing inconsistent data.

lock mode. A representation for the type of access that concurrently running programs can have to a resource that a DB2 lock is holding.

lock object. The resource that is controlled by a DB2 lock.

lock promotion. The process of changing the size or mode of a DB2 lock to a higher, more restrictive level.

lock size. The amount of data that is controlled by a DB2 lock on table data; the value can be a row, a page, a LOB, a partition, a table, or a table space.

lock structure. A coupling facility data structure that is composed of a series of lock entries to support shared and exclusive locking for logical resources.

log. A collection of records that describe the events that occur during DB2 execution and that indicate their sequence. The information thus recorded is used for recovery in the event of a failure during DB2 execution.

| **log control interval definition.** A suffix of the
| physical log record that tells how record segments are
| placed in the physical control interval.

logical claim. A claim on a logical partition of a nonpartitioning index.

logical data modeling. The process of documenting the comprehensive business information requirements in an accurate and consistent format. Data modeling is the first task of designing a database.

logical drain. A drain on a logical partition of a nonpartitioning index.

logical index partition. The set of all keys that reference the same data partition.

logical lock (L-lock). The lock type that transactions use to control intra- and inter-DB2 data concurrency between transactions. Contrast with *physical lock (P-lock)*.

logically complete. A state in which the concurrent copy process is finished with the initialization of the target objects that are being copied. The target objects are available for update.

logical page list (LPL). A list of pages that are in error and that cannot be referenced by applications until the pages are recovered. The page is in *logical error* because the actual media (coupling facility or disk) might not contain any errors. Usually a connection to the media has been lost.

logical partition. A set of key or RID pairs in a nonpartitioning index that are associated with a particular partition.

logical recovery pending (LRECP). The state in which the data and the index keys that reference the data are inconsistent.

logical unit (LU). An access point through which an application program accesses the SNA network in order to communicate with another application program.

logical unit of work (LUW). The processing that a program performs between synchronization points.

logical unit of work identifier (LUWID). A name that uniquely identifies a thread within a network. This name consists of a fully-qualified LU network name, an LUW instance number, and an LUW sequence number.

log initialization. The first phase of restart processing during which DB2 attempts to locate the current end of the log.

log record header (LRH). A prefix, in every logical record, that contains control information.

log record sequence number (LRSN). A unique identifier for a log record that is associated with a data sharing member. DB2 uses the LRSN for recovery in the data sharing environment.

log truncation. A process by which an explicit starting RBA is established. This RBA is the point at which the next byte of log data is to be written.

LPL. Logical page list.

LRECP. Logical recovery pending.

LRH. Log record header.

LRSN. Log record sequence number.

LU. Logical unit.

LU name. Logical unit name, which is the name by which VTAM refers to a node in a network. Contrast with *location name*.

LUW. Logical unit of work.

LUWID. Logical unit of work identifier.

M

mapping table. A table that the REORG utility uses to map the associations of the RIDs of data records in the original copy and in the shadow copy. This table is created by the user.

mass delete. The deletion of all rows of a table.

master terminal. The IMS logical terminal that has complete control of IMS resources during online operations.

master terminal operator (MTO). See *master terminal*.

materialize. (1) The process of putting rows from a view or nested table expression into a work file for additional processing by a query.

(2) The placement of a LOB value into contiguous storage. Because LOB values can be very large, DB2 avoids materializing LOB data until doing so becomes absolutely necessary.

| **materialized query table.** A table that is used to
| contain information that is derived and can be
| summarized from one or more source tables.

MB. Megabyte (1 048 576 bytes).

MBCS. Multibyte character set. UTF-8 is an example of an MBCS. Characters in UTF-8 can range from 1 to 4 bytes in DB2.

member name. The z/OS XCF identifier for a particular DB2 subsystem in a data sharing group.

menu. A displayed list of available functions for selection by the operator. A menu is sometimes called a *menu panel*.

| **metalanguage.** A language that is used to create other
| specialized languages.

migration. The process of converting a subsystem with a previous release of DB2 to an updated or current release. In this process, you can acquire the functions of the updated or current release without losing the data that you created on the previous release.

mixed data string. A character string that can contain both single-byte and double-byte characters.

MLPA. Modified link pack area.

MODEENT. A VTAM macro instruction that associates a logon mode name with a set of parameters representing session protocols. A set of MODEENT macro instructions defines a logon mode table.

modeling database. A DB2 database that you create on your workstation that you use to model a DB2 UDB for z/OS subsystem, which can then be evaluated by the Index Advisor.

mode name. A VTAM name for the collection of physical and logical characteristics and attributes of a session.

modify locks. An L-lock or P-lock with a MODIFY attribute. A list of these active locks is kept at all times in the coupling facility lock structure. If the requesting DB2 subsystem fails, that DB2 subsystem's modify locks are converted to retained locks.

MPP. Message processing program (in IMS).

MTO. Master terminal operator.

multibyte character set (MBCS). A character set that represents single characters with more than a single byte. Contrast with *single-byte character set* and *double-byte character set*. See also *Unicode*.

multidimensional analysis. The process of assessing and evaluating an enterprise on more than one level.

Multiple Virtual Storage. An element of the z/OS operating system. This element is also called the Base Control Program (BCP).

multisite update. Distributed relational database processing in which data is updated in more than one location within a single unit of work.

multithreading. Multiple TCBs that are executing one copy of DB2 ODBC code concurrently (sharing a processor) or in parallel (on separate central processors).

must-complete. A state during DB2 processing in which the entire operation must be completed to maintain data integrity.

mutex. Pthread mutual exclusion; a lock. A Pthread mutex variable is used as a locking mechanism to allow serialization of critical sections of code by temporarily blocking the execution of all but one thread.

| **MVS.** See *Multiple Virtual Storage*.

N

negotiable lock. A lock whose mode can be downgraded, by agreement among contending users, to be compatible to all. A physical lock is an example of a negotiable lock.

nested table expression • overloaded function

nested table expression. A fullselect in a FROM clause (surrounded by parentheses).

network identifier (NID). The network ID that is assigned by IMS or CICS, or if the connection type is RRSAF, the RRS unit of recovery ID (URID).

NID. Network identifier.

nonleaf page. A page that contains keys and page numbers of other pages in the index (either leaf or nonleaf pages). Nonleaf pages never point to actual data.

| **nonpartitioned index.** An index that is not physically
| partitioned. Both partitioning indexes and secondary
| indexes can be nonpartitioned.

nonscrollable cursor. A cursor that can be moved only in a forward direction. Nonscrollable cursors are sometimes called forward-only cursors or serial cursors.

normalization. A key step in the task of building a logical relational database design. Normalization helps you avoid redundancies and inconsistencies in your data. An entity is normalized if it meets a set of constraints for a particular normal form (first normal form, second normal form, and so on). Contrast with *denormalization*.

nondeterministic function. A user-defined function whose result is not solely dependent on the values of the input arguments. That is, successive invocations with the same argument values can produce a different answer. This type of function is sometimes called a *variant* function. Contrast this with a *deterministic function* (sometimes called a *not-variant function*), which always produces the same result for the same inputs.

not-variant function. See *deterministic function*.

| **NPSI.** See *nonpartitioned secondary index*.

NRE. Network recovery element.

NUL. The null character ('\0'), which is represented by the value X'00'. In C, this character denotes the end of a string.

null. A special value that indicates the absence of information.

NULLIF. A scalar function that evaluates two passed expressions, returning either NULL if the arguments are equal or the value of the first argument if they are not.

null-terminated host variable. A varying-length host variable in which the end of the data is indicated by a null terminator.

null terminator. In C, the value that indicates the end of a string. For EBCDIC, ASCII, and Unicode UTF-8 strings, the null terminator is a single-byte value (X'00').

For Unicode UCS-2 (wide) strings, the null terminator is a double-byte value (X'0000').

O

OASN (origin application schedule number). In IMS, a 4-byte number that is assigned sequentially to each IMS schedule since the last cold start of IMS. The OASN is used as an identifier for a unit of work. In an 8-byte format, the first 4 bytes contain the schedule number and the last 4 bytes contain the number of IMS sync points (*commit points*) during the current schedule. The OASN is part of the NID for an IMS connection.

ODBC. Open Database Connectivity.

ODBC driver. A dynamically-linked library (DLL) that implements ODBC function calls and interacts with a data source.

OBID. Data object identifier.

Open Database Connectivity (ODBC). A Microsoft® database application programming interface (API) for C that allows access to database management systems by using callable SQL. ODBC does not require the use of an SQL preprocessor. In addition, ODBC provides an architecture that lets users add modules called *database drivers*, which link the application to their choice of database management systems at run time. This means that applications no longer need to be directly linked to the modules of all the database management systems that are supported.

ordinary identifier. An uppercase letter followed by zero or more characters, each of which is an uppercase letter, a digit, or the underscore character. An ordinary identifier must not be a reserved word.

ordinary token. A numeric constant, an ordinary identifier, a host identifier, or a keyword.

originating task. In a parallel group, the primary agent that receives data from other execution units (referred to as *parallel tasks*) that are executing portions of the query in parallel.

OS/390. Operating System/390®.

outer join. The result of a join operation that includes the matched rows of both tables that are being joined and preserves some or all of the unmatched rows of the tables that are being joined. See also *join*.

overloaded function. A function name for which multiple function instances exist.

P

package. An object containing a set of SQL statements that have been statically bound and that is available for processing. A package is sometimes also called an *application package*.

package list. An ordered list of package names that may be used to extend an application plan.

package name. The name of an object that is created by a BIND PACKAGE or REBIND PACKAGE command. The object is a bound version of a database request module (DBRM). The name consists of a location name, a collection ID, a package ID, and a version ID.

page. A unit of storage within a table space (4 KB, 8 KB, 16 KB, or 32 KB) or index space (4 KB). In a table space, a page contains one or more rows of a table. In a LOB table space, a LOB value can span more than one page, but no more than one LOB value is stored on a page.

page set. Another way to refer to a table space or index space. Each page set consists of a collection of VSAM data sets.

page set recovery pending (PSRCP). A restrictive state of an index space. In this case, the entire page set must be recovered. Recovery of a logical part is prohibited.

panel. A predefined display image that defines the locations and characteristics of display fields on a display surface (for example, a *menu panel*).

parallel complex. A cluster of machines that work together to handle multiple transactions and applications.

parallel group. A set of consecutive operations that execute in parallel and that have the same number of parallel tasks.

parallel I/O processing. A form of I/O processing in which DB2 initiates multiple concurrent requests for a single user query and performs I/O processing concurrently (in *parallel*) on multiple data partitions.

parallelism assistant. In Sysplex query parallelism, a DB2 subsystem that helps to process parts of a parallel query that originates on another DB2 subsystem in the data sharing group.

parallelism coordinator. In Sysplex query parallelism, the DB2 subsystem from which the parallel query originates.

Parallel Sysplex. A set of z/OS systems that communicate and cooperate with each other through certain multisystem hardware components and software services to process customer workloads.

parallel task. The execution unit that is dynamically created to process a query in parallel. A parallel task is implemented by a z/OS service request block.

parameter marker. A question mark (?) that appears in a statement string of a dynamic SQL statement. The question mark can appear where a host variable could appear if the statement string were a static SQL statement.

| **parameter-name.** An SQL identifier that designates a
| parameter in an SQL procedure or an SQL function.

parent key. A primary key or unique key in the parent table of a referential constraint. The values of a parent key determine the valid values of the foreign key in the referential constraint.

| **parent lock.** For explicit hierarchical locking, a lock
| that is held on a resource that might have child locks
| that are lower in the hierarchy. A parent lock is usually
| the table space lock or the partition intent lock. See also
| *child lock*.

parent row. A row whose primary key value is the foreign key value of a dependent row.

parent table. A table whose primary key is referenced by the foreign key of a dependent table.

parent table space. A table space that contains a parent table. A table space containing a dependent of that table is a dependent table space.

participant. An entity other than the commit coordinator that takes part in the commit process. The term participant is synonymous with *agent* in SNA.

partition. A portion of a page set. Each partition corresponds to a single, independently extendable data set. Partitions can be extended to a maximum size of 1, 2, or 4 GB, depending on the number of partitions in the partitioned page set. All partitions of a given page set have the same maximum size.

partitioned data set (PDS). A data set in disk storage that is divided into partitions, which are called members. Each partition can contain a program, part of a program, or data. The term partitioned data set is synonymous with program library.

| **partitioned index.** An index that is physically
| partitioned. Both partitioning indexes and secondary
| indexes can be partitioned.

partitioned page set. A partitioned table space or an index space. Header pages, space map pages, data pages, and index pages reference data only within the scope of the partition.

partitioned table space. A table space that is subdivided into parts (based on index key range), each of which can be processed independently by utilities.

partitioning index. An index in which the leftmost columns are the partitioning columns of the table. The index can be partitioned or nonpartitioned.

partition pruning. The removal from consideration of inapplicable partitions through setting up predicates in a query on a partitioned table to access only certain partitions to satisfy the query.

partner logical unit. An access point in the SNA network that is connected to the local DB2 subsystem by way of a VTAM conversation.

path. See *SQL path*.

PCT. Program control table (in CICS).

PDS. Partitioned data set.

piece. A data set of a nonpartitioned page set.

physical claim. A claim on an entire nonpartitioning index.

physical consistency. The state of a page that is not in a partially changed state.

physical drain. A drain on an entire nonpartitioning index.

physical lock (P-lock). A type of lock that DB2 acquires to provide consistency of data that is cached in different DB2 subsystems. Physical locks are used only in data sharing environments. Contrast with *logical lock (L-lock)*.

physical lock contention. Conflicting states of the requesters for a physical lock. See also *negotiable lock*.

physically complete. The state in which the concurrent copy process is completed and the output data set has been created.

plan. See *application plan*.

plan allocation. The process of allocating DB2 resources to a plan in preparation for execution.

plan member. The bound copy of a DBRM that is identified in the member clause.

plan name. The name of an application plan.

plan segmentation. The dividing of each plan into sections. When a section is needed, it is independently brought into the EDM pool.

P-lock. Physical lock.

PLT. Program list table (in CICS).

point of consistency. A time when all recoverable data that an application accesses is consistent with other data. The term point of consistency is synonymous with *sync point* or *commit point*.

policy. See *CFRM policy*.

Portable Operating System Interface (POSIX). The IEEE operating system interface standard, which defines the Pthread standard of threading. See also *Pthread*.

POSIX. Portable Operating System Interface.

postponed abort UR. A unit of recovery that was inflight or in-abort, was interrupted by system failure or cancellation, and did not complete backout during restart.

PPT. (1) Processing program table (in CICS). (2) Program properties table (in z/OS).

precision. In SQL, the total number of digits in a decimal number (called the *size* in the C language). In the C language, the number of digits to the right of the decimal point (called the *scale* in SQL). The DB2 library uses the SQL terms.

precompilation. A processing of application programs containing SQL statements that takes place before compilation. SQL statements are replaced with statements that are recognized by the host language compiler. Output from this precompilation includes source code that can be submitted to the compiler and the database request module (DBRM) that is input to the bind process.

predicate. An element of a search condition that expresses or implies a comparison operation.

prefix. A code at the beginning of a message or record.

preformat. The process of preparing a VSAM ESDS for DB2 use, by writing specific data patterns.

prepare. The first phase of a two-phase commit process in which all participants are requested to prepare for commit.

prepared SQL statement. A named object that is the executable form of an SQL statement that has been processed by the PREPARE statement.

presumed-abort. An optimization of the presumed-nothing two-phase commit protocol that reduces the number of recovery log records, the duration of state maintenance, and the number of messages between coordinator and participant. The optimization also modifies the indoubt resolution responsibility.

presumed-nothing. The standard two-phase commit protocol that defines coordinator and participant responsibilities, relative to logical unit of work states, recovery logging, and indoubt resolution.

primary authorization ID. The authorization ID that is used to identify the application process to DB2.

primary group buffer pool. For a duplexed group buffer pool, the structure that is used to maintain the coherency of cached data. This structure is used for page registration and cross-invalidation. The z/OS equivalent is *old* structure. Compare with *secondary group buffer pool*.

primary index. An index that enforces the uniqueness of a primary key.

primary key. In a relational database, a unique, nonnull key that is part of the definition of a table. A table cannot be defined as a parent unless it has a unique key or primary key.

principal. An entity that can communicate securely with another entity. In Kerberos, principals are represented as entries in the Kerberos registry database and include users, servers, computers, and others.

principal name. The name by which a principal is known to the DCE security services.

private connection. A communications connection that is specific to DB2.

private protocol access. A method of accessing distributed data by which you can direct a query to another DB2 system. Contrast with *DRDA access*.

private protocol connection. A DB2 private connection of the application process. See also *private connection*.

privilege. The capability of performing a specific function, sometimes on a specific object. The types of privileges are:

explicit privileges, which have names and are held as the result of SQL GRANT and REVOKE statements. For example, the SELECT privilege.

implicit privileges, which accompany the ownership of an object, such as the privilege to drop a synonym that one owns, or the holding of an authority, such as the privilege of SYSADM authority to terminate any utility job.

privilege set. For the installation SYSADM ID, the set of all possible privileges. For any other authorization ID, the set of all privileges that are recorded for that ID in the DB2 catalog.

process. In DB2, the unit to which DB2 allocates resources and locks. Sometimes called an *application process*, a process involves the execution of one or more programs. The execution of an SQL statement is always associated with some process. The means of initiating and terminating a process are dependent on the environment.

program. A single, compilable collection of executable statements in a programming language.

program temporary fix (PTF). A solution or bypass of a problem that is diagnosed as a result of a defect in a

current unaltered release of a licensed program. An authorized program analysis report (APAR) fix is corrective service for an existing problem. A PTF is preventive service for problems that might be encountered by other users of the product. A PTF is *temporary*, because a permanent fix is usually not incorporated into the product until its next release.

protected conversation. A VTAM conversation that supports two-phase commit flows.

PSRCP. Page set recovery pending.

PTF. Program temporary fix.

Pthread. The POSIX threading standard model for splitting an application into subtasks. The Pthread standard includes functions for creating threads, terminating threads, synchronizing threads through locking, and other thread control facilities.

Q

QMF™. Query Management Facility.

QSAM. Queued sequential access method.

query. A component of certain SQL statements that specifies a result table.

query block. The part of a query that is represented by one of the FROM clauses. Each FROM clause can have multiple query blocks, depending on DB2's internal processing of the query.

query CP parallelism. Parallel execution of a single query, which is accomplished by using multiple tasks. See also *Sysplex query parallelism*.

query I/O parallelism. Parallel access of data, which is accomplished by triggering multiple I/O requests within a single query.

queued sequential access method (QSAM). An extended version of the basic sequential access method (BSAM). When this method is used, a queue of data blocks is formed. Input data blocks await processing, and output data blocks await transfer to auxiliary storage or to an output device.

quiesce point. A point at which data is consistent as a result of running the DB2 QUIESCE utility.

quiesced member state. A state of a member of a data sharing group. An active member becomes quiesced when a STOP DB2 command takes effect without a failure. If the member's task, address space, or z/OS system fails before the command takes effect, the member state is failed.

R

| **RACF.** Resource Access Control Facility, which is a component of the z/OS Security Server.

RAMAC®. IBM family of enterprise disk storage system products.

RBA. Relative byte address.

RCT. Resource control table (in CICS attachment facility).

RDB. Relational database.

RDBMS. Relational database management system.

RDBNAM. Relational database name.

RDF. Record definition field.

read stability (RS). An isolation level that is similar to repeatable read but does not completely isolate an application process from all other concurrently executing application processes. Under level RS, an application that issues the same query more than once might read additional rows that were inserted and committed by a concurrently executing application process.

rebind. The creation of a new application plan for an application program that has been bound previously. If, for example, you have added an index for a table that your application accesses, you must rebind the application in order to take advantage of that index.

rebuild. The process of reallocating a coupling facility structure. For the shared communications area (SCA) and lock structure, the structure is repopulated; for the group buffer pool, changed pages are usually cast out to disk, and the new structure is populated only with changed pages that were not successfully cast out.

RECFM. Record format.

record. The storage representation of a row or other data.

record identifier (RID). A unique identifier that DB2 uses internally to identify a row of data in a table. Compare with *row ID*.

| **record identifier (RID) pool.** An area of main storage
| that is used for sorting record identifiers during
| list-prefetch processing.

record length. The sum of the length of all the columns in a table, which is the length of the data as it is physically stored in the database. Records can be fixed length or varying length, depending on how the columns are defined. If all columns are fixed-length

columns, the record is a fixed-length record. If one or more columns are varying-length columns, the record is a varying-length column.

Recoverable Resource Manager Services attachment facility (RRSAF). A DB2 subcomponent that uses Resource Recovery Services to coordinate resource commitment between DB2 and all other resource managers that also use RRS in a z/OS system.

recovery. The process of rebuilding databases after a system failure.

recovery log. A collection of records that describes the events that occur during DB2 execution and indicates their sequence. The recorded information is used for recovery in the event of a failure during DB2 execution.

recovery manager. (1) A subcomponent that supplies coordination services that control the interaction of DB2 resource managers during commit, abort, checkpoint, and restart processes. The recovery manager also supports the recovery mechanisms of other subsystems (for example, IMS) by acting as a participant in the other subsystem's process for protecting data that has reached a point of consistency. (2) A coordinator or a participant (or both), in the execution of a two-phase commit, that can access a recovery log that maintains the state of the logical unit of work and names the immediate upstream coordinator and downstream participants.

recovery pending (RECP). A condition that prevents SQL access to a table space that needs to be recovered.

recovery token. An identifier for an element that is used in recovery (for example, NID or URID).

RECP. Recovery pending.

redo. A state of a unit of recovery that indicates that changes are to be reapplied to the disk media to ensure data integrity.

reentrant. Executable code that can reside in storage as one shared copy for all threads. Reentrant code is not self-modifying and provides separate storage areas for each thread. Reentrancy is a compiler and operating system concept, and reentrancy alone is not enough to guarantee logically consistent results when multithreading. See also *threadsafe*.

referential constraint. The requirement that nonnull values of a designated foreign key are valid only if they equal values of the primary key of a designated table.

referential integrity. The state of a database in which all values of all foreign keys are valid. Maintaining referential integrity requires the enforcement of referential constraints on all operations that change the data in a table on which the referential constraints are defined.

referential structure. A set of tables and relationships that includes at least one table and, for every table in the set, all the relationships in which that table participates and all the tables to which it is related.

| **refresh age.** The time duration between the current
| time and the time during which a materialized query
| table was last refreshed.

registry. See *registry database*.

registry database. A database of security information about principals, groups, organizations, accounts, and security policies.

relational database (RDB). A database that can be perceived as a set of tables and manipulated in accordance with the relational model of data.

relational database management system (RDBMS). A collection of hardware and software that organizes and provides access to a relational database.

relational database name (RDBNAM). A unique identifier for an RDBMS within a network. In DB2, this must be the value in the LOCATION column of table SYSIBM.LOCATIONS in the CDB. DB2 publications refer to the name of another RDBMS as a LOCATION value or a location name.

relationship. A defined connection between the rows of a table or the rows of two tables. A relationship is the internal representation of a referential constraint.

relative byte address (RBA). The offset of a data record or control interval from the beginning of the storage space that is allocated to the data set or file to which it belongs.

remigration. The process of returning to a current release of DB2 following a fallback to a previous release. This procedure constitutes another migration process.

remote. Any object that is maintained by a remote DB2 subsystem (that is, by a DB2 subsystem other than the local one). A *remote view*, for example, is a view that is maintained by a remote DB2 subsystem. Contrast with *local*.

remote attach request. A request by a remote location to attach to the local DB2 subsystem. Specifically, the request that is sent is an SNA Function Management Header 5.

remote subsystem. Any relational DBMS, except the *local subsystem*, with which the user or application can communicate. The subsystem need not be remote in any physical sense, and might even operate on the same processor under the same z/OS system.

reoptimization. The DB2 process of reconsidering the access path of an SQL statement at run time; during

reoptimization, DB2 uses the values of host variables, parameter markers, or special registers.

REORG pending (REORP). A condition that restricts SQL access and most utility access to an object that must be reorganized.

REORP. REORG pending.

repeatable read (RR). The isolation level that provides maximum protection from other executing application programs. When an application program executes with repeatable read protection, rows that the program references cannot be changed by other programs until the program reaches a commit point.

repeating group. A situation in which an entity includes multiple attributes that are inherently the same. The presence of a repeating group violates the requirement of first normal form. In an entity that satisfies the requirement of first normal form, each attribute is independent and unique in its meaning and its name. See also *normalization*.

replay detection mechanism. A method that allows a principal to detect whether a request is a valid request from a source that can be trusted or whether an untrustworthy entity has captured information from a previous exchange and is replaying the information exchange to gain access to the principal.

request commit. The vote that is submitted to the prepare phase if the participant has modified data and is prepared to commit or roll back.

requester. The source of a request to access data at a remote server. In the DB2 environment, the requester function is provided by the distributed data facility.

resource. The object of a lock or claim, which could be a table space, an index space, a data partition, an index partition, or a logical partition.

resource allocation. The part of plan allocation that deals specifically with the database resources.

resource control table (RCT). A construct of the CICS attachment facility, created by site-provided macro parameters, that defines authorization and access attributes for transactions or transaction groups.

resource definition online. A CICS feature that you use to define CICS resources online without assembling tables.

resource limit facility (RLF). A portion of DB2 code that prevents dynamic manipulative SQL statements from exceeding specified time limits. The resource limit facility is sometimes called the governor.

resource limit specification table (RLST). A site-defined table that specifies the limits to be enforced by the resource limit facility.

resource manager. (1) A function that is responsible for managing a particular resource and that guarantees the consistency of all updates made to recoverable resources within a logical unit of work. The resource that is being managed can be physical (for example, disk or main storage) or logical (for example, a particular type of system service). (2) A participant, in the execution of a two-phase commit, that has recoverable resources that could have been modified. The resource manager has access to a recovery log so that it can commit or roll back the effects of the logical unit of work to the recoverable resources.

restart pending (RESTOP). A restrictive state of a page set or partition that indicates that restart (backout) work needs to be performed on the object. All access to the page set or partition is denied except for access by the:

- RECOVER POSTPONED command
- Automatic online backout (which DB2 invokes after restart if the system parameter LBACKOUT=AUTO)

RESTOP. Restart pending.

result set. The set of rows that a stored procedure returns to a client application.

result set locator. A 4-byte value that DB2 uses to uniquely identify a query result set that a stored procedure returns.

result table. The set of rows that are specified by a SELECT statement.

retained lock. A MODIFY lock that a DB2 subsystem was holding at the time of a subsystem failure. The lock is retained in the coupling facility lock structure across a DB2 failure.

RID. Record identifier.

RID pool. Record identifier pool.

right outer join. The result of a join operation that includes the matched rows of both tables that are being joined and preserves the unmatched rows of the second join operand. See also *join*.

RLF. Resource limit facility.

RLST. Resource limit specification table.

RMID. Resource manager identifier.

RO. Read-only access.

rollback. The process of restoring data that was changed by SQL statements to the state at its last commit point. All locks are freed. Contrast with *commit*.

root page. The index page that is at the highest level (or the beginning point) in an index.

routine. A term that refers to either a user-defined function or a stored procedure.

row. The horizontal component of a table. A row consists of a sequence of values, one for each column of the table.

ROWID. Row identifier.

row identifier (ROWID). A value that uniquely identifies a row. This value is stored with the row and never changes.

row lock. A lock on a single row of data.

| **rowset.** A set of rows for which a cursor position is established.

| **rowset cursor.** A cursor that is defined so that one or more rows can be returned as a rowset for a single FETCH statement, and the cursor is positioned on the set of rows that is fetched.

| **rowset-positioned access.** The ability to retrieve multiple rows from a single FETCH statement.

| **row-positioned access.** The ability to retrieve a single row from a single FETCH statement.

row trigger. A trigger that is defined with the trigger granularity FOR EACH ROW.

RRE. Residual recovery entry (in IMS).

RRSAF. Recoverable Resource Manager Services attachment facility.

RS. Read stability.

RTT. Resource translation table.

RURE. Restart URE.

S

savepoint. A named entity that represents the state of data and schemas at a particular point in time within a unit of work. SQL statements exist to set a savepoint, release a savepoint, and restore data and schemas to the state that the savepoint represents. The restoration of data and schemas to a savepoint is usually referred to as *rolling back to a savepoint*.

SBCS. Single-byte character set.

SCA. Shared communications area.

| **scalar function.** An SQL operation that produces a single value from another value and is expressed as a function name, followed by a list of arguments that are enclosed in parentheses. Contrast with *aggregate function*.

scale. In SQL, the number of digits to the right of the decimal point (called the *precision* in the C language). The DB2 library uses the SQL definition.

schema. (1) The organization or structure of a database. (2) A logical grouping for user-defined functions, distinct types, triggers, and stored procedures. When an object of one of these types is created, it is assigned to one schema, which is determined by the name of the object. For example, the following statement creates a distinct type T in schema C:

```
CREATE DISTINCT TYPE C.T ...
```

scrollability. The ability to use a cursor to fetch in either a forward or backward direction. The FETCH statement supports multiple fetch orientations to indicate the new position of the cursor. See also *fetch orientation*.

scrollable cursor. A cursor that can be moved in both a forward and a backward direction.

SDWA. System diagnostic work area.

search condition. A criterion for selecting rows from a table. A search condition consists of one or more predicates.

secondary authorization ID. An authorization ID that has been associated with a primary authorization ID by an authorization exit routine.

secondary group buffer pool. For a duplexed group buffer pool, the structure that is used to back up changed pages that are written to the primary group buffer pool. No page registration or cross-invalidation occurs using the secondary group buffer pool. The z/OS equivalent is *new* structure.

secondary index. A nonpartitioning index on a partitioned table.

section. The segment of a plan or package that contains the executable structures for a single SQL statement. For most SQL statements, one section in the plan exists for each SQL statement in the source program. However, for cursor-related statements, the DECLARE, OPEN, FETCH, and CLOSE statements reference the same section because they each refer to the SELECT statement that is named in the DECLARE CURSOR statement. SQL statements such as COMMIT, ROLLBACK, and some SET statements do not use a section.

segment. A group of pages that holds rows of a single table. See also *segmented table space*.

segmented table space. A table space that is divided into equal-sized groups of pages called segments. Segments are assigned to tables so that rows of different tables are never stored in the same segment.

self-referencing constraint. A referential constraint that defines a relationship in which a table is a dependent of itself.

self-referencing table. A table with a self-referencing constraint.

sensitive cursor. A cursor that is sensitive to changes that are made to the database after the result table has been materialized.

sequence. A user-defined object that generates a sequence of numeric values according to user specifications.

sequential data set. A non-DB2 data set whose records are organized on the basis of their successive physical positions, such as on magnetic tape. Several of the DB2 database utilities require sequential data sets.

sequential prefetch. A mechanism that triggers consecutive asynchronous I/O operations. Pages are fetched before they are required, and several pages are read with a single I/O operation.

serial cursor. A cursor that can be moved only in a forward direction.

serialized profile. A Java object that contains SQL statements and descriptions of host variables. The SQLJ translator produces a serialized profile for each connection context.

server. The target of a request from a remote requester. In the DB2 environment, the server function is provided by the distributed data facility, which is used to access DB2 data from remote applications.

server-side programming. A method for adding DB2 data into dynamic Web pages.

service class. An eight-character identifier that is used by the z/OS Workload Manager to associate user performance goals with a particular DDF thread or stored procedure. A service class is also used to classify work on parallelism assistants.

service request block. A unit of work that is scheduled to execute in another address space.

session. A link between two nodes in a VTAM network.

session protocols. The available set of SNA communication requests and responses.

shared communications area (SCA). A coupling facility list structure that a DB2 data sharing group uses for inter-DB2 communication.

share lock. A lock that prevents concurrently executing application processes from changing data, but not from reading data. Contrast with *exclusive lock*.

shift-in character. A special control character (X'0F') that is used in EBCDIC systems to denote that the subsequent bytes represent SBCS characters. See also *shift-out character*.

shift-out character. A special control character (X'0E') that is used in EBCDIC systems to denote that the subsequent bytes, up to the next shift-in control character, represent DBCS characters. See also *shift-in character*.

sign-on. A request that is made on behalf of an individual CICS or IMS application process by an attachment facility to enable DB2 to verify that it is authorized to use DB2 resources.

simple page set. A nonpartitioned page set. A simple page set initially consists of a single data set (page set piece). If and when that data set is extended to 2 GB, another data set is created, and so on, up to a total of 32 data sets. DB2 considers the data sets to be a single contiguous linear address space containing a maximum of 64 GB. Data is stored in the next available location within this address space without regard to any partitioning scheme.

simple table space. A table space that is neither partitioned nor segmented.

single-byte character set (SBCS). A set of characters in which each character is represented by a single byte. Contrast with *double-byte character set* or *multibyte character set*.

single-precision floating point number. A 32-bit approximate representation of a real number.

size. In the C language, the total number of digits in a decimal number (called the *precision* in SQL). The DB2 library uses the SQL term.

SMF. System Management Facilities.

SMP/E. System Modification Program/Extended.

SMS. Storage Management Subsystem.

SNA. Systems Network Architecture.

SNA network. The part of a network that conforms to the formats and protocols of Systems Network Architecture (SNA).

socket. A callable TCP/IP programming interface that TCP/IP network applications use to communicate with remote TCP/IP partners.

sourced function. A function that is implemented by another built-in or user-defined function that is already known to the database manager. This function can be a scalar function or a column (aggregating) function; it returns a single value from a set of values (for example, MAX or AVG). Contrast with *built-in function*, *external function*, and *SQL function*.

source program. A set of host language statements and SQL statements that is processed by an SQL precompiler.

| **source table.** A table that can be a base table, a view, a
| table expression, or a user-defined table function.

source type. An existing type that DB2 uses to internally represent a distinct type.

space. A sequence of one or more blank characters.

special register. A storage area that DB2 defines for an application process to use for storing information that can be referenced in SQL statements. Examples of special registers are USER and CURRENT DATE.

specific function name. A particular user-defined function that is known to the database manager by its specific name. Many specific user-defined functions can have the same function name. When a user-defined function is defined to the database, every function is assigned a specific name that is unique within its schema. Either the user can provide this name, or a default name is used.

SPUFI. SQL Processor Using File Input.

SQL. Structured Query Language.

SQL authorization ID (SQL ID). The authorization ID that is used for checking dynamic SQL statements in some situations.

SQLCA. SQL communication area.

SQL communication area (SQLCA). A structure that is used to provide an application program with information about the execution of its SQL statements.

SQL connection. An association between an application process and a local or remote application server or database server.

SQLDA. SQL descriptor area.

SQL descriptor area (SQLDA). A structure that describes input variables, output variables, or the columns of a result table.

SQL escape character. The symbol that is used to enclose an SQL delimited identifier. This symbol is the double quotation mark ("). See also *escape character*.

SQL function. A user-defined function in which the CREATE FUNCTION statement contains the source code. The source code is a single SQL expression that evaluates to a single value. The SQL user-defined function can return only one parameter.

SQL ID. SQL authorization ID.

SQLJ. Structured Query Language (SQL) that is embedded in the Java programming language.

SQL path. An ordered list of schema names that are used in the resolution of unqualified references to user-defined functions, distinct types, and stored procedures. In dynamic SQL, the current path is found in the CURRENT PATH special register. In static SQL, it is defined in the PATH bind option.

SQL procedure. A user-written program that can be invoked with the SQL CALL statement. Contrast with *external procedure*.

SQL processing conversation. Any conversation that requires access of DB2 data, either through an application or by dynamic query requests.

SQL Processor Using File Input (SPUFI). A facility of the TSO attachment subcomponent that enables the DB2I user to execute SQL statements without embedding them in an application program.

SQL return code. Either SQLCODE or SQLSTATE.

SQL routine. A user-defined function or stored procedure that is based on code that is written in SQL.

SQL statement coprocessor. An alternative to the DB2 precompiler that lets the user process SQL statements at compile time. The user invokes an SQL statement coprocessor by specifying a compiler option.

SQL string delimiter. A symbol that is used to enclose an SQL string constant. The SQL string delimiter is the apostrophe ('), except in COBOL applications, where the user assigns the symbol, which is either an apostrophe or a double quotation mark (").

SRB. Service request block.

SSI. Subsystem interface (in z/OS).

SSM. Subsystem member (in IMS).

stand-alone. An attribute of a program that means that it is capable of executing separately from DB2, without using DB2 services.

star join. A method of joining a dimension column of a fact table to the key column of the corresponding dimension table. See also *join*, *dimension*, and *star schema*.

star schema. The combination of a fact table (which contains most of the data) and a number of dimension tables. See also *star join*, *dimension*, and *dimension table*.

statement handle. In DB2 ODBC, the data object that contains information about an SQL statement that is managed by DB2 ODBC. This includes information such as dynamic arguments, bindings for dynamic arguments and columns, cursor information, result values, and status information. Each statement handle is associated with the connection handle.

statement string. For a dynamic SQL statement, the character string form of the statement.

statement trigger. A trigger that is defined with the trigger granularity FOR EACH STATEMENT.

| **static cursor.** A named control structure that does not
| change the size of the result table or the order of its
| rows after an application opens the cursor. Contrast
| with *dynamic cursor*.

static SQL. SQL statements, embedded within a program, that are prepared during the program preparation process (before the program is executed). After being prepared, the SQL statement does not change (although values of host variables that are specified by the statement might change).

storage group. A named set of disks on which DB2 data can be stored.

stored procedure. A user-written application program that can be invoked through the use of the SQL CALL statement.

string. See *character string* or *graphic string*.

strong typing. A process that guarantees that only user-defined functions and operations that are defined on a distinct type can be applied to that type. For example, you cannot directly compare two currency types, such as Canadian dollars and U.S. dollars. But you can provide a user-defined function to convert one currency to the other and then do the comparison.

structure. (1) A name that refers collectively to different types of DB2 objects, such as tables, databases, views, indexes, and table spaces. (2) A construct that uses z/OS to map and manage storage on a coupling facility. See also *cache structure*, *list structure*, or *lock structure*.

Structured Query Language (SQL). A standardized language for defining and manipulating data in a relational database.

structure owner. In relation to group buffer pools, the DB2 member that is responsible for the following activities:

- Coordinating rebuild, checkpoint, and damage assessment processing
- Monitoring the group buffer pool threshold and notifying castout owners when the threshold has been reached

subcomponent. A group of closely related DB2 modules that work together to provide a general function.

subject table. The table for which a trigger is created. When the defined triggering event occurs on this table, the trigger is activated.

subpage. The unit into which a physical index page can be divided.

subquery. A SELECT statement within the WHERE or HAVING clause of another SQL statement; a nested SQL statement.

subselect. That form of a query that does not include an ORDER BY clause, an UPDATE clause, or UNION operators.

substitution character. A unique character that is substituted during character conversion for any characters in the source program that do not have a match in the target coding representation.

subsystem. A distinct instance of a relational database management system (RDBMS).

surrogate pair. A coded representation for a single character that consists of a sequence of two 16-bit code units, in which the first value of the pair is a high-surrogate code unit in the range U+D800 through U+DBFF, and the second value is a low-surrogate code unit in the range U+DC00 through U+DFFF. Surrogate pairs provide an extension mechanism for encoding 917 476 characters without requiring the use of 32-bit characters.

SVC dump. A dump that is issued when a z/OS or a DB2 functional recovery routine detects an error.

sync point. See *commit point*.

syncpoint tree. The tree of recovery managers and resource managers that are involved in a logical unit of work, starting with the recovery manager, that make the final commit decision.

synonym. In SQL, an alternative name for a table or view. Synonyms can be used to refer only to objects at the subsystem in which the synonym is defined.

syntactic character set. A set of 81 graphic characters that are registered in the IBM registry as character set 00640. This set was originally recommended to the programming language community to be used for syntactic purposes toward maximizing portability and interchangeability across systems and country boundaries. It is contained in most of the primary registered character sets, with a few exceptions. See also *invariant character set*.

Sysplex. See *Parallel Sysplex*.

Sysplex query parallelism. Parallel execution of a single query that is accomplished by using multiple tasks on more than one DB2 subsystem. See also *query CP parallelism*.

system administrator. The person at a computer installation who designs, controls, and manages the use of the computer system.

system agent. A work request that DB2 creates internally such as prefetch processing, deferred writes, and service tasks.

system conversation. The conversation that two DB2 subsystems must establish to process system messages before any distributed processing can begin.

system diagnostic work area (SDWA). The data that is recorded in a SYS1.LOGREC entry that describes a program or hardware error.

system-directed connection. A connection that a relational DBMS manages by processing SQL statements with three-part names.

System Modification Program/Extended (SMP/E). A z/OS tool for making software changes in programming systems (such as DB2) and for controlling those changes.

Systems Network Architecture (SNA). The description of the logical structure, formats, protocols, and operational sequences for transmitting information through and controlling the configuration and operation of networks.

SYS1.DUMPxx data set. A data set that contains a system dump (in z/OS).

SYS1.LOGREC. A service aid that contains important information about program and hardware errors (in z/OS).

T

table. A named data object consisting of a specific number of columns and some number of unordered rows. See also *base table* or *temporary table*.

| **table-controlled partitioning.** A type of partitioning in
| which partition boundaries for a partitioned table are
| controlled by values that are defined in the CREATE
| TABLE statement. Partition limits are saved in the
| LIMITKEY_INTERNAL column of the
| SYSIBM.SYSTABLEPART catalog table.

table function. A function that receives a set of arguments and returns a table to the SQL statement that references the function. A table function can be referenced only in the FROM clause of a subselect.

table locator. A mechanism that allows access to trigger transition tables in the FROM clause of SELECT statements, in the subselect of INSERT statements, or from within user-defined functions. A table locator is a fullword integer value that represents a transition table.

table space. A page set that is used to store the records in one or more tables.

table space set. A set of table spaces and partitions that should be recovered together for one of these reasons:

- Each of them contains a table that is a parent or descendent of a table in one of the others.
- The set contains a base table and associated auxiliary tables.

A table space set can contain both types of relationships.

task control block (TCB). A z/OS control block that is used to communicate information about tasks within an address space that are connected to DB2. See also *address space connection*.

TB. Terabyte (1 099 511 627 776 bytes).

TCB. Task control block (in z/OS).

TCP/IP. A network communication protocol that computer systems use to exchange information across telecommunication links.

TCP/IP port. A 2-byte value that identifies an end user or a TCP/IP network application within a TCP/IP host.

template. A DB2 utilities output data set descriptor that is used for dynamic allocation. A template is defined by the TEMPLATE utility control statement.

temporary table. A table that holds temporary data. Temporary tables are useful for holding or sorting intermediate results from queries that contain a large number of rows. The two types of temporary table, which are created by different SQL statements, are the created temporary table and the declared temporary table. Contrast with *result table*. See also *created temporary table* and *declared temporary table*.

Terminal Monitor Program (TMP). A program that provides an interface between terminal users and command processors and has access to many system services (in z/OS).

thread. The DB2 structure that describes an application's connection, traces its progress, processes resource functions, and delimits its accessibility to DB2 resources and services. Most DB2 functions execute under a thread structure. See also *allied thread* and *database access thread*.

threadsafe. A characteristic of code that allows multithreading both by providing private storage areas for each thread, and by properly serializing shared (global) storage areas.

three-part name. The full name of a table, view, or alias. It consists of a location name, authorization ID, and an object name, separated by a period.

time. A three-part value that designates a time of day in hours, minutes, and seconds.

time duration. A decimal integer that represents a number of hours, minutes, and seconds.

timeout. Abnormal termination of either the DB2 subsystem or of an application because of the unavailability of resources. Installation specifications are set to determine both the amount of time DB2 is to wait for IRLM services after starting, and the amount of time IRLM is to wait if a resource that an application requests is unavailable. If either of these time specifications is exceeded, a timeout is declared.

Time-Sharing Option (TSO). An option in MVS that provides interactive time sharing from remote terminals.

timestamp. A seven-part value that consists of a date and time. The timestamp is expressed in years, months, days, hours, minutes, seconds, and microseconds.

TMP. Terminal Monitor Program.

to-do. A state of a unit of recovery that indicates that the unit of recovery's changes to recoverable DB2 resources are indoubt and must either be applied to the disk media or backed out, as determined by the commit coordinator.

trace. A DB2 facility that provides the ability to monitor and collect DB2 monitoring, auditing, performance, accounting, statistics, and serviceability (global) data.

transaction lock. A lock that is used to control concurrent execution of SQL statements.

transaction program name. In SNA LU 6.2 conversations, the name of the program at the remote logical unit that is to be the other half of the conversation.

| **transient XML data type.** A data type for XML values
| that exists only during query processing.

transition table. A temporary table that contains all the affected rows of the subject table in their state before or after the triggering event occurs. Triggered SQL statements in the trigger definition can reference the table of changed rows in the old state or the new state.

transition variable. A variable that contains a column value of the affected row of the subject table in its state before or after the triggering event occurs. Triggered SQL statements in the trigger definition can reference the set of old values or the set of new values.

| **tree structure.** A data structure that represents entities
| in nodes, with a most one parent node for each node,
| and with only one root node.

trigger • unique index

trigger. A set of SQL statements that are stored in a DB2 database and executed when a certain event occurs in a DB2 table.

trigger activation. The process that occurs when the trigger event that is defined in a trigger definition is executed. Trigger activation consists of the evaluation of the triggered action condition and conditional execution of the triggered SQL statements.

trigger activation time. An indication in the trigger definition of whether the trigger should be activated before or after the triggered event.

trigger body. The set of SQL statements that is executed when a trigger is activated and its triggered action condition evaluates to true. A trigger body is also called *triggered SQL statements*.

trigger cascading. The process that occurs when the triggered action of a trigger causes the activation of another trigger.

triggered action. The SQL logic that is performed when a trigger is activated. The triggered action consists of an optional triggered action condition and a set of triggered SQL statements that are executed only if the condition evaluates to true.

triggered action condition. An optional part of the triggered action. This Boolean condition appears as a WHEN clause and specifies a condition that DB2 evaluates to determine if the triggered SQL statements should be executed.

triggered SQL statements. The set of SQL statements that is executed when a trigger is activated and its triggered action condition evaluates to true. Triggered SQL statements are also called the *trigger body*.

trigger granularity. A characteristic of a trigger, which determines whether the trigger is activated:

- Only once for the triggering SQL statement
- Once for each row that the SQL statement modifies

triggering event. The specified operation in a trigger definition that causes the activation of that trigger. The triggering event is comprised of a triggering operation (INSERT, UPDATE, or DELETE) and a subject table on which the operation is performed.

triggering SQL operation. The SQL operation that causes a trigger to be activated when performed on the subject table.

trigger package. A package that is created when a CREATE TRIGGER statement is executed. The package is executed when the trigger is activated.

TSO. Time-Sharing Option.

TSO attachment facility. A DB2 facility consisting of the DSN command processor and DB2I. Applications

that are not written for the CICS or IMS environments can run under the TSO attachment facility.

typed parameter marker. A parameter marker that is specified along with its target data type. It has the general form:

CAST(? AS data-type)

type 1 indexes. Indexes that were created by a release of DB2 before DB2 Version 4 or that are specified as type 1 indexes in Version 4. Contrast with *type 2 indexes*. As of Version 8, type 1 indexes are no longer supported.

type 2 indexes. Indexes that are created on a release of DB2 after Version 7 or that are specified as type 2 indexes in Version 4 or later.

U

UCS-2. Universal Character Set, coded in 2 octets, which means that characters are represented in 16-bits per character.

UDF. User-defined function.

UDT. User-defined data type. In DB2 UDB for z/OS, the term *distinct type* is used instead of user-defined data type. See *distinct type*.

uncommitted read (UR). The isolation level that allows an application to read uncommitted data.

underlying view. The view on which another view is directly or indirectly defined.

undo. A state of a unit of recovery that indicates that the changes that the unit of recovery made to recoverable DB2 resources must be backed out.

Unicode. A standard that parallels the ISO-10646 standard. Several implementations of the Unicode standard exist, all of which have the ability to represent a large percentage of the characters that are contained in the many scripts that are used throughout the world.

uniform resource locator (URL). A Web address, which offers a way of naming and locating specific items on the Web.

union. An SQL operation that combines the results of two SELECT statements. Unions are often used to merge lists of values that are obtained from several tables.

unique constraint. An SQL rule that no two values in a primary key, or in the key of a unique index, can be the same.

unique index. An index that ensures that no identical key values are stored in a column or a set of columns in a table.

unit of recovery. A recoverable sequence of operations within a single resource manager, such as an instance of DB2. Contrast with *unit of work*.

unit of recovery identifier (URID). The LOGRBA of the first log record for a unit of recovery. The URID also appears in all subsequent log records for that unit of recovery.

unit of work. A recoverable sequence of operations within an application process. At any time, an application process is a single unit of work, but the life of an application process can involve many units of work as a result of commit or rollback operations. In a *multisite update* operation, a single unit of work can include several *units of recovery*. Contrast with *unit of recovery*.

Universal Unique Identifier (UUID). An identifier that is immutable and unique across time and space (in z/OS).

unlock. The act of releasing an object or system resource that was previously locked and returning it to general availability within DB2.

untyped parameter marker. A parameter marker that is specified without its target data type. It has the form of a single question mark (?).

updatability. The ability of a cursor to perform positioned updates and deletes. The updatability of a cursor can be influenced by the SELECT statement and the cursor sensitivity option that is specified on the DECLARE CURSOR statement.

update hole. The location on which a cursor is positioned when a row in a result table is fetched again and the new values no longer satisfy the search condition. DB2 marks a row in the result table as an update hole when an update to the corresponding row in the database causes that row to no longer qualify for the result table.

update trigger. A trigger that is defined with the triggering SQL operation UPDATE.

upstream. The node in the syncpoint tree that is responsible, in addition to other recovery or resource managers, for coordinating the execution of a two-phase commit.

UR. Uncommitted read.

URE. Unit of recovery element.

URID . Unit of recovery identifier.

URL. Uniform resource locator.

user-defined data type (UDT). See *distinct type*.

user-defined function (UDF). A function that is defined to DB2 by using the CREATE FUNCTION

statement and that can be referenced thereafter in SQL statements. A user-defined function can be an *external function*, a *sourced function*, or an *SQL function*. Contrast with *built-in function*.

user view. In logical data modeling, a model or representation of critical information that the business requires.

UTF-8. Unicode Transformation Format, 8-bit encoding form, which is designed for ease of use with existing ASCII-based systems. The CCSID value for data in UTF-8 format is 1208. DB2 UDB for z/OS supports UTF-8 in mixed data fields.

UTF-16. Unicode Transformation Format, 16-bit encoding form, which is designed to provide code values for over a million characters and a superset of UCS-2. The CCSID value for data in UTF-16 format is 1200. DB2 UDB for z/OS supports UTF-16 in graphic data fields.

UUID. Universal Unique Identifier.

V

value. The smallest unit of data that is manipulated in SQL.

variable. A data element that specifies a value that can be changed. A COBOL elementary data item is an example of a variable. Contrast with *constant*.

variant function. See *nondeterministic function*.

varying-length string. A character or graphic string whose length varies within set limits. Contrast with *fixed-length string*.

version. A member of a set of similar programs, DBRMs, packages, or LOBs.

A version of a program is the source code that is produced by precompiling the program. The program version is identified by the program name and a timestamp (consistency token).

A version of a DBRM is the DBRM that is produced by precompiling a program. The DBRM version is identified by the same program name and timestamp as a corresponding program version.

A version of a package is the result of binding a DBRM within a particular database system. The package version is identified by the same program name and consistency token as the DBRM.

A version of a LOB is a copy of a LOB value at a point in time. The version number for a LOB is stored in the auxiliary index entry for the LOB.

view. An alternative representation of data from one or more tables. A view can include all or some of the columns that are contained in tables on which it is defined.

view check option • z/OS Distributed Computing Environment (z/OS DCE)

view check option. An option that specifies whether every row that is inserted or updated through a view must conform to the definition of that view. A view check option can be specified with the WITH CASCADED CHECK OPTION, WITH CHECK OPTION, or WITH LOCAL CHECK OPTION clauses of the CREATE VIEW statement.

Virtual Storage Access Method (VSAM). An access method for direct or sequential processing of fixed- and varying-length records on disk devices. The records in a VSAM data set or file can be organized in logical sequence by a key field (key sequence), in the physical sequence in which they are written on the data set or file (entry-sequence), or by relative-record number (in z/OS).

Virtual Telecommunications Access Method (VTAM). An IBM licensed program that controls communication and the flow of data in an SNA network (in z/OS).

| **volatile table.** A table for which SQL operations choose index access whenever possible.

VSAM. Virtual Storage Access Method.

VTAM. Virtual Telecommunication Access Method (in z/OS).

W

warm start. The normal DB2 restart process, which involves reading and processing log records so that data that is under the control of DB2 is consistent. Contrast with *cold start*.

WLM application environment. A z/OS Workload Manager attribute that is associated with one or more stored procedures. The WLM application environment determines the address space in which a given DB2 stored procedure runs.

write to operator (WTO). An optional user-coded service that allows a message to be written to the system console operator informing the operator of errors and unusual system conditions that might need to be corrected (in z/OS).

WTO. Write to operator.

WTOR. Write to operator (WTO) with reply.

X

XCF. See *cross-system coupling facility*.

XES. See *cross-system extended services*.

| **XML.** See *Extensible Markup Language*.

| **XML attribute.** A name-value pair within a tagged XML element that modifies certain features of the element.

| **XML element.** A logical structure in an XML document that is delimited by a start and an end tag. Anything between the start tag and the end tag is the content of the element.

| **XML node.** The smallest unit of valid, complete structure in a document. For example, a node can represent an element, an attribute, or a text string.

| **XML publishing functions.** Functions that return XML values from SQL values.

X/Open. An independent, worldwide open systems organization that is supported by most of the world's largest information systems suppliers, user organizations, and software companies. X/Open's goal is to increase the portability of applications by combining existing and emerging standards.

XRF. Extended recovery facility.

Z

| **z/OS.** An operating system for the eServer™ product line that supports 64-bit real and virtual storage.

z/OS Distributed Computing Environment (z/OS DCE). A set of technologies that are provided by the Open Software Foundation to implement distributed computing.

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- *DB2 Utility Guide and Reference*, SC18-7427
- *DB2 What's New?*, GC18-7428
- *DB2 XML Extender for z/OS Administration and Programming*, SC18-7431

Books and resources about related products:

APL2®

- *APL2 Programming Guide*, SH21-1072
- *APL2 Programming: Language Reference*, SH21-1061

- *APL2 Programming: Using Structured Query Language (SQL)*, SH21-1057

BookManager® READ/MVS

- *BookManager READ/MVS V1R3: Installation Planning & Customization*, SC38-2035

C language: IBM C/C++ for z/OS

- *z/OS C/C++ Programming Guide*, SC09-4765
- *z/OS C/C++ Run-Time Library Reference*, SA22-7821

Character Data Representation Architecture

- *Character Data Representation Architecture Overview*, GC09-2207
- *Character Data Representation Architecture Reference and Registry*, SC09-2190

CICS Transaction Server for z/OS

The publication order numbers below are for Version 2 Release 2 and Version 2 Release 3 (with the release 2 number listed first).

- *CICS Transaction Server for z/OS Information Center*, SK3T-6903 or SK3T-6957.
- *CICS Transaction Server for z/OS Application Programming Guide*, SC34-5993 or SC34-6231
- *CICS Transaction Server for z/OS Application Programming Reference*, SC34-5994 or SC34-6232
- *CICS Transaction Server for z/OS CICS-RACF Security Guide*, SC34-6011 or SC34-6249
- *CICS Transaction Server for z/OS CICS Supplied Transactions*, SC34-5992 or SC34-6230
- *CICS Transaction Server for z/OS Customization Guide*, SC34-5989 or SC34-6227
- *CICS Transaction Server for z/OS Data Areas*, LY33-6100 or LY33-6103
- *CICS Transaction Server for z/OS DB2 Guide*, SC34-6014 or SC34-6252
- *CICS Transaction Server for z/OS External Interfaces Guide*, SC34-6006 or SC34-6244
- *CICS Transaction Server for z/OS Installation Guide*, GC34-5985 or GC34-6224
- *CICS Transaction Server for z/OS Intercommunication Guide*, SC34-6005 or SC34-6243
- *CICS Transaction Server for z/OS Messages and Codes*, GC34-6003 or GC34-6241
- *CICS Transaction Server for z/OS Operations and Utilities Guide*, SC34-5991 or SC34-6229

- *CICS Transaction Server for z/OS Performance Guide*, SC34-6009 or SC34-6247
- *CICS Transaction Server for z/OS Problem Determination Guide*, SC34-6002 or SC34-6239
- *CICS Transaction Server for z/OS Release Guide*, GC34-5983 or GC34-6218
- *CICS Transaction Server for z/OS Resource Definition Guide*, SC34-5990 or SC34-6228
- *CICS Transaction Server for z/OS System Definition Guide*, SC34-5988 or SC34-6226
- *CICS Transaction Server for z/OS System Programming Reference*, SC34-5595 or SC34-6233

CICS Transaction Server for OS/390

- *CICS Transaction Server for OS/390 Application Programming Guide*, SC33-1687
- *CICS Transaction Server for OS/390 DB2 Guide*, SC33-1939
- *CICS Transaction Server for OS/390 External Interfaces Guide*, SC33-1944
- *CICS Transaction Server for OS/390 Resource Definition Guide*, SC33-1684

COBOL:

- *IBM COBOL Language Reference*, SC27-1408
- *Enterprise COBOL for z/OS Programming Guide*, SC27-1412

Database Design

- *DB2 for z/OS and OS/390 Development for Performance Volume I* by Gabrielle Wiorkowski, Gabrielle & Associates, ISBN 0-96684-605-2
- *DB2 for z/OS and OS/390 Development for Performance Volume II* by Gabrielle Wiorkowski, Gabrielle & Associates, ISBN 0-96684-606-0
- *Handbook of Relational Database Design* by C. Fleming and B. Von Halle, Addison Wesley, ISBN 0-20111-434-8

DB2 Administration Tool

- *DB2 Administration Tool for z/OS User's Guide and Reference*, available on the Web at www.ibm.com/software/data/db2imstools/library.html

DB2 Buffer Pool Analyzer for z/OS

- *DB2 Buffer Pool Tool for z/OS User's Guide and Reference*, available on the Web at www.ibm.com/software/data/db2imstools/library.html

DB2 Connect™

- *IBM DB2 Connect Quick Beginnings for DB2 Connect Enterprise Edition*, GC09-4833

- *IBM DB2 Connect Quick Beginnings for DB2 Connect Personal Edition*, GC09-4834
- *IBM DB2 Connect User's Guide*, SC09-4835

DB2 DataPropagator™

- *DB2 Universal Database Replication Guide and Reference*, SC27-1121

DB2 Performance Expert for z/OS, Version 1

The following books are part of the DB2 Performance Expert library. Some of these books include information about the following tools: IBM DB2 Performance Expert for z/OS; IBM DB2 Performance Monitor for z/OS; and DB2 Buffer Pool Analyzer for z/OS.

- *OMEGAMON Buffer Pool Analyzer User's Guide*, SC18-7972
- *OMEGAMON Configuration and Customization*, SC18-7973
- *OMEGAMON Messages*, SC18-7974
- *OMEGAMON Monitoring Performance from ISPF*, SC18-7975
- *OMEGAMON Monitoring Performance from Performance Expert Client*, SC18-7976
- *OMEGAMON Program Directory*, GI10-8549
- *OMEGAMON Report Command Reference*, SC18-7977
- *OMEGAMON Report Reference*, SC18-7978
- *Using IBM Tivoli OMEGAMON XE on z/OS*, SC18-7979

DB2 Query Management Facility (QMF) Version 8.1

- *DB2 Query Management Facility: DB2 QMF High Performance Option User's Guide for TSO/CICS*, SC18-7450
- *DB2 Query Management Facility: DB2 QMF Messages and Codes*, GC18-7447
- *DB2 Query Management Facility: DB2 QMF Reference*, SC18-7446
- *DB2 Query Management Facility: Developing DB2 QMF Applications*, SC18-7651
- *DB2 Query Management Facility: Getting Started with DB2 QMF for Windows and DB2 QMF for WebSphere*, SC18-7449
- *DB2 Query Management Facility: Getting Started with DB2 QMF Query Miner*, GC18-7451
- *DB2 Query Management Facility: Installing and Managing DB2 QMF for TSO/CICS*, GC18-7444
- *DB2 Query Management Facility: Installing and Managing DB2 QMF for Windows and DB2 QMF for WebSphere*, GC18-7448

- *DB2 Query Management Facility: Introducing DB2 QMF*, GC18-7443
- *DB2 Query Management Facility: Using DB2 QMF*, SC18-7445
- *DB2 Query Management Facility: DB2 QMF Visionary Developer's Guide*, SC18-9093
- *DB2 Query Management Facility: DB2 QMF Visionary Getting Started Guide*, GC18-9092

DB2 Redbooks™

For access to all IBM Redbooks about DB2, see the IBM Redbooks Web page at www.ibm.com/redbooks

DB2 Server for VSE & VM

- *DB2 Server for VM: DBS Utility*, SC09-2983

DB2 Universal Database Cross-Platform information

- *IBM DB2 Universal Database SQL Reference for Cross-Platform Development*, available at www.ibm.com/software/data/developer/cpsqlref/

DB2 Universal Database for iSeries

The following books are available at www.ibm.com/series/infocenter

- *DB2 Universal Database for iSeries Performance and Query Optimization*
- *DB2 Universal Database for iSeries Database Programming*
- *DB2 Universal Database for iSeries SQL Programming Concepts*
- *DB2 Universal Database for iSeries SQL Programming with Host Languages*
- *DB2 Universal Database for iSeries SQL Reference*
- *DB2 Universal Database for iSeries Distributed Data Management*
- *DB2 Universal Database for iSeries Distributed Database Programming*

DB2 Universal Database for Linux, UNIX, and Windows:

- *DB2 Universal Database Administration Guide: Planning*, SC09-4822
- *DB2 Universal Database Administration Guide: Implementation*, SC09-4820
- *DB2 Universal Database Administration Guide: Performance*, SC09-4821
- *DB2 Universal Database Administrative API Reference*, SC09-4824
- *DB2 Universal Database Application Development Guide: Building and Running Applications*, SC09-4825

- *DB2 Universal Database Call Level Interface Guide and Reference, Volumes 1 and 2*, SC09-4849 and SC09-4850
- *DB2 Universal Database Command Reference*, SC09-4828
- *DB2 Universal Database SQL Reference Volume 1*, SC09-4844
- *DB2 Universal Database SQL Reference Volume 2*, SC09-4845

Device Support Facilities

- *Device Support Facilities User's Guide and Reference*, GC35-0033

DFSMS

These books provide information about a variety of components of DFSMS, including z/OS DFSMS, z/OS DFSMSdfp™, z/OS DFSMSdss, z/OS DFSMSHsm, and z/OS DFP.

- *z/OS DFSMS Access Method Services for Catalogs*, SC26-7394
- *z/OS DFSMSdss Storage Administration Guide*, SC35-0423
- *z/OS DFSMSdss Storage Administration Reference*, SC35-0424
- *z/OS DFSMSHsm Managing Your Own Data*, SC35-0420
- *z/OS DFSMSdftp: Using DFSMSdftp in the z/OS Environment*, SC26-7473
- *z/OS DFSMSdftp Diagnosis Reference*, GY27-7618
- *z/OS DFSMS: Implementing System-Managed Storage*, SC27-7407
- *z/OS DFSMS: Macro Instructions for Data Sets*, SC26-7408
- *z/OS DFSMS: Managing Catalogs*, SC26-7409
- *z/OS MVS: Program Management User's Guide and Reference*, SA22-7643
- *z/OS MVS Program Management: Advanced Facilities*, SA22-7644
- *z/OS DFSMSdftp Storage Administration Reference*, SC26-7402
- *z/OS DFSMS: Using Data Sets*, SC26-7410
- *DFSMS/MVS: Using Advanced Services*, SC26-7400
- *DFSMS/MVS: Utilities*, SC26-7414

DFSORT™

- *DFSORT Application Programming: Guide*, SC33-4035
- *DFSORT Installation and Customization*, SC33-4034

Distributed Relational Database Architecture

- *Open Group Technical Standard*; the Open Group presently makes the following DRDA books available through its Web site at www.opengroup.org
 - *Open Group Technical Standard, DRDA Version 3 Vol. 1: Distributed Relational Database Architecture*
 - *Open Group Technical Standard, DRDA Version 3 Vol. 2: Formatted Data Object Content Architecture*
 - *Open Group Technical Standard, DRDA Version 3 Vol. 3: Distributed Data Management Architecture*

Domain Name System

- *DNS and BIND, Third Edition*, Paul Albitz and Cricket Liu, O'Reilly, ISBN 0-59600-158-4

Education

- Information about IBM educational offerings is available on the Web at <http://www.ibm.com/software/sw-training/>
- A collection of glossaries of IBM terms is available on the IBM Terminology Web site at www.ibm.com/ibm/terminology/index.html

eServer zSeries®

- *IBM eServer zSeries Processor Resource/System Manager Planning Guide*, SB10-7033

Fortran: VS Fortran

- *VS Fortran Version 2: Language and Library Reference*, SC26-4221
- *VS Fortran Version 2: Programming Guide for CMS and MVS*, SC26-4222

High Level Assembler

- *High Level Assembler for MVS and VM and VSE Language Reference*, SC26-4940
- *High Level Assembler for MVS and VM and VSE Programmer's Guide*, SC26-4941

ICSF

- *z/OS ICSF Overview*, SA22-7519
- *Integrated Cryptographic Service Facility Administrator's Guide*, SA22-7521

IMS Version 8

IMS product information is available on the IMS Library Web page, which you can find at www.ibm.com/ims

- *IMS Administration Guide: System*, SC27-1284
- *IMS Administration Guide: Transaction Manager*, SC27-1285

- *IMS Application Programming: Database Manager*, SC27-1286
- *IMS Application Programming: Design Guide*, SC27-1287
- *IMS Application Programming: Transaction Manager*, SC27-1289
- *IMS Command Reference*, SC27-1291
- *IMS Customization Guide*, SC27-1294
- *IMS Install Volume 1: Installation Verification*, GC27-1297
- *IMS Install Volume 2: System Definition and Tailoring*, GC27-1298
- *IMS Messages and Codes Volumes 1 and 2*, GC27-1301 and GC27-1302
- *IMS Open Transaction Manager Access Guide and Reference*, SC18-7829
- *IMS Utilities Reference: System*, SC27-1309

General information about IMS Batch Terminal Simulator for z/OS is available on the Web at www.ibm.com/software/data/db2imstools/library.html

IMS DataPropagator

- *IMS DataPropagator for z/OS Administrator's Guide for Log*, SC27-1216
- *IMS DataPropagator: An Introduction*, GC27-1211
- *IMS DataPropagator for z/OS Reference*, SC27-1210

ISPF

- *z/OS ISPF Dialog Developer's Guide*, SC23-4821
- *z/OS ISPF Messages and Codes*, SC34-4815
- *z/OS ISPF Planning and Customizing*, GC34-4814
- *z/OS ISPF User's Guide Volumes 1 and 2*, SC34-4822 and SC34-4823

Language Environment

- *Debug Tool User's Guide and Reference*, SC18-7171
- *Debug Tool for z/OS and OS/390 Reference and Messages*, SC18-7172
- *z/OS Language Environment Concepts Guide*, SA22-7567
- *z/OS Language Environment Customization*, SA22-7564
- *z/OS Language Environment Debugging Guide*, GA22-7560
- *z/OS Language Environment Programming Guide*, SA22-7561
- *z/OS Language Environment Programming Reference*, SA22-7562

MQSeries®

- *MQSeries Application Messaging Interface*, SC34-5604

- *MQSeries for OS/390 Concepts and Planning Guide*, GC34-5650
- *MQSeries for OS/390 System Setup Guide*, SC34-5651

National Language Support

- *National Language Design Guide Volume 1*, SE09-8001
- *IBM National Language Support Reference Manual Volume 2*, SE09-8002

NetView®

- *Tivoli NetView for z/OS Installation: Getting Started*, SC31-8872
- *Tivoli NetView for z/OS User's Guide*, GC31-8849

Microsoft ODBC

Information about Microsoft ODBC is available at <http://msdn.microsoft.com/library/>

Parallel Sysplex Library

- *System/390 9672 Parallel Transaction Server, 9672 Parallel Enterprise Server, 9674 Coupling Facility System Overview For R1/R2/R3 Based Models*, SB10-7033
- *z/OS Parallel Sysplex Application Migration*, SA22-7662
- *z/OS Parallel Sysplex Overview: An Introduction to Data Sharing and Parallelism*, SA22-7661
- *z/OS Parallel Sysplex Test Report*, SA22-7663

The *Parallel Sysplex Configuration Assistant* is available at www.ibm.com/s390/psa/psotool

PL/I: Enterprise PL/I for z/OS

- *IBM Enterprise PL/I for z/OS Language Reference*, SC27-1460
- *IBM Enterprise PL/I for z/OS Programming Guide*, SC27-1457

PL/I: PL/I for MVS & VM

- *PL/I for MVS & VM Programming Guide*, SC26-3113

SMP/E

- *SMP/E for z/OS and OS/390 Reference*, SA22-7772
- *SMP/E for z/OS and OS/390 User's Guide*, SA22-7773

Storage Management

- *z/OS DFSMS: Implementing System-Managed Storage*, SC26-7407
- *MVS/ESA Storage Management Library: Managing Data*, SC26-7397

- *MVS/ESA Storage Management Library: Managing Storage Groups*, SC35-0421
- *MVS Storage Management Library: Storage Management Subsystem Migration Planning Guide*, GC26-7398

System Network Architecture (SNA)

- *SNA Formats*, GA27-3136
- *SNA LU 6.2 Peer Protocols Reference*, SC31-6808
- *SNA Transaction Programmer's Reference Manual for LU Type 6.2*, GC30-3084
- *SNA/Management Services Alert Implementation Guide*, GC31-6809

TCP/IP

- *IBM TCP/IP for MVS: Customization & Administration Guide*, SC31-7134
- *IBM TCP/IP for MVS: Diagnosis Guide*, LY43-0105
- *IBM TCP/IP for MVS: Messages and Codes*, SC31-7132
- *IBM TCP/IP for MVS: Planning and Migration Guide*, SC31-7189

TotalStorage™ Enterprise Storage Server

- *RAMAC Virtual Array: Implementing Peer-to-Peer Remote Copy*, SG24-5680
- *Enterprise Storage Server Introduction and Planning*, GC26-7444
- *IBM RAMAC Virtual Array*, SG24-6424

Unicode

- *z/OS Support for Unicode: Using Conversion Services*, SA22-7649

Information about Unicode, the Unicode consortium, the Unicode standard, and standards conformance requirements is available at www.unicode.org

VTAM

- *Planning for NetView, NCP, and VTAM*, SC31-8063
- *VTAM for MVS/ESA Diagnosis*, LY43-0078
- *VTAM for MVS/ESA Messages and Codes*, GC31-8369
- *VTAM for MVS/ESA Network Implementation Guide*, SC31-8370
- *VTAM for MVS/ESA Operation*, SC31-8372
- *z/OS Communications Server SNA Programming*, SC31-8829
- *z/OS Communications Server SNA Programmer's LU 6.2 Reference*, SC31-8810
- *VTAM for MVS/ESA Resource Definition Reference*, SC31-8377

WebSphere® family

- *WebSphere MQ Integrator Broker: Administration Guide, SC34-6171*
- *WebSphere MQ Integrator Broker for z/OS: Customization and Administration Guide, SC34-6175*
- *WebSphere MQ Integrator Broker: Introduction and Planning, GC34-5599*
- *WebSphere MQ Integrator Broker: Using the Control Center, SC34-6168*

z/Architecture™

- *z/Architecture Principles of Operation, SA22-7832*

z/OS

- *z/OS C/C++ Programming Guide, SC09-4765*
- *z/OS C/C++ Run-Time Library Reference, SA22-7821*
- *z/OS C/C++ User's Guide, SC09-4767*
- *z/OS Communications Server: IP Configuration Guide, SC31-8875*
- *z/OS DCE Administration Guide, SC24-5904*
- *z/OS DCE Introduction, GC24-5911*
- *z/OS DCE Messages and Codes, SC24-5912*
- *z/OS Information Roadmap, SA22-7500*
- *z/OS Introduction and Release Guide, GA22-7502*
- *z/OS JES2 Initialization and Tuning Guide, SA22-7532*
- *z/OS JES3 Initialization and Tuning Guide, SA22-7549*
- *z/OS Language Environment Concepts Guide, SA22-7567*
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- *z/OS Language Environment Programming Reference, SA22-7562*
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- *z/OS MVS Diagnosis: Procedures, GA22-7587*
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- *z/OS MVS JCL User's Guide, SA22-7598*
- *z/OS MVS Planning: Global Resource Serialization, SA22-7600*
- *z/OS MVS Planning: Operations, SA22-7601*

- *z/OS MVS Planning: Workload Management, SA22-7602*
- *z/OS MVS Programming: Assembler Services Guide, SA22-7605*
- *z/OS MVS Programming: Assembler Services Reference, Volumes 1 and 2, SA22-7606 and SA22-7607*
- *z/OS MVS Programming: Authorized Assembler Services Guide, SA22-7608*
- *z/OS MVS Programming: Authorized Assembler Services Reference Volumes 1-4, SA22-7609, SA22-7610, SA22-7611, and SA22-7612*
- *z/OS MVS Programming: Callable Services for High-Level Languages, SA22-7613*
- *z/OS MVS Programming: Extended Addressability Guide, SA22-7614*
- *z/OS MVS Programming: Sysplex Services Guide, SA22-7617*
- *z/OS MVS Programming: Sysplex Services Reference, SA22-7618*
- *z/OS MVS Programming: Workload Management Services, SA22-7619*
- *z/OS MVS Recovery and Reconfiguration Guide, SA22-7623*
- *z/OS MVS Routing and Descriptor Codes, SA22-7624*
- *z/OS MVS Setting Up a Sysplex, SA22-7625*
- *z/OS MVS System Codes SA22-7626*
- *z/OS MVS System Commands, SA22-7627*
- *z/OS MVS System Messages Volumes 1-10, SA22-7631, SA22-7632, SA22-7633, SA22-7634, SA22-7635, SA22-7636, SA22-7637, SA22-7638, SA22-7639, and SA22-7640*
- *z/OS MVS Using the Subsystem Interface, SA22-7642*
- *z/OS Planning for Multilevel Security and the Common Criteria, SA22-7509*
- *z/OS RMF User's Guide, SC33-7990*
- *z/OS Security Server Network Authentication Server Administration, SC24-5926*
- *z/OS Security Server RACF Auditor's Guide, SA22-7684*
- *z/OS Security Server RACF Command Language Reference, SA22-7687*
- *z/OS Security Server RACF Macros and Interfaces, SA22-7682*
- *z/OS Security Server RACF Security Administrator's Guide, SA22-7683*
- *z/OS Security Server RACF System Programmer's Guide, SA22-7681*
- *z/OS Security Server RACROUTE Macro Reference, SA22-7692*
- *z/OS Support for Unicode: Using Conversion Services, SA22-7649*
- *z/OS TSO/E CLISTs, SA22-7781*
- *z/OS TSO/E Command Reference, SA22-7782*

- *z/OS TSO/E Customization*, SA22-7783
- *z/OS TSO/E Messages*, SA22-7786
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- *z/OS TSO/E REXX Reference*, SA22-7790
- *z/OS TSO/E User's Guide*, SA22-7794
- *z/OS UNIX System Services Command Reference*, SA22-7802
- *z/OS UNIX System Services Messages and Codes*, SA22-7807
- *z/OS UNIX System Services Planning*, GA22-7800
- *z/OS UNIX System Services Programming: Assembler Callable Services Reference*, SA22-7803
- *z/OS UNIX System Services User's Guide*, SA22-7801

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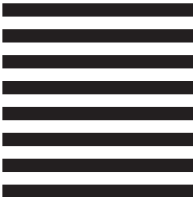
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