IBM Tivoli Directory Server Messages and Codes for z/OS

Version 2 Release 2
### Tables

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About this document

This document supports z/OS® (5650-ZOS) and the LDAP server. The LDAP server supports Lightweight Directory Access Protocol (LDAP), part of IBM® Tivoli® Directory Server for z/OS (IBM TDS), and runs as a stand-alone daemon. It is based on a client/server model that provides client access to an LDAP server. The LDAP server provides an easy way to maintain directory information in a central location for storage, updating, retrieval, and exchange.

This document includes the messages and reason codes produced by the Lightweight Directory Access Protocol (LDAP) server.

Intended audience

This document is intended for anyone who uses the LDAP server and wants to know what caused a message to be displayed and what corrective action, if any, needs to be taken.

How to use this document

Messages are generally arranged in alphanumeric order by message identifier.

By using the message identifier, you might find the index helpful in finding the message itself.

Conventions used in this document

This document may use the following typographic conventions:

**Bold** Bold words or characters represent API names, attributes, status codes, environment variables, parameter values, and system elements that you must enter into the system literally, such commands, options, or path names.

*Italic* Italic words or characters represent values for variables that you must supply.

**Example Font** Examples and information displayed by the system appear in constant width type style.

[ ] Brackets enclose optional items in format and syntax descriptions.

{} Braces enclose a list from which you must choose an item in format and syntax descriptions.

| A vertical bar separates items in a list of choices.

< > Angle brackets enclose the name of a key on the keyboard.

... Horizontal ellipsis points indicate that you may repeat the preceding item one or more times.

\ A backslash is used as a continuation character when entering commands from the shell that exceed one line (255 characters). If the command
Where to find more information

When possible, this information uses cross-document links that go directly to the topic in reference using shortened versions of the document title. For complete titles and order numbers of the documents for all products that are part of z/OS, see z/OS V2R2 Information Roadmap.

To find the complete z/OS library, including the z/OS Information Center, see z/OS Internet Library (http://www.ibm.com/systems/z/os/zos/bkserv/).

Internet sources

The following resources are available through the internet to provide additional information about the z/OS library and other security-related topics:

- Online library
  To view and print online versions of the z/OS publications, use this address: http://www.ibm.com/systems/z/os/zos/bkserv/

- Redbooks®
  The documents known as IBM Redbooks that are produced by the International Technical Support Organization (ITSO) are available at the following address: http://www.redbooks.ibm.com
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2. Send an email from the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html).

Include the following information:
• Your name and address.
• Your email address.
• Your telephone or fax number.
• The publication title and order number:
  z/OS V2R2 IBM Tivoli Directory Server Messages and Codes for z/OS
  SA23-2296-01
• The topic and page number that is related to your comment.
• The text of your comment.

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Do not use the feedback methods that are listed for sending comments. Instead, take one of the following actions:
• Contact your IBM service representative.
• Call IBM technical support.
• Visit the IBM Support Portal at z/OS Support Portal (http://www-947.ibm.com/systems/support/z/os/)
Summary of changes for z/OS IBM Tivoli Directory Server Messages and Codes for z/OS

The following messages are new, changed, or no longer issued for z/OS IBM Tivoli Directory Server Messages and Codes for z/OS in Version 2 Release 2. For more information, see z/OS IBM Tivoli Directory Server Messages and Codes for z/OS.

The following LDAP server reason codes are new.
R004212

Summary of message changes for z/OS IBM Tivoli Directory Server Messages and Codes for z/OS for Version 2 Release 2

New

The following messages are new.
GLD1310W
GLD1311E
GLD1312E
GLD1313E
GLD1314I
GLD1315I
GLD1316W
GLD1317W
GLD1318E
GLD1319E
GLD1320E
GLD1321E
GLD1322E
GLD1323E
GLD1324E
GLD1325E
GLD1326E
GLD1327E
GLD1328W
GLD1329E
GLD1330E
GLD1331E
GLD1332W
GLD1333W
GLD1334W
GLD1335I
GLD1336E
GLD1337E
GLD1338E
GLD1339E
GLD1340E
GLD1341E
GLD1342E
GLD1343E
GLD1344E
GLD8507E
GLD8508E
GLD8509E
GLD8511I
GLD8512I

Changed

The following messages are changed.
GLD1237
GLD1337
GLD1338
GLD1340
GLD1341

Summary of changes for z/OS Version 2 Release 1

See the following publications for all enhancements to z/OS Version 2 Release 1 (V2R1):

- z/OS V2R2 Migration
- z/OS Planning for Installation
- z/OS Summary of Message and Interface Changes
- z/OS V2R2 Introduction and Release Guide
Chapter 1. LDAP server and ldif2ds messages (1000)

This section lists the messages issued by the LDAP server ("LDAP server messages") and the ldif2ds utility ("ldif2ds utility messages" on page 174).

LDAP server messages

GLD1001I  LDAP server version version, release, Service level level, Build date date, Time time.

Explanation:  The LDAP server with version, release, service level, build date, and build time indicated in the message is running.
In the message text:

version  Server version
release  Server release
level  Server service level
date  Server build date
time  Server build time

System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1002I  LDAP runtime version version, release, Service level level, Build date date, Time time.

Explanation:  The LDAP run time with version, release, service level, build date, and build time indicated in the message is running.
In the message text:

version  Runtime version
release  Runtime release
GLD1003I  LDAP server is starting.
Explanation:  The LDAP server is starting.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1004I  LDAP server is ready for requests.
Explanation:  The LDAP server has started and is ready for requests.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
<table>
<thead>
<tr>
<th>Message Number</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLD1005I</td>
<td>LDAP server start command processed.</td>
</tr>
<tr>
<td>Explanation</td>
<td>The LDAP server has processed the START command.</td>
</tr>
<tr>
<td>System action</td>
<td>The program continues.</td>
</tr>
<tr>
<td>Operator response</td>
<td>None.</td>
</tr>
<tr>
<td>System programmer response</td>
<td>None.</td>
</tr>
<tr>
<td>User response</td>
<td>None.</td>
</tr>
<tr>
<td>Problem determination</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Module</td>
<td>None.</td>
</tr>
<tr>
<td>Example</td>
<td>None.</td>
</tr>
<tr>
<td>Administrator response</td>
<td>None.</td>
</tr>
<tr>
<td>Source</td>
<td>LDAP</td>
</tr>
<tr>
<td>Routing code</td>
<td>None.</td>
</tr>
<tr>
<td>Descriptor code</td>
<td>None.</td>
</tr>
<tr>
<td>Automation</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Number</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLD1006I</td>
<td>LDAP server stop command received.</td>
</tr>
<tr>
<td>Explanation</td>
<td>The LDAP server has received the STOP command.</td>
</tr>
<tr>
<td>System action</td>
<td>The program ends.</td>
</tr>
<tr>
<td>Operator response</td>
<td>None.</td>
</tr>
<tr>
<td>System programmer response</td>
<td>None.</td>
</tr>
<tr>
<td>User response</td>
<td>None.</td>
</tr>
<tr>
<td>Problem determination</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Module</td>
<td>None.</td>
</tr>
<tr>
<td>Example</td>
<td>None.</td>
</tr>
<tr>
<td>Administrator response</td>
<td>None.</td>
</tr>
<tr>
<td>Source</td>
<td>LDAP</td>
</tr>
<tr>
<td>Routing code</td>
<td>None.</td>
</tr>
<tr>
<td>Descriptor code</td>
<td>None.</td>
</tr>
<tr>
<td>Automation</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
GLD1007I  LDAP server is stopping.
Explanation:  The LDAP server is stopping.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1008E  Unable to allocate storage.
Explanation:  The LDAP server or utility is unable to allocate the necessary storage to continue processing the request.
System action:  The program ends.
Operator response:  Increase the storage available for use by the LDAP server or utility. Then restart the program. If the problem persists, contact the service representative.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1009A  LDAP server is not APF-authorized.
Explanation:  The LDAP server is not running with APF authorization. The PDS which contains the LDAP server, SYS1.SIEALNKE, and the PDSs containing all the DLLs that the LDAP server loads must be APF-authorized to allow the LDAP server to make the necessary program control threading calls.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Administrator response: Add SYS1.SIEALNKE to the list of APF-authorized data sets. If using a JOBIB or STEPLIB for the LDAP server started task, verify that all data sets in the concatenation are also APF-authorized. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1010A  Unable to make address space non-swappable: Error error_code.

Explanation: The LDAP server is unable to make its address space non-swappable. See the description of SYSEVENT in z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO for more information about the error. The LDAP server must be non-swappable to support system-level program calls. This capability is required when the LDAP server supports RACF® change logging or Policy Directory extended operations.

In the message text:

error_code
   Error code from SYSEVENT

System action: The program ends.

Operator response: Contact the LDAP Administrator or see the Administrator response.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1011E  Unable to register for restart: Error error_code, Reason 0xreason_code.

Explanation: The LDAP server is unable to register with ARM (Automatic Restart Management). See the description of IXCARM in z/OS MVS Programming: Sysplex Services Reference for more information about the error.

In the message text:

error_code
   Error code from IXCARM

reason_code
   Reason code from IXCARM

System action: The LDAP server continues, but is not automatically restarted if it fails unexpectedly.

Operator response: None.

System programmer response: None.

User response: None.
GLD1012I • GLD1013I

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Restart the program if ARM support is needed. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1012I LDAP server restart registration complete on system system_name.

Explanation: The LDAP server has successfully registered with ARM (Automatic Restart Management) on the system indicated in the message. The LDAP server is automatically restarted if it fails unexpectedly. It is not restarted if it detects an error and stops.

In the message text:

system_name
  Local system name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1013I LDAP server restarting on system system_name.

Explanation: The LDAP server on the system indicated in the message is being restarted following an unexpected failure. The RESTART_ATTEMPTS value in the ARM policy determines the number of restarts that are attempted.

In the message text:

system_name
  Local system name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Determine the reason for the restart and correct the error. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1014E Unable to deregister for restart: Error error_code, Reason 0xreason_code.
Explanation: The LDAP server is unable to unregister with ARM (Automatic Restart Management) during server shutdown. See the description of IXCARM in z/OS MVS Programming: Sysplex Services Reference for more information about the error.
In the message text:

error_code
   Error code from IXCARM
reason_code
   Reason code from IXCARM

System action: The LDAP server is in the process of stopping and continues with shutdown.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1015I LDAP server restart deregistration complete on system system_name.
Explanation: The LDAP server successfully unregistered with ARM (Automatic Restart Management) on the system indicated in the message. The LDAP server is no longer automatically restarted if it fails unexpectedly.

In the message text:
system_name
   Local system name

System action: The LDAP server is in the process of stopping and continues with shutdown. The LDAP server is no longer registered with ARM (Automatic Restart Management).
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
**GLD1016E** • **GLD1017E**

Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

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**GLD1016E** Unable to create mutex: *error_code*/*reason_code* - *error_text*

Explanation: The LDAP server or utility is unable to create a mutex. See the description of `pthread_mutex_init()` in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com) for more information about the error.

In the message text:

- **error_code**: Error code from `pthread_mutex_init()`
- **reason_code**: Reason code from `pthread_mutex_init()`
- **error_text**: Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

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**GLD1017E** Unable to create condition variable: *error_code*/*reason_code* - *error_text*

Explanation: The LDAP server or utility is unable to create a condition variable. See the description of `pthread_cond_init()` in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com) for more information about the error.

In the message text:

- **error_code**: Error code from `pthread_cond_init()`
- **reason_code**: Reason code from `pthread_cond_init()`
- **error_text**: Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.

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GLD1018A • GLD1019A

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1018A Unable to initialize the directory schema.
Explanation: The LDAP server or utility is unable to initialize the directory schema. A previous message indicates the reason for the failure.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the earlier message to correct the error. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1019A Unable to open from_code_page to to_code_page converter: error_code/reason_code - error_text
Explanation: The LDAP server or utility is unable to open a code page converter to convert character strings. See the description of iconv_open() in z/OS XL C/C++ Runtime Library Reference for more information about the error.
In the message text:
from_code_page
   Code page to be converted from
to_code_page
   Code page to be converted to
error_code
   Error code from iconv_open()
reason_code
   Reason code from iconv_open()
error_text
   Error text corresponding to the error code
System action: The program ends.
Operator response: None.
System programmer response: None.
GLD1020E • GLD1021E

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1020E  Unrecognized LDAP server command.

Explanation: An unrecognized LDAP server operator modify command is detected. The valid LDAP server commands are AUDIT, BACKEND, COMMIT, DEBUG, DISPLAY, LOG, MAINTMODE, REFRESH, RESET, SNAP, UNLOCK, and WLMEXCEPT. The SNAP command is available only with the 31-bit LDAP server.
System action: The LDAP server ignores the entered command and continues. A new LDAP server operator modify command may be entered.
Operator response: Issue a valid LDAP server operator modify command.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: See Operator response or contact Operator.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1021E  Incorrect LDAP server command option specified.

Explanation: An incorrect command option was found within an LDAP server operator modify command.
System action: The LDAP server ignores the entered command and continues. A new LDAP server operator modify command may be entered.
Operator response: Issue a valid LDAP server operator modify command.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: See Operator response or contact Operator.
Source: LDAP
Routing code: None.
GLD1022I  Debug option processed: debug_level.

Explanation: The debug level for the LDAP server has been reset using the value indicated in the message.

In the message text:

debug_level
  Debug level

System action: The LDAP server continues. Debug messages corresponding to the updated debug level are now created.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1023I  Processing configuration file filename.

Explanation: The LDAP server or utility is processing the configuration file indicated in the message.

In the message text:

filename
  LDAP server configuration file name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
**GLD1024I • GLD1026E**

**GLD1024I  Configuration file filename processed.**

**Explanation:** The LDAP server or utility has successfully processed the configuration file indicated in the message.

In the message text:

`filename`

LDAP server configuration file name

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

**GLD1025A  Unable to process command options.**

**Explanation:** The LDAP server is unable to process the command-line options. A previous message indicates the reason for the failure.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the earlier message to correct the error. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

**GLD1026E  Incorrect LDAP debug option specified: debug_options.**

**Explanation:** The value specified for the `-d` parameter on the LDAP server or utility command line is not valid.

In the message text:

`debug_options`

Debug options

**System action:** The program ends.

**Operator response:** None.
GLD1027E  GLD1028E

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: See the description of the -d parameter on the LDAP server or utility command line for more information about the available debug options and how they are specified. Specify valid debug options for the -d command parameter. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1027E  Parameter is an unrecognized command parameter.
Explanation: The command-line parameter indicated in the message is not supported by the LDAP server or utility. In the message text:

Parameter
   Unrecognized command parameter

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Determine the correct command-line parameter to use. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1028E  No value specified for the option parameter.
Explanation: The command-line parameter indicated in the message cannot be specified without a value when starting the LDAP server or utility. The parameter must have a value.
In the message text:

Option
   Command parameter with missing value

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
GLD1029E • GLD1030E

Module:  None.
Example: None.
Administrator response:  Specify a valid value for the command-line parameter. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1029E  

GLD1029E  port is not a valid TCP/IP port number.
Explanation:  The TCP/IP port number specified for an LDAP server command-line parameter or in the LDAP server configuration file is not valid. The port number must be between 1 and 65535.
In the message text:

port  
    TCP/IP port number

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example: None.
Administrator response:  Provide a valid TCP/IP port number. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1030E  Unable to parse LDAP URL url: error_text.
Explanation:  The LDAP URL specified for an LDAP server command-line parameter or in the LDAP server configuration file is not valid.
In the message text:

url  
    LDAP URL

error_text  
    Error message text

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example: None.
**Administrator response:** Use the information in the message to correct the error. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

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**GLD1031A** Unable to process the server configuration file.

**Explanation:** The LDAP server or utility is unable to process the LDAP server configuration file. A previous message indicates the reason for the failure.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Then restart the program.

---

**GLD1032E** Unable to open configuration file

**Explanation:** The LDAP server or utility is unable to open the LDAP server configuration file. See the description of fopen() in [z/OS XL C/C++ Runtime Library Reference](#) for more information about the error.

In the message text:

`filename`  
LDAP server configuration file name

`error_code`  
Error code from fopen()

`reason_code`  
Reason code from fopen()

`error_text`  
Error text corresponding to the error code

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Then restart the program.
GLD1033E • GLD1034E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1033E Unable to read configuration file filename: error_codereason_code - error_text

Explanation: The LDAP server or utility is unable to read the LDAP server configuration file. The file can be a file system file or a data set. See the description of fgets() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- filename
  LDAP server configuration file name

- error_code
  Error code from fgets()

- reason_code
  Reason code from fgets()

- error_text
  Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1034E Configuration line is too long.

Explanation: The LDAP server or utility cannot process the LDAP server configuration file because a line is too long. The maximum length of a line in the LDAP server configuration file is 1024 characters. This includes any continuation lines.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the LDAP server configuration file. Then restart the program.
GLD1035E  option is an unrecognized configuration option.

Explanation: The LDAP server or utility cannot process the LDAP server configuration file because it contains an option that is not supported.

In the message text:

option
  LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the LDAP server configuration file. Then restart the program.

GLD1036W  option is an obsolete configuration option.

Explanation: The LDAP server or utility found an option that is no longer used in the LDAP server configuration file.

In the message text:

option
  LDAP server configuration option

System action: The program ignores the configuration option and continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Remove the obsolete option from the LDAP server configuration file.
GLD1037E Either no value or not enough values have been specified for the option configuration option.

Explanation: The LDAP server or utility found an option with either no value or not enough values in the LDAP server configuration file. Every configuration option must have an appropriate number of values specified for it.

In the message text:

option
    LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1038E Value value for configuration option option is not valid.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value that is not supported for that option.

In the message text:

value
    LDAP server configuration option value

option
    LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1039W  Extraneous value specified for the option configuration option.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has more values than expected for a single instance of the option. The extra values are ignored. There are several common causes of this problem.

- The value contains a space. If the value of the option is more than one word (contains a space) but the option only accepts a single value, the extra words are ignored.
- The option in the next line after this option line does not start in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in more values than are allowed for the option.
- The extra values are intended to be a comment but they do not start with a '#' character.

In the message text:

option  LDAP server configuration option

System action: The program continues, but the extra option values are ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If a value contains a blank, enclose the value in double quotation marks. If the next line is not intended to be a continuation of this option value, ensure that the option on the next line begins in column 1. Ensure that a '#' is the first character of a comment placed at the end of an option line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1040E  Unable to normalize name error_text.

Explanation: The LDAP server or utility is unable to normalize a distinguished name (DN). This error can occur if any part of the DN does not contain an attribute type and value or if the attribute type is not defined in the directory schema or does not have an equality matching rule. The message displays either the DN or information about where the DN is specified. If a DN is displayed, the DN can be part of the value of an LDAP server configuration option, an LDAP utility command-line option, or an attribute value. Otherwise, the message displays a name indicating where the DN was specified, for example, the name of an LDAP server configuration option or of an attribute in an entry.

In the message text:

name  DN or source of DN

error_text  Error message text

System action:
- If the error occurs while running an LDAP utility, the program ends.
- If the error occurs during LDAP server processing of the configuration file, the program ends.
- If the error occurs during initialization of an LDAP server backend, then the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run.
GLD1041E • GLD1042E

with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.

- If the error occurs while processing an LDAP server operation, the operation may fail.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the problem. This may involve changing the value of an option in the LDAP server configuration file, an LDAP utility command-line option, or an attribute value in an entry. Restart the program if it did not start or if a backend that did not initialize is needed. If the error occurs during an LDAP operation, try the operation again.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1041E  Configuration option option is not allowed in the section section.

**Explanation:** The LDAP server or utility found an option in a section of the LDAP server configuration file that is not appropriate for that section. Global options must be specified before the first `database` option, while backend-specific options must be specified following the `database` option for that backend.

In the message text:

```
option

section

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
```

---

GLD1042E  Backend name name is already defined.

**Explanation:** The LDAP server or utility found a backend name on a `database` option in the LDAP server configuration file that is the same as the name for a previous backend. If a backend name is specified, the name must
be unique. There are also several reserved backend names that cannot be used: RootDSE, Schema, and Monitor. Backend names are not case-sensitive.

In the message text:

name

Backend name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the backend name in the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1043E Configuration file filename causes a recursion loop.

Explanation: The LDAP server or utility found an LDAP server configuration file that is included again while it is still being processed. This is a result of nested include options for the same configuration file.

In the message text:

filename

LDAP server configuration file name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Remove the nested include options from the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1045E The MAC address must be 12 hexadecimal digits.

Explanation: The LDAP server or utility found that the value for the serverEtherAddr option in the LDAP server configuration file is not valid. The MAC address must consist of 12 hexadecimal digits.

System action: The program ends.
Operator response: None.
GLD1046E  GLD1047E

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the value for the serverEtherAddr option in the LDAP server configuration file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1046E Configuration option option cannot be converted to IBM-1047.

Explanation: The LDAP server or utility cannot convert the value of an option in the LDAP server configuration file. The value needs to be converted to the IBM-1047 code page but contains characters that cannot be represented in that code page.

In the message text:

option
    LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Specify a string consisting of valid characters in the IBM-1047 character set for the option in the LDAP server configuration file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1047E Directory path is in use by another database instance.

Explanation: The LDAP server or utility found multiple LDBM, CDBM, or file-based GDBM backends using the same directory for database files. Each instance of the LDBM, CDBM, or file-based GDBM backend requires a unique directory for its database files. The file directory is specified by the databaseDirectory option in the backend section of the LDAP server configuration file.

In the message text:

path
    Database directory path

System action: The program ends.
Operator response: None.
System programmer response: None.
GLD1048E  •  GLD1050E

User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the databaseDirectory option to specify a unique file directory for each LDBM, CDBM, and file-based GDBM backend in the LDAP server configuration file. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

--------

GLD1048E  Unable to add schema definition: error_text.

Explanation:  The LDAP server is unable to add a new definition to the directory schema.
In the message text:
error_text
   Error message text

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the message to correct the error. Then restart the LDAP server. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

--------

GLD1050E  Unable to create thread: error_code/reason_code - error_text

Explanation:  The LDAP server is unable to create a thread. See the description of pthread_create() in z/OS XL C/C++ Runtime Library Reference for more information about the error.
In the message text:
error_code
   Error code from pthread_create()
reason_code
   Reason code from pthread_create()
error_text
   Error text corresponding to the error code

System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
### GLD1051A • GLD1052A

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1051A  Unable to start the console task.**

**Explanation:** The LDAP server is unable to start the console task. A previous message indicates the reason for the failure.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the earlier message to correct the problem. Then restart the program. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1052A  Unable to start the network task.**

**Explanation:** The LDAP server is unable to start the interfaces used by the LDAP server. A previous message indicates the reason for the failure.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the earlier message to correct the problem. Then restart the program. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.
GLD1053E  Unable to wait on condition variable: error_code/reason_code - error_text

Explanation: The LDAP server is unable to wait on a condition variable. See the description of pthread_cond_wait() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
   Return code from pthread_cond_wait()

reason_code
   Reason code from pthread_cond_wait()

error_text
   Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1054E  Unable to signal a condition variable: error_code/reason_code - error_text

Explanation: The LDAP server is unable to signal a condition variable. See the description of the pthread_cond_signal() routine in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
   Error code from pthread_cond_signal()

reason_code
   Reason code from pthread_cond_signal()

error_text
   Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.
GLD1055E • GLD1056E

Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1055E  Unable to create a network socket: error_code/reason_code - error_text

Explanation: The LDAP server is unable to create a network socket. See the description of the socket() routine in
z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
  Error code from socket()

reason_code
  Reason code from socket()

error_text
  Error text corresponding to the error code

System action: The program continues. The request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1056E  Unable to obtain the network configuration: error_code/reason_code - error_text

Explanation: The LDAP server is unable to obtain the network configuration. See the description of the SIOCGIFCONF option for the ioctl() routine in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
  Error code from ioctl()

reason_code
  Reason code from ioctl()

error_text
  Error text corresponding to the error code

System action: The program continues. The request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1057E Unable to obtain the status of the name interface: error_code/reason_code - error_text

Explanation: The LDAP server is unable to obtain the status of the indicated network interface. See the description of the SIOCGIFFLAGS option for ioctl() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

name
  Network interface name

error_code
  Error code from ioctl()

reason_code
  Reason code from ioctl()

error_text
  Error text corresponding to the error code

System action: The program continues. The request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1058E Unable to obtain the IPv6 home interfaces: error_code/reason_code - error_text

Explanation: The LDAP server is unable to obtain the list of IPv6 home interfaces. See the description of the SIOCGHOMEIF6 option for ioctl() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
GLD1059I

error_code
   Error code from ioctl()
reason_code
   Reason code from ioctl()
error_text
   Error text corresponding to the error code
System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1059I  Listening for requests on ip port port.

Explanation:  The LDAP server is listening for non-secure requests on the indicated network interface. If the listen option specifies ldap://INADDR_ANY, the IP address is displayed as 0.0.0.0. If the listen option specifies ldap://in6addr_any, the IP address is displayed as ::.
In the message text:
ip  IP address
port  TCP/IP port number
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
No longer listening for requests on ip port port.

Explanation: The LDAP server is no longer listening for requests on the indicated network interface. This indicates that the network interface is no longer available. If the listen option specifies ldap://INADDR_ANY, the IP address is displayed as 0.0.0.0. If the listen option specifies ldap://in6addr_any, the IP address is displayed as ::.

In the message text:
ip IP address
port TCP/IP port number

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

Network monitor terminating abnormally.

Explanation: The network monitor thread is stopping because of an error condition. A previous message identifies the reason for the failure.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the earlier message to correct the error, if there is one. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

Unable to initialize the SSL environment: return_code - error_text.

Explanation: The LDAP server cannot initialize the SSL environment. See the description of the gsk_environment_open() and gsk_environment_init() routines in z/OS Cryptographic Services System SSL Programming for more information about the error.

In the message text:
GLD1064E

*return_code*  
Return code from SSL routine

*error_text*  
Error text corresponding to the return code

**System action:** If the error occurs during LDAP server initialization, the tcpTerminate option in the LDAP server configuration file determines what the server does. If the tcpTerminate option is set to recover (this is the default if the configuration option is not specified), LDAP server initialization continues. In this case, SSL support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends. If the error occurs while processing the LDAP server REFRESH SSL operator modify command, the program continues, using the existing SSL environment.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. If SSL connections are not needed, remove the sslKeyRingFile option from the LDAP server configuration file. Restart the program if it ended or if SSL connections are needed.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1064E  **Unable to load the System SSL runtime:** *error_code*reason_code - *error_text*

**Explanation:** The LDAP server or utility cannot load the System SSL runtime DLL. The LDAP server uses the System SSL runtime DLL for initializing secure SSL sockets. Both the LDAP server and utility load the System SSL routine DLL for obtaining access to the System SSL CMS runtime DLL which is used for random byte generation of ibm-entryUUID attribute values, CRAM-MD5 and DIGEST-MD5 binds, and the salt value for Salted SHA password hashing. See the description of dllload() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

*error_code*  
Error code from dllload()

*reason_code*  
Reason code from dllload()

*error_text*  
Error text corresponding to the error code

**System action:**

- If the error occurs while loading the System SSL run time for access to the random byte generation routine in the System SSL CMS runtime DLL, the program ends.
- If the error occurs while during secure SSL sockets LDAP server initialization, the LDAP server continues if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, SSL support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the SYS1.SIEALNKE data set is available to the LDAP server or utility job step, then restart the program if it ended. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1065E Unable to query the gsk_get_ssl_vector routine: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to query the **gsk_get_ssl_vector()** routine in the System SSL runtime DLL. The LDAP server uses the System SSL runtime DLL for initializing secure SSL sockets. Both the LDAP server and utility load the System SSL routine DLL for obtaining access to the System SSL CMS runtime DLL which is used for random byte generation of **ibm-entryUUID** attribute values, CRAM-MD5 and DIGEST-MD5 binds, and the salt value for Salted SHA password hashing. See the description of **dllqueryfn()** in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/docview basement/docview.wss?uid=swg27027780) for more information about the error.

In the message text:

- **error_code**
  - Error code from **dllqueryfn()**

- **reason_code**
  - Reason code from **dllqueryfn()**

- **error_text**
  - Error text corresponding to the error code

System action:
- If the error occurs while loading the System SSL runtime for access to the random byte generation routine in the System SSL CMS runtime DLL, the program ends.
- If the error occurs while during secure SSL sockets LDAP server initialization, the LDAP server continues if the **tcpTerminate** option in the LDAP server configuration file is set to **recover** (this is the default if the configuration option is not specified). In this case, SSL support is not available until the error is corrected and the server is restarted. If the **tcpTerminate** option is set to **terminate**, the program ends.

Operator response: None.

System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Ensure that the correct level of System SSL is installed on the system. Restart the program if it ended. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1066E • GLD1067E

GLD1066E  Unable to bind to ip port: error_code/reason_code - error_text

Explanation:  The LDAP server is unable to bind to the indicated network interface. See the description of bind() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

ip  IP address
port  TCP/IP port number
error_code  Error code from bind()
reason_code  Reason code from bind()
error_text  Error text corresponding to the error code

System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. Ensure that no other application is using the indicated port and that the port is not reserved. Then retry the request. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1067E  Unable to listen for requests: error_code/reason_code - error_text

Explanation:  The LDAP server cannot listen for requests on a network interface. See the description of listen() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code  Error code from listen()
reason_code  Reason code from listen()
error_text  Error text corresponding to the error code

System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1068E** Unable to accept connection: error_code/reason_code - error_text

Explanation: The LDAP server cannot accept a connection on a network interface. See the description of accept() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- `error_code`
  - Error code from accept()

- `reason_code`
  - Reason code from accept()

- `error_text`
  - Error text corresponding to the error code

System action: The program continues. The request fails. This message is issued, at most, once a minute for a limit of 60 times when this condition exists. Although this message may not be issued after being displayed 60 times on the console, the condition may still exist.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1069E** Unable to receive data: error_code/reason_code - error_text

Explanation: The LDAP server cannot receive data on a network interface. See the description of recv() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- `error_code`
  - Error code from recv()

- `reason_code`
  - Reason code from recv()

- `error_text`
  - Error text corresponding to the error code

System action: The program continues. The request fails.
GLD1070E  GLD1071E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1070E  suffix is a reserved database suffix.

Explanation: The LDAP server or utility found a suffix option in the LDAP server configuration file which specifies a value that is reserved for use by the LDAP server. The LDAP server reserves "", "cn=schema", and "cn=monitor" as suffixes for internal backends. It restricts usage of "cn=changelog" when the GDBM backend is configured. It also restricts usage of "cn=configuration" and "cn=ibmpolicies" when the CDBM backend is configured. The LDAP server also reserves "cn=Anybody", "cn=Authenticated" and "cn=This", because it uses these distinguished names to represent special-purpose access groups.

In the message text:

**suffix**
  Suffix option value

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the suffix option in the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1071E  suffix is a duplicate database suffix.

Explanation: The LDAP server or utility found a suffix option value in the LDAP server configuration file which is a duplicate of another suffix option value. Each suffix value must be unique and must not be subordinate to another suffix value. For example, "o=IBM,c=US" and "c=US" cannot both be assigned as suffixes since the first value is a subordinate of the second value.

In the message text:

**suffix**
  Suffix option value
GLD1072E • GLD1074W

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the suffix option in the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD1072E**  Unable to send data: *error_code*/*reason_code* - *error_text*

Explanation: The LDAP server cannot send data to a client application on a network interface. See the description of send() in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/knowledgecenter/SSLTBW_2.1.0/com.ibm.zos.v2r1.lisr/zosr_c_rtnlibr_.html) for more information about the error.

In the message text:
- *error_code*
  - Error code from send()
- *reason_code*
  - Reason code from send()
- *error_text*
  - Error text corresponding to the error code

System action: The program continues. The request may fail. This message could be accompanied by a failure of the client application because of lost response data. Client symptoms might include time-outs, long waits, or connection failures.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Ensure TCP/IP is operating correctly. Then retry the request if it failed. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD1074W**  Maximum client connections changed from *old_value* to *new_value*.

Explanation: The value for the maxConnections configuration option in the LDAP server configuration file is too large compared to the maximum number of file descriptors allowed for the LDAP server process. The maxConnections configuration option determines the maximum number of concurrent client connections. Each client connection requires a socket descriptor and each socket descriptor counts against the maximum number of files for a
process. The LDAP server requires 4 file descriptors plus 2 file descriptors for each backend, plus a minimum of 30
file descriptors for network connections. To avoid running out of file descriptors, a limit is placed on the maximum
number of concurrent client connections based on the current file limit.

In the message text:

old_value
   Old maximum client connections value

new_value
   New maximum client connections value

System action: The program continues, using the updated value for the maximum number of concurrent client
connections to accept the current file limit for the LDAP server process.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the maxConnections configuration option must be old_value, increase the values of the
MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in the BPXPRMxx member. It may
also be necessary to increase the FILEPROCMAX value in the RACF OMVS segment of the user ID running the
LDAP server so that the old_value can be supported. Then restart the LDAP server. See the description of the
maxConnections configuration option in Customizing the LDAP server configuration for more information.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1075W  Client connection threshold reached, currently using current_value of maximum_value.

Explanation: The number of concurrent client connections has reached 90% of the maximum number of connections
allowed on the LDAP server.

In the message text:

current_value
   Current number of client connections

maximum_value
   Maximum number of client connections

System action: The program continues, but is in danger of reaching the maximum number of concurrent client
connections allowed.

Operator response: Contact the LDAP Administrator or see Administrator response.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: A common reason that client connections are used in the LDAP server is because client
applications are not unbinding from the LDAP server when they are finished making requests. Ensure that client
applications disconnect when they are finished making requests to the LDAP server. If this is not the problem,
increase the number of connections allowed on the LDAP server.
If the maxConnections configuration option is set in the LDAP server configuration file, increase its value. Verify the increased value of maxConnections can be supported by obtaining the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in the BPXPRMxx member. Also, verify that the FILEPROCMAX value in the RACF OMVS segment of the user ID running the LDAP server is set to a sufficient value to support the increased value of maxConnections.

If maxConnections is not set in the LDAP server configuration file, the number of connections is limited by the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in BPXPRMxx, and also by the value of FILEPROCMAX in the RACF OMVS segment of the user ID running the LDAP server. Ensure these are set to a sufficient value.

If any of these values are updated, it is necessary to restart the LDAP server to put these changes into effect. See the description of the maxConnections configuration option in [Customizing the LDAP server configuration] for more information.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1076I  Number of client connections now below threshold, currently using current_value of maximum_value.

Explanation: The number of concurrent client connections has dropped below 90% of the maximum number of connections allowed on the LDAP server. Warning messages may be issued once again if the number of concurrent client connections exceeds the warning threshold.

In the message text:

current_value
  Current number of client connections

maximum_value
  Maximum number of client connections

System action: The program continues.

Operator response: Contact the LDAP Administrator or see Administrator response.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If this message is repeatedly displayed, it means that the maximum number of file descriptors available to the LDAP server may be too low. In this case, it may be desirable to increase the number of concurrent connections that the LDAP server can support by changing the setting of the maxConnections option in the LDAP server configuration file. Verify the increased value of maxConnections can be supported by obtaining the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in the BPXPRMxx member. Also, verify that the FILEPROCMAX setting in the RACF OMVS segment of the user ID running the LDAP server is set to a sufficient value to support the increased value of maxConnections. If any of these values are updated, it is necessary to restart the LDAP server to put these changes into effect. See the description of the maxConnections configuration option in [Customizing the LDAP server configuration] for more information.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1077E  Maximum client connections reached, connection from *ip* rejected.

**Explanation:** The maximum number of concurrent client connections has been reached and new connections are rejected until the number of client connections drops below the maximum value. This situation can be caused by client applications not unbinding when they are finished communicating with the LDAP server.

In the message text:

*ip*  IP address

**System action:** The program continues. Additional client applications cannot connect to the LDAP server. This message is issued at most once a minute for a limit of 60 times when this condition exists. Although this message may not be issued after being displayed 60 times on the console, the condition may still exist.

**Operator response:** Contact the LDAP Administrator or see Administrator response.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** A common reason that client connections are used in the LDAP server is because client applications are not unbinding from the LDAP server when they are finished making requests. Ensure that client applications disconnect when they are finished making requests to the LDAP server. If this is not the problem, increase the number of connections allowed on the LDAP server.

- If the **maxConnections** configuration option is set in the LDAP server configuration file, increase its value. Verify the increased value of **maxConnections** can be supported by obtaining the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in the BPXPRMxx member. Also, verify that the FILEPROCMAX value in the RACF OMVS segment of the user ID running the LDAP server is set to a sufficient value to support the increased value of **maxConnections**.

- If **maxConnections** is not set in the LDAP server configuration file, the number of connections is limited by the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in BPXPRMxx, and also by the value of FILEPROCMAX in the RACF OMVS segment of the user ID running the LDAP server. Ensure these are set to a sufficient value.

If any of these values are updated, it is necessary to restart the LDAP server to put these changes into effect. See the description of the **maxConnections** configuration option in [Customizing the LDAP server configuration](#) for more information.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1078E  Unable to get the value for the maximum number of files: **error_code**/**reason_code** - **error_text**

**Explanation:** The LDAP server is unable to determine the maximum number of files allowed for a process. See the description of **getrlimit()** in [z/OS XL C/C++ Runtime Library Reference](#) for more information about the error.

In the message text:

**error_code**

Error code from **getrlimit()**

**reason_code**

Reason code from **getrlimit()**

**error_text**

Error text corresponding to the error code

**System action:** The program ends.
GLD1079E • GLD1080E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1079E  Maximum file limit of current_limit is too small, change it to at least new_limit.

Explanation: The maximum number of files that can be opened by the LDAP server process is too small. The LDAP server requires 4 file descriptors plus 2 file descriptors for each backend, plus a minimum of 30 file descriptors for network connections. The current maximum file limit displayed in the message is not large enough to support the minimum of 30 file descriptors required for network connections. The maximum file limit must be set to at least the indicated new limit for the LDAP server to start.

In the message text:
current_limit
Current maximum file limit
new_limit
Recommended maximum file limit

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Increase the values of the MAXFILEPROC statement and of MAXSOCKETS on the NETWORK statement in the BPXPRMxx member. It may also be necessary to increase the FILEPROCMAX value in the RACF OMVS segment of the user ID running the LDAP server. Then restart the LDAP server. See the description of the maxConnections configuration option in Customizing the LDAP server configuration for more information.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1080E  Unable to load the Kerberos runtime: return_code/reason_code - error_text

Explanation: The LDAP server encountered an error in attempting to load the Kerberos runtime DLL. See the description of krb5_dll_load() in z/OS Integrated Security Services Network Authentication Service Programming for more information about the return codes. See z/OS UNIX System Services Messages and Codes for more information about the reason codes.
GLD1081A

In the message text:

return_code
   Return code from krb5_dll_load()

reason_code
   Reason code from krb5_dll_load()

error_text
   Error text corresponding to the return code

System action: The LDAP server continues initialization if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, Kerberos support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that the SYS1.SIEALNKE data set is available to the LDAP server job step. If Kerberos authentication is not needed, set the supportKrb5 option in the LDAP server configuration file to off. Restart the program if it ended or if Kerberos support is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1081A  No network interface is available for a 'listen' statement.

Explanation: There are no network interfaces available for a listen statement. This error can also occur if a listen option in the LDAP server configuration file or on the LDAP server command line specifies SSL connections but SSL support is not available.

System action: The LDAP server continues if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). If the tcpTerminate option is set to terminate, the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Either start the required network interfaces or remove the corresponding listen option from the LDAP server configuration file or command line. Restart the program if it ended.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1082A  Network interface ip on port port is not available.

Explanation: A required network interface is not available for use.

In the message text:

ip  IP address

port  TCP/IP port number

System action: The LDAP server continues if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified) or if at least one network interface starts successfully. Otherwise, the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either start the required network interface or remove the corresponding listen option from the LDAP server configuration file or command line. Restart the program if it ended.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1083A  Host host cannot be resolved.

Explanation: The host name specified on a listen option in the LDAP server configuration file or on the LDAP server command line cannot be resolved.

In the message text:

host  Host name

System action: The LDAP server continues if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified) or if at least one network interface starts successfully. Otherwise, the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the DNS name server is available and that the host name is defined. Ensure that the host name is specified correctly or remove the corresponding listen option from the LDAP server configuration file or command line. Restart the program if it ended.

Source: LDAP

Routing code: None.

Descriptor code: None.
GLD1084I • GLD1086I

**Automation:** Not applicable.

<table>
<thead>
<tr>
<th>Message</th>
<th>Explanation</th>
<th>System action</th>
<th>Operator response</th>
<th>System programmer response</th>
<th>User response</th>
<th>Problem determination</th>
<th>Module</th>
<th>Example</th>
<th>Administrator response</th>
<th>Source</th>
<th>Routing code</th>
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<th>Automation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLD1084I</td>
<td>Network interface status</td>
<td>This message is displayed in response to the LDAP server DISPLAY NETWORK operator modify command. The remaining lines in this multi-line message display the status of each network interface. A network interface is <strong>ACTIVE</strong> if the LDAP server is listening for requests on that interface. A network interface is <strong>INACTIVE</strong> if the interface has been stopped and has not been restarted yet. No entry is displayed for network interfaces which were not started when the LDAP server was started. The LDAP server checks for network interface changes based on the value of the LDAP_NETWORK_POLL environment variable, which has a default value of 5 minutes.</td>
<td>The program continues.</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>LDAP</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>GLD1085I</td>
<td>No active network interfaces.</td>
<td>This message is displayed in response to the LDAP server DISPLAY NETWORK operator modify command when there are no active network interfaces to display, and no network interfaces ever started successfully.</td>
<td>The program continues.</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>LDAP</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>GLD1086I</td>
<td>Maximum number of lines displayed.</td>
<td>There is a limit of 254 lines of output from an LDAP server operator modify command. The maximum number of output lines has been reached for this command and the rest of the output is not displayed.</td>
<td>The program continues.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1087E  The type backend is already defined.
Explanation:  The LDAP server or utility found multiple database options in the LDAP server configuration file for a CDBM, GDBM, SDBM, or EXOP backend. Each of these backends can be defined at most once in the configuration file.
In the message text:
  type
    Backend type
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Remove the extra backend section from the LDAP server configuration file. The backend section includes the database option and all the options following it until the next database option. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1088E  The EXOP backend requires Program Call services.
Explanation:  The Policy Directory extended operations backend requires Program Call services. The LDAP server must have a listen option specifying ldap://:pc or ldaps://:pc to provide Program Call services. The listen option can be specified in the LDAP server configuration file or on the LDAP server command line when starting the server.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
GLD1089E • GLD1090E

Example: None.

Administrator response: Either specify a listen option for Program Call services in the LDAP server configuration file or on the LDAP server command line, or remove the EXOP database configuration option. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1089E  The option option must be specified for the type backend.

Explanation: The LDAP server or utility found that an option is missing from a backend section of the LDAP server configuration file. The option indicated in the message is required when configuring this type of backend.

In the message text:

option
  Option name

type
  Backend type

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Add the required option to the backend section of the LDAP server configuration file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1090E  The SDBM backend supports a single suffix.

Explanation: The LDAP server or utility found multiple suffix options in the SDBM section of the LDAP server configuration file. There can only be one SDBM backend section in the configuration file and it must contain exactly one suffix option.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Remove the extra suffix options from the SDBM section of the LDAP server configuration file. Then restart the program.
GLD1091E • GLD1092E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1091E Unable to open schema database file filename error_code/ reason_code - error_text

Explanation: The LDAP server or utility is unable to open the schema database file. See the description of fopen() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

  filename
  Schema database file name

  error_code
  Error code from fopen()

  reason_code
  Reason code from fopen()

  error_text
  Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1092E Unable to read from schema database file filename error_code/ reason_code - error_text

Explanation: The LDAP server or utility is unable to read the schema database file. See the description of fread() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

  filename
  Schema database file name

  error_code
  Error code from fread()

  reason_code
  Reason code from fread()

  error_text
  Error text corresponding to the error code

System action:
• If the error occurs during LDAP server initialization, the program ends.
GLD1093E

- If the error occurs during a schema modify operation, the schema modification is successful. If the LDAP server is part of a cross-system group in a sysplex, the other LDAP servers in the sysplex may not apply the schema change to their version of the schema. In this case, add and modify operations on those LDAP servers may fail if they involve the modified schema elements.
- If the error occurs when processing a request for the schema from another LDAP server in the sysplex, the other LDAP server ends because it cannot obtain the schema.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Also, verify that the schema database file has not been corrupted and that there are no file system errors. Restart the program if it did not start or retry the schema modify operation.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1093E Unable to write to schema database file filename error_code/reason_code - error_text

Explanation: The LDAP server is unable to write the schema database file. See the description of fwrite() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
filename
  Schema database file name
error_code
  Error code from fwrite()
reason_code
  Reason code from fwrite()
error_text
  Error text corresponding to the error code

System action: If the error occurs during LDAP server initialization, the server ends. If it occurs during a modify operation of the schema, the modify operation fails and the server continues to run with its current schema.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Also, verify that the LDAP server has write access to the directory containing the file and that there are no file system errors. Restart the program if it did not start or retry the schema modify operation.

Source: LDAP
Routing code: None.
GLD1094E

Descriptor code: None.

Automation: Not applicable.

GLD1094E Unable to create directory name error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to create the indicated directory for the schema database file or for the checkpoint file for an LDBM or file-based GDBM backend. See the description of mkdir() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

name
   Directory name

error_code
   Error code from mkdir()

reason_code
   Reason code from mkdir()

error_text
   Error text corresponding to the error code

System action:
• If the error occurs during schema initialization, the program ends.
• If the error occurs during LDBM, CDBM, or GDBM initialization, then the LDBM, CDBM, or GDBM backend does not start. If the servStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the servStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
• If the error occurs during a modify operation of the schema, the modify operation fails and the server continues to run with its current schema.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. If an LDBM, CDBM, or a file-based GDBM backend is configured, the directory containing the checkpoint file is specified by the databaseDirectory option in the backend section of the LDAP server configuration file. The directory defaults to /var/ldap/ldbm and /var/ldap/gdbm if the configuration option is not specified for an LDBM or GDBM backend. If the configuration option is not specified for a CDBM backend, the directory defaults to the schema directory which is specified by the schemaPath option in the global section of the LDAP server configuration file. The directory containing the schema database file is specified by the schemaPath option. The directory defaults to /var/ldap/schema if the configuration option is not specified. Make sure that the directory can be created if it does not exist. Restart the LDAP server if it did not start or retry the schema modify operation. If the server started but an LDBM, CDBM, or GDBM backend is not available, then restart the server to make it available. For a utility, restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1095E  Schema database file filename is not valid.

Explanation: The LDAP server or utility is not able to load the schema from the schema database file. Either the record format is not as expected or the schema is not complete. If the file name indicated in the message is **XCF**, then the schema was sent to the LDAP server from another LDAP server in the sysplex.

In the message text:

filename
   Schema database file name

System action: The program ends unless the internal schema is still usable.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the schema database file is not modified by any application other than the LDAP server. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1096E  Unable to decode schema database record.

Explanation: The LDAP server or utility detected an error while trying to load the schema. The schema can be loaded from either the schema database file or from the sysplex group owner through XCF. This error indicates that the LDAP server could not decode one of the schema database records.

System action: The program ends unless the internal schema is still usable.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the schema database file is not modified by any application other than the LDAP server. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1097E  Unable to encode schema database record.

Explanation: The LDAP server detected an error while trying to save the schema to the schema database file. It could not encode one of the database records.

System action: If the error occurs during LDAP server initialization, the server ends. If it occurs during a modify
operation of the schema, the modify operation fails and the server continues to run with its current schema.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Restart the program. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

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**GLD1098E**

Unable to rename oldfile to newfile: error_code/reason_code - error_text

**Explanation:** The LDAP server is unable to rename a file. See the description of `rename()` in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- `oldfile` Old file name
- `newfile` New file name
- `error_code` Error code from `rename()`
- `reason_code` Reason code from `rename()`
- `error_text` Error text corresponding to the error code

**System action:**
- If the error occurs during schema initialization, the server ends.
- If the error occurs during LDBM, CDBM, or GDBM initialization, then the LDBM, CDBM, or GDBM backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.
- If the error occurs during a modify operation of the schema, the modify operation fails and the LDAP server continues to run with its current schema.
- If the error occurs during an LDBM, CDBM, or GDBM operation, then, if the `fileTerminate` option in the LDAP server configuration file is set to `recover` (this is the default if the configuration option is not specified), the server continues to run but the LDBM, CDBM, or GDBM backend is placed in read-only state. If the `fileTerminate` option is set to `terminate`, the program ends.
- If the error occurs during activity log file rollover and the `logfileRolloverDirectory` option in the LDAP server configuration file specifies a z/OS UNIX System Services directory, the LDAP server continues with the rolled over activity log file remaining in the directory specified by the `logfile` option.
- If the error occurs during activity log file rollover and the `logfileRolloverDirectory` option in the LDAP server configuration file specifies a generated data group (GDG) base, the LDAP server continues with the current data set for the activity log file.

**Operator response:** Use the information in the message to assist the LDAP administrator to correct the error. If requested, issue the LDAP server `BACKEND` operator modify command to set the LDBM, CDBM, or GDBM backend to read/write state.
GLD1099E • GLD1100A

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Also, verify that the LDAP server has write access to the directory. Then restart the LDAP server if it did not start. If an LDBM, CDBM, or GDBM backend was placed in read-only state, it can be reset to read/write state by restarting the LDAP server or by using the LDAP server BACKEND operator modify command. If the error occurred during activity log file rollover and the logfileRolloverDirectory option specifies a z/OS UNIX System Services directory, create a directory with the appropriate permissions that the LDAP server can write to. Verify that the old and new activity log files reside in the same type of z/OS UNIX System Services file system.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1099E  Schema unique identifier number is already assigned.

Explanation: Each attribute and object class in the LDAP server schema is identified by a unique internal identifier. While adding an attribute or object class to the schema, the LDAP server has detected that the attribute or object class identifier is already in use. This should not occur.

In the message text:

number
   Identifier number

System action: If the error occurs during LDAP server initialization, the server ends. If it occurs during a modify operation of the schema, the modify operation fails and the server continues to run with its current schema.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Restart the LDAP server. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1100A  LDAP server shutdown initiated because directory schema cannot be restored.

Explanation: The LDAP server is stopping because an attempt to load the directory schema has failed and the schema cannot be used. A previous message identifies the reason for the failure.

System action: The server ends.

Operator response: None.
System programmer response: None.
GLD1101A  •  GLD1102E

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the earlier message to correct the problem. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1101A  Unable to load the database backends.

Explanation: The LDAP server is unable to load the database backends. A previous message indicates the reason for the failure.
System action: The server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the earlier message to correct the problem. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1102E  No type load module specified for 64-bit addressing mode.

Explanation: The LDAP server or utility is running in 64-bit addressing mode but one of the database options in the LDAP server configuration file does not specify a load module for 64-bit addressing mode. As a result, the backend is not loaded.
In the message text:
type
  Backend type
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Either specify a load module for 64-bit addressing mode on the database option or remove
the backend section from the LDAP server configuration file. The backend section includes the database option and all the options following it until the next database option. Restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1103E  No backend load module specified for 31-bit addressing mode.

Explanation: The LDAP server or the utility is running in 31-bit addressing mode but one of the database options in the LDAP server configuration file does not specify a load module for 31-bit addressing mode. As a result, the backend is not loaded.

In the message text:
backend
Backend type

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either specify a load module for 31-bit addressing mode on the database option or remove the backend section from the LDAP server configuration file. The backend section includes the database option and all the options following it until the next database option. Restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1104E  Unable to load DLL module: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to load the indicated DLL. See the description of dllload() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
module
   DLL module
error_code
   Error code from dllload()
reason_code
   Reason code from dllload()
error_text
   Error text corresponding to the error code

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
GLD1105E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Ensure that the DLL is installed and can be accessed by the LDAP server or utility. If the DLL module name is specified on a database option in the LDAP server configuration file, ensure that it is entered correctly there. Restart the program if it did not start or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1105E Unable to query entry point name in DLL module; error_code/reason_code - error_text

Explanation: The LDAP server or the utility is unable to locate a required entry point in the indicated DLL. See the description of dllqueryfn() in [z/OS XL C/C++ Runtime Library Reference] for more information about the error.

In the message text:

name
Entry point name

module
DLL module

type
Error code from dllqueryfn()

reason_code
Reason code from dllqueryfn()

error_text
Error text corresponding to the error code

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Ensure that the correct DLL is installed. If the DLL module name is specified on a database option in the LDAP server configuration file, ensure that it is entered correctly there. Restart the program if it did not start or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
GLD1106E  type backend initialization failed for backend named name.

Explanation: The indicated backend failed to initialize. A previous message indicates the reason for the failure.

In the message text:

- **type** Backend type
- **name** Backend name

**System action:** The backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the earlier message to correct the error. For a TDBM or DB2-based GDBM backend, ensure that DB2® is available. Restart the program if it did not start or if the backend is needed.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

GLD1107I SNAP dump completed.

Explanation: The LDAP server completed writing the dump that is requested by the LDAP server SNAP operator modify command. The dump is written to the data set specified by the `CEEDUMP DD` statement in the start procedure for the LDAP server.

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD1108I  Server statistics reset.

**Explanation:** The statistics monitored by the LDAP server have been reset. This message is displayed in response to the LDAP server **RESET THREADS** command.

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

GLD1109I  Server activity statistics

**Explanation:** This message is displayed in response to the LDAP server **DISPLAY THREADS** operator modify command. The remaining lines in this multi-line message display the activity statistics. The **RESET THREADS** operator modify command can be used to reset the activity statistics.

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

GLD1110E  An administrator DN must be specified using the adminDN configuration option.

**Explanation:** The LDAP server or utility found that the adminDN option is missing in the LDAP server configuration file. This option defines the LDAP root administrator and is required.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.
Example: None.

Administrator response: Add the adminDN option to the global section of the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1111E Unable to normalize schema owner: text.

Explanation: The LDAP server or utility is unable to normalize the distinguished name of the schema entry owner. This may occur because a series of conflicting modifications to the schema entryowner attribute and one or more attributetypes definitions within the schema.

In the message text:

   text

   Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program. It may be necessary to restore the schema from a backup. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1112E Unable to process schema ACL: error_text.

Explanation: The LDAP server or utility is unable to process the access control list for the schema entry. This may occur because a series of conflicting modifications to the schema aclentry attribute and one or more attributetypes definitions within the schema.

In the message text:

   error_text

   Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.
GLD1113E • GLD1114E

Administrator response:  Use the information in the message to correct the error. Then restart the program. It may be necessary to restore the schema from a backup. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1113E  The keylabel record in the encryption keys dataset is incorrect.

Explanation:  The LDAP server or utility found a record in the encryption keys data set that is not valid. Each record in the encryption keys data set consists of a key label followed by one or more key components. Each key component consists of 16 hexadecimal characters. Blank lines and lines beginning with '#' or an '*' are commentary records and are ignored.

The following is an example of a properly formatted key in the encryption keys data set.

```
label1 1010101010101010 1010101010101010
```

In the message text:

```
keylabel
  Encryption key label name
```

System action:  The utility ends. The LDAP server continues, but encryption and decryption of values using a key in the key data set may fail. In particular, this may result in bind failures if the userPassword attribute value cannot be decrypted.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Correct the record in the encryption keys data set. Then restart the program.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1114E  A record in the encryption keys dataset is longer than 255 bytes.

Explanation:  The LDAP server or utility found a record in the encryption keys data set that is too long. The maximum length of a record in the encryption keys data set is 255 bytes.

System action:  The utility ends. The LDAP server continues, but encryption and decryption of values using a key in the key data set may fail. In particular, this may result in bind failures if the userPassword attribute value cannot be decrypted.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
GLD1115E • GLD1116E

Administrator response: Correct any records in the encryption keys data set that are longer than 255 bytes. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1115E  Label 'keylabel' is not available: error_text.

Explanation: The LDAP server or utility encountered an error attempting to encrypt a value using the key label indicated in the message and the AES or DES algorithm. The label and algorithm to use are specified on the pwEncryption or secretEncryption options in the LDAP server configuration file. If the key label is stored in ICSF, refer to z/OS Cryptographic Services ICSF Application Programmer's Guide for more information about the error.

In the message text:
keylabel
  Encryption key label name
error_text
  Error message text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If using an encryption keys data set to store AES or DES keys, ensure that keylabel matches the label on one of the records in the data set and that the keys are valid. A DES key that is specified in the encryption keys data set consists of 8, 16 or 24 bytes with odd parity while an AES key consists of 32 bytes. If AES or DES keys are stored in an ICSF CKDS data set, ensure that ICSF is running before starting the LDAP server or utility. Correct the LDAP server configuration file or the encryption keys data set. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1116E  Unable to initialize an SSL connection with IP_address: return_code - Error_text.

Explanation: The LDAP server encountered an error while initializing an SSL connection with the client connecting from the IP address indicated in the message. The failing routine can be gsk_secure_socket_open(),
gsk_attribute_set_numeric_value(), gsk_attribute_get_buffer(), gsk_attribute_set_buffer(), or
gsk_secure_socket_init(). See the descriptions of these routines in z/OS Cryptographic Services System SSL Programming for more information about the error.

In the message text:
IP_address
  Client IP address
return_code
  Return code from SSL routine
Error_text
Error text corresponding to the return code

System action: The LDAP server continues. The client request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1117E Unable to read SSL data from IP_address: return_code - Error_text.

Explanation: The LDAP server encountered an error while attempting to read data from an SSL connection with the client connecting from the IP address indicated in the message. See the description of gsk_secure_socket_read() in z/OS Cryptographic Services System SSL Programming for more information about the error.

In the message text:
IP_address
Client IP address
return_code
Return code from gsk_secure_socket_read()
Error_text
Error text corresponding to the return code

System action: The LDAP server continues. The client request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1118E • GLD119E

GLD1118E  Unable to send SSL data to IP_address: return_code - Error_text.

Explanation: The LDAP server encountered an error while attempting to send data over an SSL connection with the client connecting from the IP address indicated in the message. See the description of gsk_secure_socket_write() in [z/OS Cryptographic Services System SSL Programming] for more information about the error.

In the message text:

IP_address
  Client IP address

return_code
  Return code from gsk_secure_socket_write()

Error_text
  Error text corresponding to the return code

System action: The LDAP server continues. The client request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1119E  Unable to get SSL certificate information: return_code - Error_text.

Explanation: The LDAP server encountered an error while attempting to obtain certificate information for a client performing an SASL EXTERNAL bind over SSL. See the description of gsk_attribute_get_cert_info() in [z/OS Cryptographic Services System SSL Programming] for more information about the error.

In the message text:

return_code
  Return code from gsk_attribute_get_cert_info()

Error_text
  Error text corresponding to the return code

System action: The LDAP server continues. The bind request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation. If the problem persists, contact the service representative.

Source: LDAP
GLD1120E  Kerberos initialization failed: 0xreturn_code - error_text.

Explanation: The LDAP server encountered an error while attempting to initialize the Kerberos runtime environment. The failing routine can be krb5_init_context(), krb5_sname_to_principal(), or krb5_unparse_name(). See the descriptions of these routines in z/OS Integrated Security Services Network Authentication Service Programming for more information about the error.

In the message text:

return_code
Return code from Kerberos routine

error_text
Error text corresponding to the return code

System action: The LDAP server continues initialization if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, Kerberos support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. If Kerberos authentication is not needed, set the supportKrb5 option in the LDAP server configuration file to off. Restart the program if it ended or if Kerberos support is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1121E  Unable to parse Kerberos principal 'principal_name': 0xreturn_code - error_text.

Explanation: The LDAP server is unable to parse the Kerberos principal specified by the serverKrbPrinc option in the LDAP server configuration file. See the description of krb5_parse_name() in z/OS Integrated Security Services Network Authentication Service Programming for more information about the error.

In the message text:

principal_name
Kerberos principal name

return_code
Return code from krb5_parse_name()

error_text
Error text corresponding to the return code

System action: The LDAP server continues initialization if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, Kerberos support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.
GLD1122E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that a valid Kerberos principal name is specified for the serverKrbPrinc option in the LDAP server configuration file. Correct the option, or, if Kerberos authentication is not needed, set the supportKrb5 option in the LDAP server configuration file to off. Restart the program if it ended or if Kerberos support is needed.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1122E  GSSAPI initialization failed: Major 0xmajor_error, Minor 0xminor_error - principal_name.

Explanation: The LDAP server encountered an error while attempting to initialize the GSSAPI environment. The failing routine can be gss_import_name() or gss_acquire_cred(). See the descriptions of these routines in z/OS [Integrated Security Services Network Authentication Service Programming] for more information about the error.
In the message text:
major_error
   Major error code from Kerberos routine
minor_error
   Minor error code from Kerberos routine
principal_name
   Kerberos server principal name

System action: The LDAP server continues initialization if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, Kerberos support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that the LDAP server has access to the encryption key for the Kerberos principal associated with the LDAP server. The encryption key is in a key table or the local KDC depending on the krbKeytab option value in the LDAP server configuration file. Correct the LDAP server configuration file or the GSSAPI environment on the system. If Kerberos authentication is not needed, set the supportKrb5 option in the LDAP server configuration file to off. Restart the program if it ended or if Kerberos support is needed. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1123E Unable to wrap a GSSAPI message: Major 0x\texttt{major\_error}, Minor 0x\texttt{minor\_error} - principal\_name.

Explanation: The LDAP server encountered a problem while attempting to cryptographically sign and possibly encrypt (wrap) a GSSAPI message. See the description of \texttt{gss\_wrap()} in \textit{z/OS Integrated Security Services Network Authentication Service Programming} for more information about the error.

In the message text:

\begin{itemize}
  \item \texttt{major\_error}
    \begin{itemize}
      \item Major error code from \texttt{gss\_wrap()}
    \end{itemize}
  \item \texttt{minor\_error}
    \begin{itemize}
      \item Minor error code \texttt{gss\_wrap()}
    \end{itemize}
  \item \texttt{principal\_name}
    \begin{itemize}
      \item Kerberos server principal name
    \end{itemize}
\end{itemize}

System action: The LDAP server continues. The client request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Correct the GSSAPI environment.

GLD1124E Unable to unwrap a GSSAPI message: Major 0x\texttt{major\_error}, Minor 0x\texttt{minor\_error} - principal\_name.

Explanation: The LDAP server encountered a problem while attempting to unwrap a GSSAPI message sealed by the \texttt{gss\_wrap()} routine and verify the embedded signature. See the description of \texttt{gss\_unwrap()} in \textit{z/OS Integrated Security Services Network Authentication Service Programming} for more information about the error.

In the message text:

\begin{itemize}
  \item \texttt{major\_error}
    \begin{itemize}
      \item Major error code from \texttt{gss\_unwrap()}
    \end{itemize}
  \item \texttt{minor\_error}
    \begin{itemize}
      \item Minor error code \texttt{gss\_unwrap()}
    \end{itemize}
  \item \texttt{principal\_name}
    \begin{itemize}
      \item Kerberos server principal name
    \end{itemize}
\end{itemize}

System action: The LDAP server continues. The client request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Correct the GSSAPI environment.
GLD1125W • GLD1126I

The option configuration option is specified more than once.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that is specified more than once in the global section or in a backend section. The option can only be specified once in a section of the configuration file.

In the message text:

option

LDAP server configuration option

System action: The program continues, using the value in the last occurrence of the option in the LDAP server configuration file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the extra occurrences of the option in the global or backend section of the LDAP server configuration file so that the option is only specified once in that section. Restart the program if the wanted option value is not being used.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1126I Server lock statistics

Explanation: This message is displayed in response to the LDAP server DISPLAY LOCKS operator modify command. The remaining lines in this multi-line message display the lock contention statistics. There are two types of contention: waiting for shared control of the lock and waiting for exclusive control of the lock. For each type of request, the number of times that contention was encountered and the average wait time until the lock was obtained is displayed. The LDAP server RESET LOCKS operator modify command can be used to reset the lock contention statistics.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.
GLD1127I  Server lock statistics reset.

Explanation: The LDAP server has reset the lock contention statistics after the RESET LOCKS operator modify command has been issued.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1128E  ARM element name arm_name is already in use.

Explanation: The LDAP server is unable to register with the Automatic Restart Management (ARM) service because the element name indicated in the message is already in use. This error can occur if the LDAP server is started multiple times on the same system and unique ARM names are not specified by the armName option in the LDAP server configuration file.

In the message text:

arm_name

ARM element name

System action: The LDAP server continues, but Automatic Restart Management (ARM) is not available to the LDAP server. The LDAP server is not automatically restarted if it fails unexpectedly.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify unique values for the armName option in the LDAP server configuration file if multiple instances of the LDAP server are being ran on the same system. Restart the program if ARM support is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.
GLD1129I  Program Call communication is active.

Explanation: The Program Call support interface is now active on the LDAP server.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1130E  Program Call initialization failed: Return code return_code, Reason code reason_code.

Explanation: The LDAP server is unable to initialize the Program Call support. The return code has the following values:

1  Job step is not APF-authorized.
2  Program Call support is being used by another LDAP server on the same system.
3  ESTAEX create failed. The reason code is the ESTAEX return code. See the description of ESTAEX in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information about the error.
4  LXRES failed. The reason code is the LXRES return code. See the description of LXRES in z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU for more information about the error.
5  ETCRE failed. The reason code is the ETCRE return code. See the description of ETCRE in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information about the error.
6  ETCON failed. The reason code is the ETCON return code. See the description of ETCON in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information about the error.
7  IEANTCR failed. The reason code is the IEANTCR return code. See the description of IEANTCR in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information about the error.

In the message text:

return_code
  Return code

reason_code
  Reason code

System action: The Program Call interface is not available. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Restart the program if it ended or if Program Call support is needed. Program Call support is used by RACF change logging and Policy Directory extended operations. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1131E Program Call support not activated because another server already provides Program Call support.
Explanation: Another LDAP server is already running with Program Call support activated. Only one LDAP server on each system can provide Program Call support.
System action: If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If Program Call support is needed on this LDAP server, stop the other LDAP server that is running with Program Call support and remove the listen option for Program Call support from the LDAP server configuration file for the other server. Then restart both LDAP servers. If Program Call support is not needed on this LDAP server, remove the listen option for Program Call support from the LDAP server configuration file for the LDAP server.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1132E Program Call termination failed: Return code return_code, Reason code reason_code.
Explanation: The LDAP server is unable to stop the Program Call support. The return code has the following values:

101 ESTAEX cancel failed. The reason code is the ESTAEX return code. See the description of ESTAEX in \textit{z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG} for more information about the error.

102 IEANTDL failed. The reason code is the IEANTDL return code. See the description of IEANTDL in \textit{z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG} for more information about the error.

103 Unable to obtain control area lock. This indicates another task abnormally ended while holding the lock.

In the message text:
return_code
Return code
GLD1133A  GLD1135I

reason_code
  Reason code

System action: The LDAP server continues. The server may be in the process of ending.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1133A  Unable to start the Program Call support.

Explanation: The LDAP server is unable to initialize the Program Call support. A previous message identifies the reason for the failure.

System action: The Program Call interface is not available. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the earlier message to correct the error. Restart the program if it ended or if Program Call support is needed. Program Call support is used by RACF change logging and Policy Directory extended operations. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1135I  Sysplex status

Explanation: This message is displayed in response to the LDAP server DISPLAY XCF operator modify command. The remaining lines in this multi-line message display the status of each LDAP server in the cross-system group.

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
GLD1136I  Cross-system services are not available.

Explanation:  This message is displayed in response to the LDAP server DISPLAY XCF operator modify command when the LDAP server is not a member of a cross-system group.

System action:  The LDAP server continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1137A  Unable to initialize sysplex services.

Explanation:  The LDAP server is unable to initialize the sysplex support. A previous message indicates the reason for the failure.

System action:  The LDAP server ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the earlier message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD1138E  Cross-system group name value is not valid.

Explanation: The cross-system group name specified by the serverSysplexGroup option in the LDAP server configuration file is not valid. A cross-system group name is 1-8 characters and consists of letters (A-Z), numbers (0-9), and special characters (#, @, $). The special characters must be in the IBM-1047 code page.

In the message text:

value
   Cross-system group name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid cross-system group name on the serverSysplexGroup option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1139E  Not authorized to join cross-system group group_name.

Explanation: The LDAP server is not authorized to join the cross-system group. The user ID associated with the LDAP server must have at least READ access to the GLD.XCF.GROUP.group_name resource in the FACILITY class. The group name is specified by the serverSysplexGroup option in the LDAP server configuration file.

In the message text:

group_name
   Cross-system group name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Give the LDAP server user ID at least READ access to the cross-system resource. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1140E  Cross-system group group_name is not defined.

Explanation: The cross-system group is not defined to the external security manager. The cross-system group for the LDAP server must have a profile in the FACILITY class. The resource name is GLD.XCF.GROUP.group_name, where the group name is specified by the serverSystplexGroup option in the LDAP server configuration file. For example, if the cross-system group name is LDAP6, then the resource name is GLD.XCF.GROUP.LDAP6.

In the message text:

  group_name  
  Cross-system group name

System action: The LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Create the profile to define the cross-system group to the external security manager. Give the LDAP server user ID at least READ access to the resource. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1141E  XCF initialization failed: Return code return_code, Reason code x'reason_code'.

Explanation: The LDAP server is unable to initialize the cross-system coupling facility (XCF) support. The return code has the following values:

1  IXCJOIN failed. The reason code contains the IXCJOIN return code in the upper 16 bits and the IXCJOIN reason code in the lower 16 bits. See the description of IXCJOIN in z/OS MVS Programming: Sysplex Services Reference for more information about the error.

2  IXCQUERY failed. The reason code contains the IXCQUERY return code in the upper 16 bits and the IXCQUERY reason code in the lower 16 bits. See the description of IXCQUERY in z/OS MVS Programming: Sysplex Services Reference for more information about the error.

3  IXCSETUS failed. The reason code contains the IXCSETUS return code in the upper 16 bits and the IXCSETUS reason code in the lower 16 bits. See the description of IXCSETUS in z/OS MVS Programming: Sysplex Services Reference for more information about the error.

In the message text:

  return_code  
  Return code

  reason_code  
  Reason code

System action: The LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
GLD1142E • GLD1143E

Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1142E System system_name is already active in cross-system group group_name.

Explanation: Another LDAP server on the same system is already a member of the cross-system group. Only one LDAP server on each system in the sysplex can be a member of a particular cross-system group. The cross-system group name is specified by the serverSysplexGroup option in the LDAP server configuration file.

In the message text:
system_name
  System name
group_name
  Cross-system group name

System action: The LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either stop the other LDAP server or specify a different cross-system group in the serverSysplexGroup option in the LDAP server configuration file for this LDAP server. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1143E XCF termination failed: Return code return_code, Reason code x'reason_code'.

Explanation: The LDAP server is unable to end the cross-system coupling facility (XCF) support. The return code has the following values:

1 IXCLEAVE failed. The reason code contains the IXCLEAVE return code in the upper 16 bits and the IXCLEAVE reason code in the lower 16 bits. See the description of IXCLEAVE in z/OS MVS Programming for more information about the error.

In the message text:
return_code
  Return code
reason_code
  Reason code

System action: The LDAP server ends.
GLD1144I  •  GLD1145I

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the message to correct the error. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1144I  SSL environment refreshed.

Explanation:  A new SSL environment has replaced the existing SSL environment. This message is displayed upon completion of the LDAP server REFRESH SSL operator modify command.
System action:  The LDAP server continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1145I  SSL support is not active.

Explanation:  The LDAP server REFRESH SSL operator modify command cannot be processed because SSL support is not enabled in the LDAP server. Either SSL support is not configured or the LDAP server is unable to initialize the SSL environment.
System action:  The LDAP server continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
**GLD1146I • GLD1147I**

Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1146I  **System system_name has joined LDAP cross-system group group_name.**

Explanation: The LDAP server running on the indicated system has joined the LDAP cross-system group. Sysplex services are now active for that server. This message is displayed by each active LDAP server when a new LDAP server joins the cross-system group.

In the message text:

- **system_name**: System name
- **group_name**: Cross-system group name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.

---

GLD1147I  **System system_name has left LDAP cross-system group group_name.**

Explanation: The LDAP server running on the indicated system has left the LDAP cross-system group. Sysplex services are no longer active for that server. This message is displayed by each active LDAP server when an LDAP server leaves the cross-system group.

In the message text:

- **system_name**: System name
- **group_name**: Cross-system group name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
GLD1148E  Unable to set cross-system group owner: Return code return_code, Reason code x'reason_code'.

Explanation: The LDAP server is unable to set the owner for the cross-system group. The return code has the following values:

1    IXCSETUS failed. The reason code contains the IXCSETUS return code in the upper 16 bits and the IXCSETUS reason code in the lower 16 bits. See the description of IXCSETUS in z/OS MVS Programming: Sysplex Services Reference for more information about the error.

In the message text:

return_code
    Return code

reason_code
    Reason code

System action: The LDAP server continues. Update operations to the LDAP server probably fail. Search operations may succeed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Example: None.

Administrator response: Stop the LDAP server. Use the information in the message to correct the error. Then restart the LDAP server. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1149I  System system_name is leaving the sysplex.

Explanation: The LDAP server on the indicated system is leaving the sysplex and LDAP cross-system services are no longer available to this server.

In the message text:

system_name
    System name

System action: The LDAP server issuing this message continues. If the server leaving the sysplex is the sysplex owner, another server becomes the sysplex owner. During that transition period, update operations to shared directories may fail.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.
GLD1150E

Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1150E  Unable to send cross-system message: Return code return_code, Reason code x'reason_code'.

Explanation: The LDAP server is unable to send a message to another member of the LDAP cross-system group. The return code has the following values:

2  XCF services are not available.
3  No response received.
4  Insufficient storage available on source system.
5  Insufficient storage available on target system.
6  Target member not defined.
7  Target member not active.
8  IXCMSGO failed. The reason code contains the IXCMSGO return code in the upper 16 bits and the IXCMSGO reason code in the lower 16 bits. See the description of IXCMSGO in [z/OS MVS Programming: Sysplex Services Reference] for more information about the error.
9  IXCMSGI failed on the target system. The reason code contains the IXCMSGI return code in the upper 16 bits and the IXCMSGI reason code in the lower 16 bits. See the description of IXCMSGI in [z/OS MVS Programming: Sysplex Services Reference] for more information about the error.
10 IXCMGI failed on the source system. The reason code contains the IXCMGI return code in the upper 16 bits and the IXCMGI reason code in the lower 16 bits. See the description of IXCMGI in [z/OS MVS Programming: Sysplex Services Reference] for more information about the error.
11 Message cancelled or timed out.
12 Unknown notification response.

In the message text:

return_code
  Return code
reason_code
  Reason code

System action: The LDAP server may continue or it may end, depending on which function attempted to send a message.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1151E Unable to reply to cross-system message: Return code return_code, Reason code x'reason_code'.
Explanation: The LDAP server is unable to reply to a message received from another member of the LDAP cross-system group. The return code has the following values:

- XCF services are not available.
- Insufficient storage available on source system.
- IXCMSGO failed. The reason code contains the IXCMSGO return code in the upper 16 bits and the IXCMSGO reason code in the lower 16 bits. See the description of IXCMSGO in z/OS MVS Programming: Sysplex Services Reference for more information about the error.
- Message cancelled.
- Unknown notification response.

In the message text:

- return_code
  Return code
- reason_code
  Reason code

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Stop the server and then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1152E Time limit exceeded while loading schema from group owner.
Explanation: The LDAP server waits a maximum of 30 seconds after requesting a copy of the schema from the LDAP cross-system owner. The owning LDAP server is not responding to cross-system requests.

System action: If the error occurs during LDAP server initialization, the server ends. If the error occurs when requesting the new schema after it is modified by the schema owner, the server continues to run with its current (unmodified) schema. Add and modify operations that involve the modified schema elements may fail on this server.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
GLD1153E  •  GLD1154E

Module:  None.
Example:  None.

Administrator response:  Determine the owning system by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the DISPLAY XCF operator modify command for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF operator modify command. Restart this LDAP server if it ended or if the updated schema is needed. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1153E  The schema owner cannot be contacted.

Explanation:  The LDAP server is unable to contact the schema owner to obtain a copy of the current schema.

System action:
• If the error occurs during LDAP server initialization, the server ends.
• If the error occurs when requesting the new schema after it is modified by the schema owner, the server continues with its current (unmodified) schema. Add and modify operations that involve the modified schema elements may fail on this server.
• If the error occurs while sending a schema modify request to the schema owner, the server continues but the schema modify request fails.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.

Module:  None.
Example:  None.

Administrator response:  Determine the owning system by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the DISPLAY XCF operator modify command for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF operator modify command. Restart this LDAP server if it ended or if the updated schema is needed. Retry the schema modify operation if it failed. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1154E  A database name is required in multi-server mode.

Explanation:  A backend name must be specified on the database option for an LDBM, TDBM, CDBM, or GDBM backend in the LDAP server configuration file when multi-server mode is enabled for the backend. Multi-server mode is enabled by specifying the serverSysplexGroup option in the global section and the multiserver on option in the backend section of the LDAP server configuration file.

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
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User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Specify a backend name on the database option in the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1155E  The database name may not exceed 8 characters in multi-server mode.

Explanation: The backend name for an LDBM, TDBM, CDBM, or GDBM backend has a maximum length of 8 characters when multi-server mode is enabled for the backend. Multi-server mode is enabled by specifying the serverSysplexGroup option in the global section and the multiserver on option in the backend section of the LDAP server configuration file.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Specify a valid backend name on the database option in the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1156E  A fully-qualified path must be specified for the database directory.

Explanation: The directory specified by the databaseDirectory option in the LDBM, CDBM, or GDBM backend section of the LDAP server configuration file must be a fully qualified path. That is, the path must start with a `/`
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Specify a fully qualified path on the databaseDirectory option in the LDAP server configuration file. Then restart the program.
Source: LDAP
GLD1157E  Multi-server mode requires cross-system services.

Explanation: The multiserver option in a backend section of the LDAP server configuration file cannot be set on unless cross-system services are configured. Cross-system services are configured by specifying the name of the LDAP cross-system group on the serverSysplexGroup option in the global section of the configuration file.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either add the serverSysplexGroup option to the global section of the configuration file or set the multiserver option off in the backend section (or remove it from the backend section). Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1158E  Multi-server change log support is required.

Explanation: The multiserver option in the GDBM section of the LDAP server configuration file must be set on because there is another backend section that has multiserver set on. When GDBM is configured, all LDBM, TDBM, CDBM, and GDBM backends must have the same setting for the multiserver option.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either set the multiserver option in the GDBM section of the LDAP server configuration file on or set all the multiserver options off. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1159E Multi-server support required for all LDBM, TDBM, CDBM, and GDBM backends.

Explanation: If the GDBM backend is configured, the multiserver option in the LDBM, TDBM, or CDBM section of the LDAP server configuration file must be set on because the GDBM section has multiserver set on. If the CDBM backend is configured, the multiserver option in the LDBM, TDBM, or GDBM section of the LDAP server configuration file must be set on because the CDBM section has multiserver set on. When a GDBM or CDBM backend is configured, all LDBM, TDBM, CDBM, and GDBM backends must have the same setting for the multiserver option.

System action: The program ends.

Operator response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either set the multiserver option on in the LDBM, TDBM, CDBM, and GDBM backend sections of the LDAP server configuration file or set all the multiserver options off. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1160E Unable to initialize the LDAP client SSL support: Error return_code, Reason reason_code.

Explanation: The LDAP server is unable to initialize the LDAP client SSL support. See the description of ldap_ssl_client_init() in IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:

return_code
    Return code from ldap_ssl_client_init()

reason_code
    Reason code from ldap_ssl_client_init()

System action: LDAP server initialization continues if the tcpTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified). In this case, SSL support is not available until the error is corrected and the server is restarted. If the tcpTerminate option is set to terminate, the program ends.

Operator response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. If SSL connections are not needed, remove the sslKeyRingFile option from the LDAP server configuration file. Restart the program if it ended or if SSL connections are needed.

Source: LDAP

Routing code: None.
GLD1161E  The option1 configuration option requires the option2 configuration option.

Explanation: Certain LDAP server configuration options and values depend on other configurations options being specified to provide complete configuration information. Note that the value of some configuration options may be specified as a command-line parameter when starting the LDAP server (in this case, the command-line parameter overrides the value in the configuration file).

In the message text:

option1
   LDAP server configuration option
option2
   LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If option1 is needed, then either add option2 to the configuration file or change the value of option2 to support option1. If option1 is not needed, then either remove option1 or change its value to one that does not require option2. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1162E  Configuration options option1 and option2 are mutually exclusive.

Explanation: The two options indicated in the message cannot both be specified in the same LDAP server configuration file.

In the message text:

option1
   Configuration option one
option2
   Configuration option two

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Remove one or both of the options from the LDAP server configuration file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1163I Replication status
Explanation: This message is displayed in response to the LDAP server DISPLAY REPLICAS operator modify command. The remaining lines in this multi-line message display the status of each peer or replica server.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1164I No replication status.
Explanation: This message is displayed in response to the LDAP server DISPLAY REPLICAS operator modify command when there are no peer or replicas servers. It can also be displayed if the LDAP server that received the operator modify command is in a sysplex but is not the sysplex owner. Only the LDAP server that is the cross-system group owner has information about peer and replica servers.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If this LDAP server is in a sysplex and is not the cross-system group owner, issue the LDAP server DISPLAY XCF operator modify command against this LDAP server to determine the cross-system group owner. Then direct the DISPLAY REPLICAS operator modify command to the group owner.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1165I  The LDAP server is in maintenance mode.

Explanation: The LDAP server has entered maintenance mode either because the LDAP server MAINTMODE ON operator modify command is issued or because the -m command-line parameter is specified when the LDAP server is started.

System action: The LDAP server changes to maintenance mode. Update requests are accepted only from users who are bound with the distinguished name specified on the adminDN, masterServerDN, or peerServerDN options in the LDAP server configuration file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1166I  LDAP server maintenance mode has ended.

Explanation: The LDAP server is no longer in maintenance mode because of usage of the LDAP server MAINTMODE OFF operator modify command.

System action: The LDAP server changes to regular mode. Update requests are now accepted from all users.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1167I  The LDAP server is already in maintenance mode.

Explanation: The LDAP server MAINTMODE ON operator modify command is issued when the LDAP server is already in maintenance mode.

System action: The LDAP server continues in maintenance mode.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination: Not applicable.

Module: None.
Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1168I The LDAP server is not in maintenance mode.

Explanation: The LDAP server MAINTMODE OFF operator modify command is issued when the LDAP server is not in maintenance mode.

System action: The LDAP server continues in regular mode.

Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1169E The option configuration option must be the same for all TDBM and DB2-based GDBM backends.

Explanation: The indicated option must be specified, with the same value, in all TDBM and DB2-based GDBM backends in the LDAP server configuration file.

In the message text:

```
option
   LDAP server configuration option
```

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either specify the same option and value in all TDBM and DB2-based GDBM backend sections or remove the option from all TDBM and DB2-based GDBM backend sections in the LDAP server configuration file. Then restart the program.

Source: LDAP
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Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1171E  Native return code return_code, SQL state state, SQL message: error_text

Explanation: The LDAP server encountered an error while performing a DB2 database operation. See IBM Information Management Software for z/OS Solutions Information Center for more information about DB2 errors.

In the message text:

return_code
   Native return code
state
   SQL state
erro_text
   SQL message text

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Restart the program if it ended or if the backend is needed. If the problem is unable to be resolved, contact the DB2 database administrator.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1172E  Error code error_code received for ODBC function name.

Explanation: The LDAP server encountered an error for an ODBC (Open Database Connectivity) function. This message may be followed by additional messages providing further information about the error. See IBM Information Management Software for z/OS Solutions Information Center for more information about ODBC errors.

In the message text:

error_code
   Error code
name
   ODBC function name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
GLD1174E  LDAP server stopping because DB2 is terminating.

Explanation: The LDAP server DB2 monitor has detected that the DB2 database manager is ending. The LDAP server ends also because the db2Terminate option in the LDAP server configuration file is set to terminate.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the LDAP server when the DB2 database manager is available. If the LDAP server should not terminate when the DB2 database manager ends, change the db2Terminate option to recover or remove the option from the LDAP server configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD1175E  Unable to establish DB2 monitor connection: type return code return_code, reason code reason_code.

Explanation: The LDAP server is unable to establish a connection with the DB2 server. The return code and reason code are from the CONNECT function if the type is DSNALI or from the IDENTIFY function if the type is DSNRLI. See IBM Information Management Software for z/OS Solutions Information Center for more information about the error.

In the message text:

- type DB2 attachment facility type
- return_code Return code
- reason_code Reason code

System action: If the error occurs in the LDAP server during initialization, then the DB2-based backends do not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this

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is the default if the configuration option is not specified), the program ends. If the error occurs after server initialization, the DB2-based backends are disabled and all requests to those backends are rejected.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify the values in the DSNAOINI configuration file used by the LDAP server and ensure that DB2 is running. Restart the program if it ended or if the DB2 backends are needed. If the problem is unable to be resolved, contact the DB2 database administrator.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD1176E**  Unable to open the encryption keys dataset: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to open the encryption keys data set. See the description of fopen() in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/docview.wss?uid=swg27007245) for more information about the error. The keys data set is specified by the -k parameter on the utility command line. For the LDAP server, and for the utility when the -k parameter is not specified, the keys data set can be specified in the LDAPKEYS DD statement in the JCL used to start the server or utility.

In the message text:

`error_code`
- Error code from `fopen()`

`reason_code`
- Reason code from `fopen()`

`error_text`
- Error text corresponding to the error code

System action: The utility ends. The LDAP server continues, but encryption and decryption of values using a key in the key data set may fail. In particular, this may result in bind failures if the `userPassword` attribute value cannot be decrypted.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that the encryption keys data set exists and can be accessed by the LDAP server or utility. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1177E Unable to read the encryption keys dataset: error_code\reason_code - error_text

Explanation: The LDAP server or utility is unable to read the encryption keys data set. See the description of fgets() in z/OS XL C/C++ Runtime Library Reference for more information about the error. The keys data set is specified by the -k parameter on the utility command line. For the LDAP server, and for the utility when the -k parameter is not specified, the keys data set can be specified in the LDAPKEYS DD statement in the JCL used to start the server or utility.

In the message text:

error_code
   Error code from fgets()

reason_code
   Reason code from fgets()

error_text
   Error text corresponding to the error code

System action: The utility ends. The LDAP server continues, but encryption and decryption of values using a key in the key data set may fail. In particular, this may result in bind failures if the userPassword attribute value cannot be decrypted.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the encryption keys data set is not corrupted and that there are no I/O (input/output) errors. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1178E The schema owner busy, retrying.

Explanation: The LDAP server which is the owner of the schema in the LDAP cross-system group in the sysplex is currently busy and cannot send the schema.

System action: The LDAP server continues and retries the request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the problem persists, restart the LDAP server that owns the schema. If the problem still persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.
**GLD1179E** The *option* configuration option value must be different for each *type* backend.

**Explanation:** The indicated option in the LDAP server configuration file must have a unique value for each backend section in which it is included.

In the message text:

*option*  
  Configuration option name

*type*  
  Backend type

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** The `dbuserid` value must be unique for each DB2-based backend (TDBM and DB2-based GDBM). Different backends cannot share a DB2 database.

**Administrator response:** Correct the LDAP server configuration file so that the option value is unique throughout the LDAP server configuration file. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1180I** Activity log option processed: *option*.

**Explanation:** The indicated activity log option specified on an LDAP server LOG operator modify command has successfully been processed.

In the message text:

*option*  
  Activity log option

**System action:** The LDAP server continues, with activity logging using the indicated log option.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD1181E Incorrect LDAP server activity log option specified: option.

Explanation: An activity log option that is not valid is specified on an LDAP server LOG operator modify command.

In the message text:

option
   Incorrect activity log option

System action: The LDAP server continues, with no change to activity logging.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Retry the LOG operator modify command using a valid activity log option.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1182A Unable to initialize activity logging.

Explanation: The LDAP server cannot initialize the activity logging facility. A previous message indicates the reason for the failure.

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1184E Unable to start activity logging.

Explanation: The LDAP server cannot open the activity log file. The name of the file is specified by the logfile option in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output if the configuration option is not specified.

System action: The LDAP server continues, but activity logging is not done.

Operator response: None.
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System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that the LDAP server has write access to the log file and to its directory if the file does not exist. Restart the program if activity logging is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1185I LDAP server audit option processed: option.
Explanation: The indicated audit option specified on an LDAP server AUDIT operator modify command has successfully been processed.

In the message text:

```
option
    Audit option
```

System action: The LDAP server continues, with auditing using the indicated option.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1186E Incorrect LDAP server audit option specified: option.
Explanation: An audit option that is not valid is specified on an LDAP server AUDIT operator modify command.

In the message text:

```
option
    Incorrect audit option
```

System action: The LDAP server continues, with no change to auditing.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Retry the AUDIT operator modify command using a valid audit option.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1187I LDAP server SMF auditing ON.

Explanation: LDAP server auditing is activated, either by way of the audit option in the LDAP server configuration file or the LDAP server AUDIT operator modify command.

System action: The LDAP server continues, with auditing activated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The LDAP server DISPLAY AUDIT operator modify command can be used to review the current LDAP server auditing settings. Use the LDAP server AUDIT operator modify command to make any necessary updates.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1188I LDAP server SMF auditing OFF.

Explanation: LDAP server auditing has been deactivated, either by way of the audit option in the LDAP server configuration file or the LDAP server AUDIT operator modify command.

System action: The LDAP server continues, without auditing activated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If auditing is needed, use the LDAP server AUDIT operator modify command to turn on LDAP server auditing.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1189I LDAP server audit settings updated with values values.

Explanation: The LDAP server is updated with the indicated audit settings. The audit settings are specified either in the audit option in the LDAP server configuration file or on the LDAP server AUDIT operator modify command.

In the message text:
values
String representation of audit values

System action: The LDAP server continues, with auditing using the indicated values.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1190I Audit status

Explanation: This message displays the current LDAP server audit settings as a result of issuing the LDAP server DISPLAY AUDIT operator modify command.

System action: The LDAP server continues.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: The LDAP server DISPLAY AUDIT operator modify command can be used to review the current LDAP server auditing settings. Use the LDAP server AUDIT operator modify command to make any necessary updates.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1191I LDAP server auditing is only available on V1R7 and above.

Explanation: LDAP server auditing is unavailable on this level of z/OS.

System action: The LDAP server continues. No audit records are created.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Remove the audit option from the LDAP server configuration file and do not issue the LDAP server AUDIT or DISPLAY AUDIT operator modify commands.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1193E XCF send for name timed out, retrying.
Explanation: XCF was unable complete the send of a request from the indicated backend to the owner of the resource in the LDAP server cross-system group.
In the message text:
name
Backend name
System action: The LDAP server continues and retries the request.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If the problem persists, restart this LDAP server and the LDAP server that owns the resource. If the problem still persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1194I Component Trace has been successfully started for GLDSRVR.
Explanation: Component TRACE (CTRACE) has successfully started on the LDAP server in CTRACE component name GLDSRVR. The LDAP server writes CTRACE records to a subnode under the GLDSRVR component name.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
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Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1195A Unable to start ctrace: Error return_code, Reason reason_code.

Explanation: The LDAP server cannot identify its component tracing facility to the z/OS CTRACE subsystem. See the description of CTRACE DEFINE in z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN for more information about the error.

In the message text:

return_code
  Return code from CTRACE DEFINE

reason_code
  Reason code from CTRACE DEFINE

System action: The program continues, but component trace is not used.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Restart the program if component tracing is needed. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1196I Active trace points only written to memory now for GLDSRVR.

Explanation: The LDAP debug output generated by the LDAP server is written to memory.

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1197I Active trace points now written to memory and trace file for GLDSRVR.

Explanation: The LDAP debug output generated by the LDAP server is written to both memory and the output trace file. The LDAP_DEBUG_FILENAME environment variable specifies the output trace file name. If the LDAP_DEBUG_FILENAME environment variable is not specified, then LDAP debug output goes to stdout.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1198E Unable to open logfile filename: error_code/ reason_code - error_text

Explanation: The LDAP server is unable to open a log file. See the description of fopen() in z/OS XL C/C++ Runtime Library Reference for more information about the error. For activity logging, the name of the file is specified by the logfile option in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output if the configuration option is not specified. For replication error logging, the name of the file is specified by the ibm-slapdLog attribute in the replica entry.

In the message text:

filename
  Log file file name

error_code
  Error code from fopen()

reason_code
  Reason code from fopen()

error_text
  Error text corresponding to the error code

System action: The LDAP server continues, but logging using this file is not done. For replication, replication to the replica server using this log may stall.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has write access to the log file and to its directory if the file does not exist. Restart the program if logging is needed.

Source: LDAP

Routing code: None.
GLD1199I • GLD1200I

Descriptor code: None.
Automation: Not applicable.

GLD1199I   The backend named name has been set to read-only mode.
Explanation: The indicated backend is successfully set to read-only mode after the LDAP server BACKEND operator modify command is issued.
In the message text:

   name       Backend name

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1200I   The backend named name has been set to read/write mode.
Explanation: The indicated backend is successfully set to read/write mode after the LDAP server BACKEND operator modify command is issued.
In the message text:

   name       Backend name

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1201I  The backend named name is already set to read-only mode.

Explanation:  The indicated backend is already running in read-only mode. The LDAP server BACKEND operator modify command is ignored.

In the message text:

name  Backend name

System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1202I  The backend named name is already set to read/write mode.

Explanation:  The indicated backend is already running in read/write mode. The LDAP server BACKEND operator modify command is ignored.

In the message text:

name  Backend name

System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1203E  Incorrect LDAP server backend option specified: options.

Explanation:  An option that is not valid is specified on the LDAP server BACKEND operator modify command.

In the message text:
GLD1204I • GLD1205I

options
   Options specified on LDAP server BACKEND operator modify command

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Retry the BACKEND operator modify command with valid options.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1204I  Schedule commit for all backends completed.

Explanation: A database commit resulting from an LDAP server COMMIT operator modify command has successfully completed on all backends.
System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1205I  Schedule commit for all backends failed.

Explanation: A database commit resulting from an LDAP server COMMIT or BACKEND operator modify command has failed. A previous message may indicate the reason for the failure.
System action: The program continues, but the operator modify command fails. One or more databases are not been committed.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
GLD1206I Only sysplex owner can perform command.

Explanation: A database commit resulting from an LDAP server COMMIT or BACKEND operator modify command has failed because the LDAP server is not the owner of the backend database in the sysplex. Only the LDAP server that is the database owner in the LDAP cross-system group can process this command.

System action: The program continues, but the operator modify command fails. One or more databases are not been committed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Retry the operator modify command, directing it to the LDAP server that is the database owner in the sysplex.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1207E type backend specified for a non-type database.

Explanation: The LDAP server or utility found that the backend type specified on a database option in the LDAP server configuration file does support the backend DLL specified on the configuration option.

In the message text:

type

LDAP server backend type

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the database option in the LDAP server configuration file so that the specified DLL and backend type match. Restart the program if it ended or if the backend is needed.
GLD1208E  GLD1209E

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1208E  Configuration for type backend named name failed.

Explanation:  The LDAP server backend indicated in the message cannot be started because a configuration error. A previous message indicates the reason for the failure.

In the message text:

type
Backend type

name
Backend name

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the earlier message to correct the error in the LDAP server configuration file. Then restart the program.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1209E  Unable to obtain file lock with fcntl() on filename: error_code/reason_code - error_text

Explanation:  The LDAP server or utility is not able to obtain a read or write lock on the file indicated in the message. See the description of fcntl() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

filename
File name

error_code
Error code from fcntl()

reason_code
Reason code from fcntl()

error_text
Error text corresponding to the error code

System action:
• If a read or write file lock error is encountered during LDAP server initialization of an LDBM, CDBM, or GDBM (file-based) backend, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
• If a read or write file lock error is encountered while executing the `ds2ldif` utility to unload an LDBM or CDBM backend, an `unloadRequest` extended operation is attempted to unload the wanted backend data.

**Operator response:** None.
**System programmer response:** None.
**User response:** None.
**Problem determination:** Not applicable.
**Module:** None.
**Example:** None.

**Administrator response:** Use the information in the message to correct the error. If multiple LDAP servers are using the same LDBM, CDBM, or GDBM (file-based) backend, ensure they are all operating in multi-server mode. Only one LDAP server may have a write lock at a time. Correct the LDAP server configuration files of the LDAP servers so that they are not sharing the same LDBM, CDBM, or GDBM (file-based) backend if they are not in a multi-server environment. Restart the program if it ended or if the backend is needed.

**Source:** LDAP

**Routing code:** None.
**Descriptor code:** None.
**Automation:** Not applicable.

---

**GLD1210E**  Terminating LDAP server because `tcpTerminate` option is set to 'terminate'.

**Explanation:** The LDAP server has detected that there are no active network interfaces or has found an error while initializing SSL or Kerberos. The LDAP server is ending because the `tcpTerminate` option in the LDAP server configuration file is set to 'terminate'.

**System action:** The program ends.
**Operator response:** None.
**System programmer response:** None.
**User response:** None.
**Problem determination:** Not applicable.
**Module:** None.
**Example:** None.

**Administrator response:** Verify that the network interfaces, SSL, and Kerberos are active and configured correctly. Then restart the program.

**Source:** LDAP

**Routing code:** None.
**Descriptor code:** None.
**Automation:** Not applicable.

---

**GLD1211I**  Listening for requests on IP secure port port.

**Explanation:** The LDAP server is listening for secure requests on the indicated network interface. If the `listen` option specifies `ldaps://INADDR_ANY`, the IP address is displayed as `0.0.0.0`. If the `listen` option specifies `ldaps://in6addr_any`, the IP address is displayed as `::`

In the message text:

- `ip`  IP address
- `port`  TCP/IP port number
GLD1212E

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1212E Unable to chmod file

Explanation: The LDAP server or utility is unable to change the permission bits on the indicated file. The failing
routine can be chmod() or fchmod(). See the description of these routines in z/OS XL C/C++ Runtime Library Reference
for more information about the error.

In the message text:
filename
LDBM database, CDBM database, schema file name, or replication error log
error_code
Error code from routine
reason_code
Reason code from routine
terminate
Error text corresponding to the error code

System action:
• If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the
LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and
plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the
configuration option is not specified), the program ends.
• If the error occurs while executing the ds2ldif utility to unload an LDBM or CDBM backend, an unloadRequest
extended operation is attempted to unload the wanted backend data.
• If the error occurs during an LDBM, CDBM, or GDBM operation, then, if the fileTerminate option in the LDAP
server configuration file is set to recover (this is the default if the configuration option is not specified), the server
continues to run but the LDBM, CDBM, or GDBM backend is placed in read-only state. If the fileTerminate option
is set to terminate, the program ends.
• For a replication error log file, the permission bits are changed when the file is first created. If an error occurs, the
replication error information is written to the error log file the next time a replication error occurs.
• If the error occurs while attempting to modify the global schema, the schema modification fails but the updates to
the schema are saved in the schema.db.new file.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Administrator response: Use the information in the message to correct the error. Ensure that the LDAP server has the appropriate authority to change the owner on all of the LDBM, CDBM, GDBM (file-based), schema, and replication error log files. Also, ensure that the user ID that is running the ds2ldif utility is a superuser or is the owner of the LDBM or CDBM database files or in the same group as the LDAP server user ID. See Setting up the user ID and security for the LDAP server for more information about giving the authority to perform permission bit updates on the files. Restart the program if it ended or if the backend did not start and is needed. If an LDBM, CDBM, or GDBM backend was placed in read-only state, it can be reset to read/write state by restarting the LDAP server or by using the LDAP server BACKEND operator modify command. For a schema update, reissue the schema modify request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1213E** Unable to chown file filenames error_code reason_code - error_text

Explanation: The LDAP server or utility is unable to change the owner or group of the indicated database file. The failing routine can be fchown() or chown(). See the description of these routines in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

*filename*
  LDBM database or schema file name

*error_code*
  Error code from routine

*reason_code*
  Reason code routine

*error_text*
  Error text corresponding to the error code

System action:

- If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
- If the error occurs while executing the ds2ldif utility to unload an LDBM or CDBM backend, an unloadRequest extended operation is attempted to unload the wanted backend data.
- If the error occurs during an LDBM, CDBM, or GDBM operation, then, if the fileTerminate option in the LDAP server configuration file is set to recover (this is the default if the configuration option is not specified), the server continues to run but the LDBM, CDBM, or GDBM backend is placed in read-only state. If the fileTerminate option is set to terminate, the program ends.
- If the error occurs while attempting to modify the global schema, the schema modification fails but the updates to the schema are saved in the schema.db.new file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Ensure that the LDAP server has the appropriate authority to change the owner on all of the LDBM, CDBM, GDBM (file-based), and schema files.
Also, ensure that the user ID that is running the ds2ldif utility is a superuser or is the owner of the LDBM or CDBM database files or in the same group as the LDAP server user ID. See Setting up the user ID and security for the LDAP server for more information about giving the authority to perform ownership updates on the files. Restart the program if it ended or if the backend did not start and is needed. If an LDBM, CDBM, or GDBM backend was placed in read-only state, it can be reset to read/write state by restarting the LDAP server or by using the LDAP server BACKEND operator modify command. For a schema update, reissue the schema modify request.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1214A Unable to create schema search entry: return code return_code - error_text

Explanation: The LDAP server is unable to create an internal search entry containing the contents of the LDAP server schema.

In the message text:

return_code
LDAP return code

error_text
Error text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1215A Unable to complete schema change due to failure in backend name: return code return_code - error_text

Explanation: During schema initialization or after schema modification, each active backend is notified that the schema has changed so that the backend can do any needed processing to use the new schema. In particular, if a TDBM backend is running in multi-server mode and has a DB_VERSION less than 4, then it must update the schema entry within the TDBM database. An error occurred during backend processing for the new schema.

In the message text:

name
Backend name

return_code
LDAP return code

error_text
Error text

System action: The program ends.
GLD1216E  Unable to send request for backend name to sysplex group owner: return code return_code.

Explanation: An error occurred while sending an XCF request to the LDAP cross-system group owner in the sysplex. The return code has the following values:

1  An unavailable XCF service.
80  An XCF error.

In the message text:

name  Backend name

return_code  Return code

System action: If the error occurs during LDAP server initialization, the program ends. If the error occurs after initialization, the LDAP server continues if the LDAP server schema is still usable; otherwise the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that the XCF service is available. Restart the program if it ended. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1217E  Unable to receive schema.

Explanation: The LDAP server is unable to load schema from the LDAP cross-system group owner in the sysplex. The problem might be that the sysplex group owner stopped the schema load or that the LDAP server is unable to allocate sufficient storage.

System action: If the error occurs during LDAP server initialization, the program ends. If the error occurs after initialization, the LDAP server continues if the LDAP server schema is still usable; otherwise the program ends.
GLD1218E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that there is enough storage available for use by the LDAP server. Then restart the program if it ended. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1218E  operation operation failed for dn to host:port, rc=return_code setting change aside into filename

Explanation: The LDAP server is unable to replicate a change to the indicated server. The change is removed from the replication queue and placed in the replication error log file.

In the message text:
operation
  Operation name
dn  Distinguished name of entry to replicate
host
  Replica server host name
port
  Replica server port number
return_code
  LDAP return code
filename
  Replication error log file name

System action: The LDAP server continues. Replication to the indicated replica server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Examine the replication error log to determine the cause of the failure. Fix the problem on the replica server. Then apply the change in the replication error log to the replica server.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1219I  The amount of replication changes set aside has reached the maximum for error log filename.

Explanation: The number of changes set aside into the replication error log since the LDAP server was last started has reached the maximum allowed. The maximum number is set in the ibm-slapdReplMaxErrors attribute in the replica entry.

In the message text:
filename
    Replication error log file name

System action: The LDAP server continues. Replication to the indicated server continues, although it may stall. Future replication failures are not set aside.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the replication error log to correct the replication errors and apply the changes to the replica. To enable future operations to be set aside, restart the LDAP server, delete and add the replication entry, or increase the value of the ibm-slapdReplMaxErrors attribute in the replica entry. Note that these actions do not delete anything from the replication error log; they allow additional changes to be set aside into the error log.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD1220I  Replication to replica host:port has stalled.

Explanation: A failed replication operation is preventing other replication operations from occurring.

In the message text:
host
    Replica server host name
port
    Replica server port number

System action: The LDAP server continues. The replication operation is retried.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the replication error log to correct the error on the replica server, then wait for the replication operation to be retried. If necessary, resynchronize the replica server. See Recovering from basic replication out-of-sync conditions for more information.

Source: LDAP

Routing code: None.
GLD1221E  •  GLD1222E

Descriptor code: None.
Automation: Not applicable.

GLD1221E  Unable to write to file filename error_code/reason_code - error_text.

Explanation: The LDAP server is unable to write to the indicated file. See the description of fprintf() or fwrite() in z/OS XL C/C++ Runtime Library Reference for more information about the error. If the indicated file is a replication error log, the file name is specified by the ibm-slapdLog attribute in the replica entry. If the indicated file is the activity log, an error occurred while writing an activity log record.

In the message text:

filename
  File name
error_code
  Error code from fprintf() or fwrite()
reason_code
  Reason code from fprintf() or fwrite()
error_text
  Error text corresponding to the error code

System action: The LDAP server continues. If the error occurs while writing to the replication error log, some information about the replication error cannot be written to the log and the replication operation cannot be set aside. In this case, the replication operation is retried and replication stalls if it is not successful. If the error occurs while writing an activity log record, the LDAP server automatically turns off activity logging.

Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Verify that the file can be written to by the LDAP server and is not full. If the error occurred while writing an activity log record, use the LDAP server LOG operator modify command to activate activity logging after the error is corrected.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation code: None.

GLD1222E  File operation routine failed to file filename error_code/reason_code - error_text.

Explanation: The LDAP server is unable to perform the indicated operation to the indicated file. See the description of the routine in z/OS XL C/C++ Runtime Library Reference for more information about the error. If the indicated file is a replication error log, the file name is specified by the ibm-slapdLog attribute in the replica entry.

In the message text:

routine
  File operation routine name
filename
  File name
error_code
  Error code from the C API
**reason_code**

Reason code from the C API

**error_text**

Error text corresponding to the error code

**System action:** The LDAP server continues. If the error occurs while writing to the replication error log, some information about the replication error cannot be written to the log and the replication operation cannot be set aside. In this case, the replication operation is retried and replication stalls if it is not successful.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Verify that the file can be used in the indicated way by the LDAP server.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1223I**  **End display output**

**Explanation:** This message is displayed at the end of the output of the LDAP server DISPLAY AUDIT operator modify command.

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1224I**  **Backend status**

**Explanation:** This message is displayed at the beginning of the output of the LDAP server DISPLAY BACKEND operator modify command. The status of each backend follows.

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1225I  Maintenance Mode status
Explanation: This message is displayed at the beginning of the output of the LDAP server DISPLAY MAINTMODE operator modify command. The maintenance mode status follows.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1226I  Debug settings
Explanation: This message is displayed at the beginning of the output of the LDAP server DISPLAY DEBUG operator modify command. The debug settings follow.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1227I  This LDAP server has become LDAP sysplex group owner.

Explanation:  The LDAP server is the database owner in the LDAP cross-system group in the sysplex. This can occur during LDAP server initialization if the server is the first server to join the sysplex group. It can also occur if the LDAP server assumes ownership of the sysplex group because the LDAP server that was the group owner has stopped.

System action:  The LDAP server continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

---

GLD1228E  Unable to cancel thread: error_code/reason_code - error_text

Explanation:  The LDAP server is unable to cancel a thread. See the description of pthread_cancel() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
   Error code from pthread_cancel()

reason_code
   Reason code from pthread_cancel()

error_text
   Error text corresponding to the error code

System action:  The program continues. The request fails.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD1229E  Environment variable file cannot be opened. Processing is continuing without setting additional environment variables.

Explanation: The LDAP server or utility is unable to open the environment variables file. The name of the file is specified in the current value of the LDAP_DS_ENVVARS_FILE environment variable. If this environment variable is not defined, the file name is specified by the //DD:ENVVAR statement in the procedure used to start the program. If the file in the DD statement cannot be opened, the program attempts to open /etc/ldap/ds.envvars.

System action: The program continues without setting additional environment variables.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that an environment variables file exists and can be read. Restart the program if environment variables must be set.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1230E  Environment variable ignored because line is too long: line line_number, file filename.

Explanation: The LDAP server or utility encountered a line that is too long in its environment variables file. The total length of a line (including any continuation lines) must be less than 1024 characters.

In the message text:

line_number  Line number

filename  Environment variables file name

System action: The program continues without setting the environment variable on the indicated line.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the contents of the environment variables file. Restart the program if the environment variable must be set.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Environment variable ignored because '=' is missing: line line_number, file filename.

Explanation: The LDAP server or utility encountered an incorrect line in its environment variables file. An environment variable line consists of name=value but the indicated line does not contain an = sign.

In the message text:

line_number
  Line number

filename
  Environment variables file name

System action: The program continues without setting the environment variable on the indicated line.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the contents of the environment variables file. Restart the program if the environment variable must be set.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Environment variable is ignored because name is NULL: line line_number, file filename.

Explanation: The LDAP server or utility encountered an incorrect line in its environment variables file. An environment variable line consists of name=value but the indicated line does not contain a name.

In the message text:

line_number
  Line number

filename
  Environment variables file name

System action: The program continues without setting the environment variable on the indicated line.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the contents of the environment variables file. Restart the program if the environment variable must be set.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1233E  Environment variable is ignored because value could not be set: line line\_number, file filename.

**Explanation:** An attempt by the LDAP server or utility to set an environment variable failed.

In the message text:

- **line\_number**
  - Line number

- **filename**
  - Environment variables file name

**System action:** The program continues without setting the environment variable on the indicated line.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify the contents of the environment variables file. Restart the program if the environment variable must be set.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1234E  Last line in environment variables file ignored because it has a continuation character: line line\_number, file filename.

**Explanation:** The LDAP server or utility found a continuation character at the end of the last line in its environment variables file. The line is ignored because there is no continuation line.

In the message text:

- **line\_number**
  - Line number

- **filename**
  - Environment variables file name

**System action:** The program continues without setting the environment variable on the indicated line.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify the contents of the environment variables file. Restart the program if the environment variable must be set.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
**GLD1237E**  Incomplete shutdown processing; some data may not be committed and resources not freed.

**Explanation:**
During LDAP server shutdown processing, the server waits 10 seconds for all active requests to complete, but one or more requests are still active. If the requests complete, then each backend is notified to free any resources and commit any data. The requests did not complete, thus the backends are not notified.

**System action:**
Requests that are still active after 10 seconds are terminated. The 10-second wait is approximate, and the writing of this message and shutdown processing might be delayed by long running requests. Requests active in TDBM or DB2-based GDBM backends are rolled back. Database commit processing of LDBM and file-based GDBM backends, which is normally done during shutdown, is bypassed. See [Database commit processing](#) for more information about file-based backend commits.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Restart the LDAP server, and reissue any incomplete requests.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1238E**  Unable to decode a request for type backend named name because attribute type attribute is not defined.

**Explanation:** The LDAP server found an attribute type used in a request for the indicated backend but the attribute type is not defined in the LDAP server schema.

In the message text:

```
type
  Backend type
name
  Backend name
attribute
  Undefined attribute type
```

**System action:** The request fails. The program may end depending on when the error occurs. A follow-on message indicates the effect on the program.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the follow-on message to resolve the problem. If the LDAP server is in a sysplex and is not the owner of the backend in the sysplex, then restart the server.
GLD1240E • GLD1241W

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1240E  A type backend named name database update is missing.

Explanation: The LDAP server has received a database update for the indicated backend from the cross-system
group owner but the update cannot be processed because the previous update has not been received.

In the message text:

type
   Backend type

name
   Backend name

System action: The LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Check the system log for an earlier message indicating a cross-system communication
error. After correcting the problem, restart this LDAP server to synchronize the indicated database with the group
owner.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1241W  The option1 configuration option value value cannot be used because it is not in a configured suffix
and option2 is not specified.

Explanation: The distinguished name specified for the LDAP root administrator (adminDN), peer server
(peerServerDN), or master replica server (masterServerDN) in the LDAP server configuration file cannot be used to
bind to the LDAP server because the password is not specified, either in the corresponding password configuration
option (adminPW, peerServerPW, or masterServerPW) or in an entry for the distinguished name in the directory.
The DN does not fall under any of the suffixes in the LDAP server configuration file or any of the suffixes added by
plug-in extensions to the LDAP server, thus there cannot be an entry for the DN in the directory.

In the message text:

option1
   LDAP server configuration option

value
   LDAP server configuration option value

option2
   LDAP server configuration option

System action: The program continues but the LDAP root administrator, peerServer DN, or masterServer DN cannot
access the LDAP server.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If intending to bind to the LDAP server using the root administrator, peer server, or master server distinguished name, it is recommended that the configuration option value be changed so that the DN falls under one of the suffixes in the LDAP server configuration file or one of the suffixes added by plug-in extensions to the LDAP server. Then restart the server and add an entry for the distinguished name containing a `userPassword` value to the directory. As a less-secure alternative, the corresponding password configuration option can be added to LDAP server configuration file and then restart the LDAP server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1242W  SDBM update operations and some search operations cannot be performed because there is no RACF address space.

Explanation: The SDBM backend has detected that the RACF address space is not running. SDBM operations that use the RACF address space fail and return a return code of decimal 52 (LDAP_UNAVAILABLE - 'Directory server function is unavailable'). These operations include all update operations and any search operation that scans the RACF database using the RACF SEARCH command. Binding to SDBM and searches for a specific RACF user, group, connection, or resource profile can be performed because they do not use the RACF address space.

System action: The program continues but SDBM update operations and some search operations cannot be performed.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If SDBM is needed to update RACF user, group, connection, or resource profiles or to search the RACF database, start the RACF address space. These SDBM operations can then be performed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1243I  Analysis of DB2 RUNSTATS utility output complete.

Explanation: The output of the DB2 RUNSTATS utility in the DB2 catalog has been reexamined. This message is displayed upon completion of the LDAP server REFRESH DB2RUNSTATS operator modify command.

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
GLD1244E  •  GLD1245E

Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1244E  Unable to analyze DB2 RUNSTATS utility output.

Explanation:  The LDAP server cannot analyze DB2 RUNSTATS utility output in the DB2 catalog. This message is displayed when errors are encountered during the LDAP server REFRESH DB2RUNSTATS operator modify command.

System action:  The LDAP server uses the updated DB2 catalog statistics for those that were successfully analyzed, but continues using the previous DB2 catalog statistics for those that it could not process successfully. More error messages may precede this message which provides more details.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the previous error messages in the LDAP server job log to analyze and correct the error. Then, reissue the REFRESH DB2RUNSTATS operator modify command.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1245E  Unable to get thread-specific value: error_code/reason_code - error_text

Explanation:  The LDAP server is unable to retrieve thread specific information for a thread. See the description of pthread_getspecific() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
   Error code from pthread_getspecific()
reason_code
   Reason code from pthread_getspecific()
error_text
   Error text corresponding to the error code

System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module: None.
Example: None.

**Administrator response:** Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1246E** Unable to set thread-specific value: error_code/reason_code - error_text

**Explanation:** The LDAP server is unable to store thread specific information for a thread. See the description of pthread_setspecific() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- **error_code**
  - Error code from pthread_setspecific()

- **reason_code**
  - Reason code from pthread_setspecific()

- **error_text**
  - Error text corresponding to the error code

**System action:** The program continues. The request fails.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

---

**GLD1247E** Unable to create key identifier: error_code/reason_code - error_text

**Explanation:** The LDAP server is unable to store thread specific information for a thread. See the description of pthread_key_create() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

- **error_code**
  - Error code from pthread_key_create()

- **reason_code**
  - Reason code from pthread_key_create()

- **error_text**
  - Error text corresponding to the error code

**System action:** The program ends.
GLD1248W

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the LDAP server and retry the request. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1248W Unable to connect to DB2; will attempt retry \textit{current retry} of \textit{maximum retries} in number seconds.

Explanation: The LDAP server is unable to establish a connection with DB2 during LDAP server startup. It retries to connect to DB2. The LDAP server global configuration option \texttt{db2StartUpRetryLimit} sets the maximum number of times the LDAP server can retry a DB2 connection during server startup. The number of seconds to wait before each retry attempt is determined by the value of the \texttt{db2StartUpRetryInterval} LDAP server global configuration option. The LDAP server, by default, waits 45 seconds before each retry attempt.

In the message text:
\begin{itemize}
  \item \texttt{current retry} \\
      Current retry attempt
  \item \texttt{maximum retries} \\
      Maximum retry attempts
  \item \texttt{number} \\
      Interval before the next retry attempt
\end{itemize}

System action: The LDAP server waits for the specified number of seconds before retrying to connect to DB2. If the final retry attempt is unsuccessful, then the DB2-based backends do not start.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify the values in the DSNAOINI configuration file used by the LDAP server and ensure that DB2 is running or is starting. If using the RRS attachment facility, ensure that it is running or is starting. The attachment facility being used is specified in the DSNAOINI configuration file.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1249E  Unable to start DB2 monitor.

Explanation:  The LDAP server is unable to start the DB2 monitor thread. A previous message indicates the reason for the failure.

System action:  All DB2-based backends do not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the earlier message to correct the problem. Restart the program if it did not start or if DB2-based backends are needed.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1250E  The option configuration option requires the type backend.

Explanation:  The LDAP server or utility found an option in the LDAP server configuration file whose processing requires that a specific type of backend also be configured, but a backend of that type is not contained in the configuration file.

In the message text:

option

Type LDAP server configuration option

type

Backend type

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Either remove the option from the LDAP server configuration file or add a backend of the specified type to the configuration file. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD1251E • GLD1252E

GLD1251E  Schema database version \textit{version1} not supported, highest supported \textit{version2}.

\textbf{Explanation:} The LDAP server or utility found that the schema database is at a higher version level than is currently supported by the LDAP server. This indicates that the schema database may contain values that the LDAP server cannot process. The schema cannot be loaded from the database.

In the message text:

\textit{version1}
\hspace{1em} Database schema version

\textit{version2}
\hspace{1em} Server schema version

\textbf{System action:} The program ends.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} None.

\textbf{Example:} None.

\textbf{Administrator response:} Restore the LDAP server to the level used to create the schema database. Then restart the program.

\textbf{Source:} LDAP

\textbf{Routing code:} None.

\textbf{Descriptor code:} None.

\textbf{Automation:} Not applicable.

---

GLD1252E  Unencrypted data from \textit{IP_address1} has been sent to a secure connection on \textit{IP_address2} port \textit{port}.

\textbf{Explanation:} The LDAP server encountered unencrypted data sent from the IP address indicated in the message to a secure connection on the LDAP server. The server can only process encrypted data when using a secure connection.

In the message text:

\textit{IP_address1}
\hspace{1em} Client IP address

\textit{IP_address2}
\hspace{1em} Server IP address

\textit{port}
\hspace{1em} Server port number

\textbf{System action:} The LDAP server continues. The request fails.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} None.

\textbf{Example:} None.

\textbf{Administrator response:} If a command utility such as \texttt{ldapsearch} is being used and secure communications are intended, ensure that the \texttt{-Z} (use secure communications) option is specified. If secure communications are not wanted, then make sure that a non-secure port is specified on the command utility. If another LDAP client application is being used and secure communications are intended, verify that the application calls \texttt{ldap_ssl_init()}.
and `ldap_ssl_client_init()`. If secure communications are not wanted, make sure that the application uses a non-secure port.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1253W The 'old_option' configuration option value has been replaced by 'new_option'.

Explanation: The LDAP server or utility found an option or value in the LDAP server configuration file that is no longer supported. That option or value has been replaced by another option or value. To facilitate migration, the program still accepts the old option or value, but internally converts it to the new option or value, as displayed in the message. The LDAP server configuration file is not changed.

In the message text:

old_option
    Old LDAP server configuration option

new_option
    New LDAP server configuration option

System action: The program continues, using the replacement configuration option or value. Support for the old configuration option or value may be removed in a future release of the LDAP server, resulting in the program ending.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Replace the old option or value with the new option or value in the LDAP server configuration file. If using a new option, ensure that the option is in the appropriate section of the configuration file. For example, if replacing the 'database ictx' option with the 'plugin' option, move the 'plugin' option to the global section of the configuration file.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1254E Plug-in initialization failed for plug-in named 'name'.

Explanation: The indicated plug-in failed to initialize. A previous message indicates the reason for the failure.

In the message text:

name
    Plug-in name

System action: The plug-in does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully initialize. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
GLD1255E • GLD1256E

User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the earlier message to correct the error. Restart the program if it did not initialize or if the plug-in is needed.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1255E  Plug-in start-up failed for plug-in named 'name'.

Explanation:  The indicated plug-in failed to start. A previous message indicates the reason for the failure.
In the message text:

   name
   Plug-in name

System action:  The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the earlier message to correct the error. Restart the program if it did not start or if the plug-in is needed.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1256E  Replication entry 'name' is not supported in this replication configuration.

Explanation:  The LDAP server or utility found a replication entry that is not supported in this replication configuration. If useAdvancedReplication on is specified in the LDAP server configuration file, then entries with an object class of replicaObject are not supported. If useAdvancedReplication off is specified in the LDAP server configuration file, then entries with object classes of ibm-replicationAgreement, ibm-replicationContext, ibm-replicationGroup, and ibm-replicationSubEntry are not supported. If running the ldif2ds utility, a previous message indicates the name of the LDIF file containing the entry.
In the message text:

   name
   Entry distinguished name

System action:
• If the error occurs while running an LDAP utility, the program ends.
If the error occurs during initialization of an LDAP server backend, then the backend does not start. If the \texttt{srvStartUpError} option in the LDAP server configuration file is set to \texttt{ignore}, the LDAP server continues to run with those backends and plug-ins that successfully start. If the \texttt{srvStartUpError} option is set to \texttt{terminate} (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response:

* If \texttt{useAdvancedReplication on} is specified in the LDAP server configuration file, the LDAP server or utility does not support basic replication entries with an object class of \texttt{replicaObject}. If configuring a basic replication environment, change the \texttt{useAdvancedReplication} option setting from \texttt{on} to \texttt{off} to allow basic replication entries to be used. If configuring an advanced replication environment, then all entries with an object class of \texttt{replicaObject} must be removed from the LDAP server backend or the input LDIF file.

* If \texttt{useAdvancedReplication off} is specified in the LDAP server configuration file, the LDAP server or utility does not support advanced replication entries with object classes of \texttt{ibm-replicationAgreement}, \texttt{ibm-replicationContext}, \texttt{ibm-replicationGroup}, and \texttt{ibm-replicationSubEntry}. If configuring an advanced replication environment, change the \texttt{useAdvancedReplication} option setting from \texttt{off} to \texttt{on} to allow advanced replication entries to be used. If configuring a basic replication environment, then all entries with object classes of \texttt{ibm-replicationAgreement}, \texttt{ibm-replicationContext}, \texttt{ibm-replicationGroup}, and \texttt{ibm-replicationSubEntry} must be removed from the LDAP server backend or the input LDIF file.

Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD1257E** Multi-server configuration backend (CDBM) support is required.

Explanation: The \texttt{multiserver} option in the CDBM section of the LDAP server configuration file must be set on because there is another backend section that has \texttt{multiserver} set on. When CDBM is configured, all LDBM, TDBM, CDBM, and GDBM backends must have the same setting for the \texttt{multiserver} option.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Either set the \texttt{multiserver} option in the CDBM section of the LDAP server configuration file on or set all the \texttt{multiserver} options off. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1258E  The operations monitor ID 'opid' is already associated with WLM transaction name 'name'.

Explanation: The operations monitor ID (OPID) specified on the LDAP server WLMEXCEPT operator modify command is already associated with a WLM transaction name. An OPID is only allowed to be associated with one WLM transaction name at a time.

In the message text:

opid
   Operations monitor identifier

name
   WLM transaction name

System action: The LDAP server continues. The request fails.

Operator response: Contact the LDAP Administrator or see the Administrator response.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the OPID specified on the LDAP server WLMEXCEPT operator modify command is correct and is not already associated with a WLM transaction name. If the correct OPID was specified, issue the LDAP server RESET WLMEXCEPT operator modify command to remove the current OPID mapping. Then, reissue the same LDAP server WLMEXCEPT operator modify command to set the OPID mapping to the WLM transaction name specified in the message.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1259I  The operations monitor ID 'opid' is now associated with WLM transaction name 'name'.

Explanation: The operations monitor ID (OPID) is successfully associated with the WLM transaction name specified. Future client requests in the LDAP server that match the search pattern identified by the OPID are routed to the specified WLM transaction name.

In the message text:

opid
   Operations monitor identifier

name
   WLM transaction name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1260I  Now setting the LDAP server health value to 'value' percent.

Explanation: The LDAP server has adjusted its internal health value to accurately reflect the number of errors that have occurred in the LDAP server. The health value is the number of failures that have occurred in the last 5000 client operations. The health value is only updated if one minute has passed since the internal health value was last set. The internal health value is used by the sysplex distributor to help distribute incoming client requests to the LDAP servers within the sysplex.

In the message text:

value

LDAP health percentage

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If activity or audit logging is active, analyze the activity or audit logs to determine the client application errors. If activity or audit logging is not active, consider turning on ERROR tracing on the LDAP server to determine the client application errors. Correct any client applications that are resulting in errors in the LDAP server. After the client application errors are fixed, continue to monitor the LDAP server's health value.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1261E  The operations monitor ID 'opid' is not valid.

Explanation: The operations monitor ID (OPID) value entered on the LDAP server WLMEXCEPT operator modify command is not valid.

In the message text:

opid

Operations monitor identifier

System action: The LDAP server continues. The request fails.
Operator response: Issue an LDAP server WLMEXCEPT operator modify command with a valid OPID value. Contact the LDAP Administrator to determine a valid OPID value.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify the OPID specified on the LDAP server WLMEXCEPT operator modify command is a valid number and exists as an ID value in a search pattern returned on the cn=operations,cn=monitor entry.
GLD1262E • GLD1263I

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1262E  The WLM transaction name 'name' is not valid.
Explanation: The WLM transaction name entered on the WLMEXCEPT operator modify command is not valid.
In the message text:

name
  WLM transaction name
System action: The LDAP server continues. The request fails.
Operator response: Issue an LDAP server WLMEXCEPT operator modify command with a valid WLM transaction name. Contact the LDAP Administrator to determine a valid WLM transaction name.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify the WLM transaction name specified on the LDAP server WLMEXCEPT operator modify command is 1 to 8 characters long. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1263I  wlmExcept reset completed.
Explanation: If an operations monitor ID (OPID) has been specified on the LDAP server RESET WLMEXCEPT operator modify command, then that OPID is no longer associated with a WLM transaction name. If an OPID has not been specified on the LDAP server RESET WLMEXCEPT operator modify command, then the LDAP server defaults to using only the configured wlmExcept options for routing incoming client requests to WLM transaction names.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1264E  The Extended Operation owner cannot be contacted.

Explanation:  The LDAP server is unable to contact the Extended Operation owner to request a function be performed.

System action:  An error is returned to the client requesting the operation. The LDAP server continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Determine the owning system by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the DISPLAY XCF operator modify command for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF operator modify command. Restart this LDAP server if it ended. Retry the Extended Operation request if it failed. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1265E  The Extended Operation owner is busy, retrying.

Explanation:  The LDAP server which is the owner of Extended Operations in the LDAP cross-system group in the sysplex is currently busy and cannot respond to the Extended Operation request.

System action:  The LDAP server continues and retries the request.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  If the problem persists, restart the LDAP server that owns the Extended Operations in the LDAP cross-system group. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1266E  The LDAP server must have READ access to the BPX.WLMSERVER profile.

Explanation:  The user ID that runs the LDAP server must have READ access to the BPX.WLMSERVER profile in the RACF FACILITY class so that the LDAP server can connect to Workload Manager (WLM).

System action:  If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.
GLD1267E  GLD1268E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The BPX.WLMSERVER profile must be defined in the FACILITY class before running the LDAP server by issuing a RACF \texttt{RDEFINE} command. Once the profile is defined, grant READ access to the user ID that runs the LDAP server by issuing a RACF \texttt{PERMIT} command. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1267E  The serverCompatLevel is set to \texttt{value}. The configuration option 'option' requires minimum serverCompatLevel \texttt{min\_value}.

Explanation: The \texttt{serverCompatLevel} value specified in the configuration file is set to an unsupported level for the configuration option indicated in the message.

In the message text:

\texttt{value}
\begin{itemize}
\item \texttt{serverCompatLevel} option value
\end{itemize}
\texttt{option}
\begin{itemize}
\item LDAP server configuration option
\end{itemize}
\texttt{min\_value}
\begin{itemize}
\item \texttt{serverCompatLevel} option minimum value
\end{itemize}

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Set the \texttt{serverCompatLevel} configuration option to the minimum level specified in the message or remove the configuration option indicated in the message.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1268E  The serverCompatLevel is set to \texttt{value}. The sysplex owner has a different serverCompatLevel setting.

Explanation: The \texttt{serverCompatLevel} value specified in the configuration file for this server is incompatible with the \texttt{serverCompatLevel} value established by the sysplex owner.

In the message text:
GLD1269A  •  GLD1270E

value

serverCompatLevel option value

System action: The LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Obtain the serverCompatLevel value established by the sysplex owner. Either migrate the server to an appropriate level for the sysplex or upgrade this LDAP server to a level that is compatible with the sysplex.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1269A  Unable to initialize WLM support.

Explanation: The LDAP server is unable to initialize WLM support.

System action: If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: To determine the problem, restart the LDAP server with ERROR tracing turned on to determine the failure. The WLM routine that has failed is present in the LDAP ERROR traces. See the z/OS XL C/C++ Runtime Library Reference for more information about the error. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1270E  IP address 'value' for configuration option 'option' is not valid.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value that is not supported for that option.

In the message text:

value

LDAP server configuration option IP address
option
  LDAP server configuration option

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1271E  The operations monitor ID parameter is missing.

Explanation: The operations monitor ID (OPID) parameter is missing on the LDAP server WLMEXCEPT operator modify command.

System action: The LDAP server continues. The request fails.
Operator response: Issue an LDAP server WLMEXCEPT operator modify command with an OPID value. Contact the LDAP Administrator to determine the correct OPID value.
System programmer response: None.
User response: None.
Problem determination: None.
Module: None.
Example: None.

Administrator response: Verify that an OPID is specified on the LDAP server WLMEXCEPT operator modify command.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1272E  The WLM transaction name parameter is missing.

Explanation: The WLM transaction name parameter is missing on the LDAP server WLMEXCEPT operator modify command.

System action: The LDAP server continues. The request fails.
Operator response: Issue an LDAP server WLMEXCEPT operator modify command with a WLM transaction name. Contact the LDAP Administrator to determine the correct WLM transaction name.
System programmer response: None.
User response: None.

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that a WLM transaction name is specified on the WLMEXCEPT operator modify command.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1273I  Replication conflict: a conflict is detected on an add operation of 'dn' in type backend named name. The add will be converted into a modify because it has a timestamp equal to or later than the target entry timestamp.

Explanation: The LDAP server detected a replication conflict on an add operation of an entry in the specified backend. Since the replicated modify time stamp is equal to or later than the modify time stamp of the existing entry, this add conflict is resolved by converting the operation into a modify operation. The existing attributes that are being replaced are recorded in the lostandfound log. The location of the lost and found log is specified in the ibm-slapdLog attribute on the cn=Replication,cn=Log Management,cn=Configuration entry.

In the message text:

- dn  Entry distinguished name
- type  Backend type
- name  Backend name

System action: The LDAP server converts the add operation into a modify operation, and continues to process the request.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Inspect the recorded entry in the lost and found log file and verify that the attributes and their values are modified correctly.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1274W  Replication conflict: a conflict is detected on a modify operation of 'dn' in type backend named name. A refresh of the entry will be requested because the entry has been modified on this server before it was modified on the supplier.

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an incoming modification has a newer time stamp than the time stamp on the target entry. This server requests the supplier to send a refreshed entry to resolve this conflict.

In the message text:
GLD1275W

Entry distinguished name

Backend type

Backend name

System action: The LDAP server sends an entry refresh request to the supplier.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1275W  Replication conflict: a conflict is detected on a modify operation of 'dn' in type backend named name. A refresh of the entry will be requested because an earlier update on the supplier has not yet been applied to this server.

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an earlier update on the supplier has not yet been applied to this server. This server requests the supplier to send a refreshed entry to resolve this conflict.

In the message text:

Entry distinguished name

Backend type

Backend name

System action: The LDAP server sends an entry refresh request to the supplier.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Replication conflict: a conflict is detected on a modify operation of 'dn' in type backend named name. The modification was rejected because it had a timestamp older than or equal to the target entry timestamp.

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an incoming modification has the same or older time stamp than the time stamp on the target entry. This server ignores the modify request.

In the message text:

dn  Entry distinguished name

type  Backend type

name  Backend name

System action: The LDAP server ignores the incoming request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Check that no updates have been lost by comparing the contents of this entry among all the servers in the replication topology.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Entries 'name1' and 'name2' contain conflicting password values for the masterServer DN 'value'. The entry is not processed.

Explanation: The LDAP server detected a difference in the password values for the same ibm-masterServerDN attribute value in two different consumer server credential entries. The same ibm-masterServerPW value should be used for the conflicting entries specified in this message. The replication information in the first entry is ignored.

In the message text:

name1  Entry distinguished name of conflicting entry

name2  Entry distinguished name of conflicting entry

value  Master server distinguished name

System action: The LDAP server continues, but the consumer server credential entry settings in the first entry are ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.
GLD1278E • GLD1279A

Example: None.

Administrator response: Update the ibm-masterServerPW attribute values on the conflicting consumer server credential entries to use the same value or use a different ibm-masterServerDN attribute value for one of the conflicting consumer server credential entries. A consumer server credential entry has an object class value of ibm-slapdSupplier or ibm-slapdReplication and must reside under the cn=configuration suffix in the CDBM backend.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1278E Routine 'routine' failed: Return code return_code - error_text.

Explanation: An internal programming error has been detected by the routine identified in the message.

In the message text:

routine
  Routine name

return_code
  Return code from routine

error_text
  Error text corresponding to the return code

System action: The current LDAP operation being handled by the server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Try running the LDAP operation again with DEBUG ERROR activated in the server using the operator modify command. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1279A LDAP server stopping because it is unable to become owner of type backend named name.

Explanation: An error occurred when the LDAP server attempted to become the sysplex group owner for the named backend. A previous message indicates the reason for the failure.

In the message text:

type
  Backend type

name
  Backend name

System action: The LDAP server ends.

Operator response: None.
GLD1280E  Unable to load the System SSL CMS runtime: error_code/reason_code - error_text

Explanation: The LDAP server or utility cannot load the System SSL CMS runtime DLL. The LDAP server or utility uses the System SSL CMS runtime DLL to call the gsk_generate_random_bytes() routine for random byte generation of ibm-entryUUID attribute values, CRAM-MD5 and DIGEST-MD5 binds, and the salt value for Salted SHA password hashing. See the description of dllload() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
    Error code from dllload()

reason_code
    Reason code from dllload()

ero_text
    Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the SYS1.SIEALNKE data set is available to the LDAP server or utility job step, then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

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GLD1281E  Unable to query the gsk_get_cms_vector routine: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to query the gsk_get_cms_vector() routine in the System SSL CMS runtime DLL. The LDAP server or utility uses the System SSL CMS runtime DLL to call the gsk_generate_random_bytes() routine for random byte generation of ibm-entryUUID attribute values, CRAM-MD5 and DIGEST-MD5 binds, and the salt value for Salted SHA password hashing. See the description of dllqueryfn() in z/OS XL C/C++ Runtime Library Reference for more information about the error.
GLD1282E

In the message text:

error_code
    Error code from dllqueryfn()
reason_code
    Reason code from dllqueryfn()
error_text
    Error text corresponding to the error code

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. Ensure that the correct level of System SSL CMS is installed on the system. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

---

GLD1282E  Unable to generate random data bytes: return_code - error_text

Explanation:  The LDAP server or utility encountered an error while attempting to generate random data bytes using the gsk_generate_random_bytes(). See the description of gsk_generate_random_bytes() in z/OS Cryptographic Services System SSL Programming for more information about the error.

In the message text:

return_code
    Return code from gsk_generate_random_bytes()
error_text
    Error text corresponding to the return code

System action:  The LDAP server or utility continues but the operation fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error, then retry the operation. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD1283W  Filtered access control has reduced the access rights for DN 'name'.

Explanation: The LDAP server has matched filtered access control values for an LDAP administrator DN. This has reduced the access rights for the root administrator DN (adminDN), the Kerberos administrator DN (krbLDAPAdmin), or an administrative group member.

In the message text:

name

DN of the administrator

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1284E  Required attribute type attribute is not defined in the schema.

Explanation: The LDAP server or utility found that the required attribute type indicated in the message is not defined in the LDAP server schema.

In the message text:

attribute

Undefined attribute type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the schemaPath configuration option has the correct value and restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1285E  Required object class objectclass is not defined in the schema.

Explanation: The LDAP server or utility found that the required object class indicated in the message is not defined in the LDAP server schema.

In the message text:
objectclass
  Undefined object class

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the schemaPath configuration option has the correct value and restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1286E  The serverCompatLevel is set to value. A filtered 'attribute' value was found in backend 'name'. Filtered 'attribute' values require minimum serverCompatLevel min_value.

Explanation: The serverCompatLevel value specified in the configuration file is set to an unsupported level for filtered values in the backend indicated in the message.

In the message text:
value
  serverCompatLevel option value
attribute
  Attribute type
name
  Backend name
min_value
  serverCompatLevel option minimum value

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value. If the error occurs in the schema backend, the LDAP server ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Set the `serverCompatLevel` configuration option to the minimum level specified in the message. If the `serverCompatLevel` configuration option must remain at the current level, the filtered attribute values must be removed from the backend. To find the filtered attribute values in the specified backend, the following steps must be performed:

- Temporarily set the `serverCompatLevel` configuration option to the minimum level specified and use the `ds2ldif` utility to unload the specified backend.
- Analyze the unloaded LDIF file and look for entries that have filtered attribute values.
- Start the LDAP server and modify the entries that have filtered attribute values by removing the filtered attribute values.
- Set the `serverCompatLevel` configuration option back to the wanted setting and restart the LDAP server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1287E  The LDAP administrator entry cannot be unlocked because the password is defined in the configuration file.

Explanation: The LDAP server UNLOCK operator modify command failed because the password for the LDAP root administrator entry is specified in the `adminPW` option in the LDAP server configuration file. The LDAP server UNLOCK operator modify command only works when the LDAP root administrator entry and password reside in an LDBM, TDBM, or CDBM backend.

System action: The LDAP server continues. The request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The LDAP server UNLOCK operator modify command only works when the `adminDN` server configuration option specifies a distinguished name (DN) that resides in an LDBM, TDBM, or CDBM backend and that entry must have a `userPassword` attribute value. The `adminPW` option must be removed from the LDAP server configuration file for the UNLOCK operator modify command to succeed. Then restart the server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1288I  The LDAP administrator entry is now unlocked.

Explanation: The LDAP server UNLOCK operator modify command has completed successfully and unlocked the LDAP root administrator entry.

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
GLD1289E • GLD1290I

Example: None.

Administrator response: The LDAP root administrator entry is now unlocked and can now authenticate to the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD1289E The LDAP administrator entry cannot be unlocked because the credentials could not be set.

Explanation: The LDAP server UNLOCK operator modify command encountered an internal error while attempting to set the credentials for the LDAP root administrator. A previous message or LDAP error trace identifies the reason for the failure.

System action: The LDAP server continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message or LDAP error trace to correct the problem. If LDAP error tracing is not active at the time of the failure, the error trace is automatically written to CTRACE. LDAP error tracing can be activated using the LDAP server DEBUG operator modify command to set ERROR tracing. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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GLD1290I Activity log status

Explanation: This message displays the current LDAP server activity log settings as a result of issuing the LDAP server DISPLAY LOG operator modify command.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The LDAP server DISPLAY LOG operator modify command can be used to review the current LDAP server activity log settings. Use the LDAP server LOG operator modify command to make any necessary updates.

Source: LDAP

Routing code: None.

Descriptor code: None.
The Activity log file is rolled over.
Explanation: The activity log file has been successfully rolled over.
System action: The LDAP server continues with activity logging active.
  - If a z/OS UNIX System Services file is specified in the logfile configuration option and a UNIX System Services directory is specified in the logfileRolloverDirectory configuration option, the current activity log file is renamed with a time stamp appended to the end of the log file name and then moved to the directory specified. A new activity log file is created with the name specified in the logfile configuration option.
  - If a z/OS UNIX System Services file is specified in the logfile configuration option and the logfileRolloverDirectory configuration option is not specified, the current activity log file is renamed in the same directory with a time stamp appended to the end of the log file name. A new activity log file is created with the name specified in the logfile configuration option.
  - If a generated data group (GDG) base is specified in the logfile and logfileRolloverDirectory configuration options, the current activity log file is closed and a new data set generation is created in the base specified by the logfileRolloverDirectory option. The new data set generation is used for the new activity log file.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: The rolled over activity log file can now be analyzed and archived.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

The Activity log file cannot be rolled over.
Explanation: The activity log file could not be rolled over because an error was encountered. A previous message indicates the reason for the failure.
System action:
  - If a z/OS UNIX System Services file is specified in the logfile configuration option, the LDAP server continues with activity logging writing to the same activity log file.
  - If the logfile and the logfileRolloverDirectory configuration options specify a generated data group (GDG) base, the LDAP server continues with activity logging writing to the same data set generation.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response:
  - If a z/OS UNIX System Services directory is specified in the logfileRolloverDirectory configuration option, verify that the directory exists and that the LDAP server has the appropriate permissions to write to the directory. If the
directory does not exist, create the directory or update the `logfileRolloverDirectory` option in the LDAP server configuration file to specify a valid directory. Then retry the request.

- If the `logfileRolloverDirectory` configuration option is not specified, the activity log file specified in the `logfile` configuration option could not be found. Verify that the LDAP server can write to the directory and file specified in the `logfile` option still exists.
- If the `logfile` and the `logfileRolloverDirectory` configuration options specify a z/OS UNIX System Services directory, ensure the directories reside in the same type of file system. Activity log file rollover is not supported between different file system types.
- If the `logfile` and the `logfileRolloverDirectory` configuration options specify a data set, verify that each data set specified is a generated data group (GDG) base. Activity log file rollover is only supported in data sets when using GDGs.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1293E  The LDAP administrator entry cannot be unlocked because the entry is not defined in a LDBM, TDBM, or CDBM backend.

Explanation: The LDAP server UNLOCK operator modify command was unable to unlock the LDAP root administrator entry because it is not defined within a configured LDBM, TDBM, or CDBM backend.

System action: The LDAP server continues. The request fails.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If password policy should apply to the LDAP root administrator, add an LDAP root administrator user entry that has a `userPassword` attribute value in the LDBM, TDBM, or CDBM backend. The distinguished name (DN) specified in the `adminDN` option in the LDAP server configuration file must specify an LDBM, TDBM, or CDBM entry with a `userPassword` attribute value and the `adminPW` option must be removed from the LDAP server configuration file. Then stop and restart the server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1294E  The LDAP administrator cannot be unlocked because a modify error occurred: error_code.

Explanation: The LDAP server UNLOCK operator modify command encountered an error while attempting to modify the LDAP root administrator entry in the backend. The error code has the following common values:

1 Operations error modifying the LDAP root administrator entry
32 LDAP root administrator entry does not exist
121 A parameter is not valid
122 Unable to process the MODIFY request
132 Insufficient storage is available

Any LDAP error codes documented in the `/usr/include/ldap.h` file may also be returned.
In the message text:

**error_code**

Error code from modify operation

**System action:** The LDAP server continues. The request fails.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Additional information about this error is provided in the LDAP error trace. Use the information in this message and error trace to correct the problem. If LDAP error tracing is not active at the time of the failure, the error trace is automatically written to CTRACE. LDAP error tracing can be activated using the LDAP server DEBUG operator modify command to set ERROR tracing. Then retry the request. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1295E The LDAP administrator entry cannot be unlocked because the entry participates in native authentication.

**Explanation:** The LDAP server UNLOCK operator modify command was unable to unlock the LDAP root administrator entry because it is defined in a backend or subtree which participates in native authentication. The LDAP server UNLOCK operator modify command only works when the LDAP root administrator entry and password reside in an LDBM, TDBM, or CDBM backend.

**System action:** The LDAP server continues. The request fails.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** The LDAP server UNLOCK operator modify command only works when the adminDN server configuration option specifies a distinguished name (DN) that resides in an LDBM, TDBM, or CDBM backend and that entry must have a userPassword attribute value. If password policy should apply to the LDAP root administrator, update the adminDN option to specify a distinguished name (DN) that resides outside the scope of a backend or subtree that is participating in native authentication. Then stop and restart the server.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

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GLD1296I  GLD1297A

GLD1296I  Display Replica completed.

Explanation:  This message is displayed in response to the LDAP server DISPLAY REPLICAS operator modify command, when advanced replication is configured. The advanced replication DISPLAY REPLICAS output is only displayed in the LDAP server's job log.

System action:  The LDAP server continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

---

GLD1297A  System failure in service_name, taking SYSMDUMP system dump with abend code abend_error_code and abend reason code abend_reason_code. Failure point: file filename, line line_number, function function_name.

Explanation:  The LDAP server or utility encountered a problem using the LE system service or routine specified and is taking a SYSMDUMP system dump. The SYSMDUMP is written to the data set specified by the SYSMDUMP DD statement in the JCL used to start the LDAP server or utility. The abend error code is always 90 and indicates that the LDAP server or utility has requested the abend. The abend reason code ranges from 1 to 11 and there is a one to one relationship with the LE routine specified in the message. The file name, line number, and function name indicate the location in the LDAP code where the abend occurred.

In the message text:

service_name
  LE routine name

abend_error_code
  LDAP abend code

abend_reason_code
  LDAP abend reason code

filename
  LDAP file name where this abend occurred

line_number
  Line number where this abend occurred

function_name
  LDAP routine name where this abend occurred

System action:  The program ends.

Operator response:  None.

System programmer response:  Analyze the SYSMDUMP system dump and fix the problem, then restart the program. If the problem persists, contact the service representative.

User response:  None.

Problem determination:  Not applicable.
GLD1298E  The following encryption or hashing method is not available: value, reason: error_text.

Explanation: The LDAP server or utility encountered an error attempting to encrypt or hash a value using the algorithm indicated in the message. The algorithm that is used is specified on the pwEncryption option in the LDAP server configuration file. See z/OS Cryptographic Services ICSF Application Programmer's Guide for more information about the error.

In the message text:

value
  Encryption or hashing algorithm

error_text
  Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the appropriate level of ICSF is available on the system to perform the wanted encryption or hashing. Use the error message text to determine the exact cause of the problem. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1299I  The value value_specified specified for attribute attribute in entry entry is not valid. The default value value_default has been set.

Explanation: The LDAP server encountered an attribute value which is not valid. The default attribute value is used.

In the message text:

value_specified
  Attribute value specified

attribute
  Attribute type

entry
  Entry name
GLD1300E

value_default
- Default attribute value

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1300E The administrator group member DN value is already defined. The values in entry name are ignored.

Explanation: The LDAP server encountered a duplicate administrator member in the entry specified. A duplicate is detected if multiple administrative group member entries (ibm-slapdAdminMember objectclass) have the same ibm-slapdAdminDN value. Duplicates are also detected if an ibm-slapdAdminDN value matches the masterServerDN, peerServerDN, or the adminDN options in the LDAP server configuration file. If an ibm-slapdAdminDN value matches the ibm-slapdMasterDN value in an advanced replication supplier credentials entry (ibm-slapdSupplier or ibm-replicationConfiguration objectclasses), a duplicate is also detected. Finally, a duplicate is detected if the value matches a member value in the cn=safadmingroup,cn=configuration (ibm-SAFAdminGroup objectclass).

In the message text:

value
- Distinguished name

name
- Entry distinguished name

System action: The LDAP server continues. When detected, the values in the administrative group member entry are ignored. These may include the ibm-slapdAdminPW and ibm-slapdAdminRole attribute values.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Modify the ibm-slapdAdminDN attribute to specify a value that is not already in use by the entries or configuration options described in the explanation.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1301E The administrator group member DN value is already defined. The roles defined in the security manager may be ignored.

Explanation: The LDAP server encountered a duplicate administrator member in the entry specified. A duplicate is detected if multiple administrative group member entries (ibm-slapdAdminMember objectclass) have the same ibm-slapdAdminDN value. Duplicates are also detected if an ibm-slapdAdminDN value matches the masterServerDN, peerServerDN, or the adminDN options in the LDAP server configuration file. If an ibm-slapdAdminDN value matches the ibm-slapdMasterDN value in an advanced replication supplier credentials entry (ibm-slapdSupplier or ibm-replicationConfiguration objectclasses), a duplicate is also detected. Finally, a duplicate is detected if the value matches a member value in the cn=safadmingroup,cn=configuration (ibm-SAFAdminGroup objectclass).

In the message text:

value
   Distinguished name

System action: The LDAP server continues. When detected, the security manager may not be queried for role assignments.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the member attribute to specify a value that is not already in use by the entries or configuration options described in the explanation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1302E Unable to query the SAF Administration roles for SAF_user: error_code/reason_code - error_text

Explanation: The LDAP server is unable to query SAF to determine the administration roles for the indicated SAF user ID. SAF is being queried for the administration roles because the SAF user ID is a member of the cn=safadmingroup,cn=configuration administration group entry. See the description of __check_resource_auth_np() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

SAF_user
   SAF user ID

error_code
   Error code returned from __check_resource_auth_np()

reason_code
   Reason code from __check_resource_auth_np()

error_text
   Error text corresponding to the error code

System action: The LDAP server continues but the bound administrator is assigned the NOADMIN role. When detected, the security manager may not be queried for SAF role assignments.

Operator response: None.

System programmer response: None.
GLD1303E • GLD1304E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message and the information in the __check_resource_auth_np() description to correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1303E  Message catalog name not set for plug-in name.

Explanation: The indicated plug-in failed to initialize. A message catalog had not been set by calling slapi_pblock_set() with function code SLAPI_PLUGIN_MSG_CAT_NP.

In the message text:

name

   Plug-in name

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully initialize. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Contact the provider of the plug-in.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1304E  Unable to open message catalog filename: error_code - error_text

Explanation: A plug-in is unable to open the specified message catalog. See the description of catopen() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

filename

   Message catalog file name

error_code

   Error code from catopen()

catopen()

error_text

   Error text corresponding to the error code

System action: The plug-in’s messages are not displayed.
GLD1305E • GLD1306E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error, then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1305E  Message 0xmessage_id not found in catalog_filename
Explanation: A plug-in has attempted to retrieve the specified message from the specified catalog. The message is not in the catalog.
In the message text:
message_id
  Message identifier
filename
  Message catalog file name
System action: The requested plug-in message is not displayed. The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Contact the provider of the plug-in.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1306E  Job job_name failed to connect to WLM: return_code/reason_code
Explanation: The LDAP server is unable to connect to WLM as a work manager. See the description of ConnectWorkMgr in z/OS MVS Programming: Workload Management Services for more information about the error. If the reason code is xxxx0847, then another address space with the same subsystem type and subsystem name is connected to WLM on the z/OS image and has the role of queue manager or router. The LDAP server uses LDAP for the subsystem type and its job name for the subsystem name.
In the message text:
job_name
  Job name of the LDAP server
return_code
  Return code from ConnectWorkMgr
GLD1307E

reason_code
   Reason code from ConnectWorkMgr

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. If the reason code is xxxx0847, ensure that the LDAP server job name is unique on the z/OS image. Then, restart the LDAP server.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1307E   Unable to wait on condition variable: error_code/reason_code - error_text

Explanation:  The LDAP server is unable to wait on a condition variable. See the description of pthread_cond_timedwait() in [z/OS XL C/C++ Runtime Library Reference] for more information about the error.

In the message text:

error_code
   Return code from pthread_cond_timedwait()
reason_code
   Reason code from pthread_cond_timedwait()
error_text
   Error text corresponding to the error code

System action:  The program continues. The request fails.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD1308E  Value value for configuration option option cannot be combined with other values.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value that must be specified alone, but the value was incorrectly specified in combination with other values for the same option.

In the message text:

value
   LDAP server configuration option value

option
   LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then, restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1309E  Value for configuration option option is missing an operator before 'value_string'.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value specified as an expression, but the expression is missing an operator. For the sslCipherSpecs configuration option, tokens within the expressions must be separated by a '+' or '-' operator.

In the message text:

option
   LDAP server configuration option

value_string
   String following the missing operator within the option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then, restart the program.
GLD1310W • GLD1311E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1310W Configuration option \texttt{option=value} overlaps with environment variable \texttt{environment_variable_name=environment_variable_value}, the environment variable is ignored.

Explanation: An LDAP configuration option is configured in the LDAP server configuration file and an environment variable that controls the same feature is also set.

In the message text:

- \texttt{option}\texttt{\hspace{1em}LDAP server configuration option}
- \texttt{value}\texttt{\hspace{1em}LDAP server configuration value}
- \texttt{environment_variable_name}\texttt{\hspace{1em}LDAP server environment variable name}
- \texttt{environment_variable_value}\texttt{\hspace{1em}LDAP server environment variable value}
- System action: The program continues. The environment variable is ignored.
- Operator response: None.
- System programmer response: None.
- User response: None.
- Problem determination: None.
- Module: None.
- Example: None.

Administrator response: Remove the corresponding environment variable.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1311E Unsupported data set type \texttt{(type)} for log file \texttt{name}, activity logging is disabled.

Explanation: The specified log file is not supported by the LDAP server. For supported data set types, see Configuring the activity log support in \textit{z/OS IBM Tivoli Directory Server Administration and Use for z/OS}. For activity logging, the name of the file is specified by the \texttt{logfile} and \texttt{logFileRolloverDirectory} configuration options in the LDAP server configuration file. The default log file name is \texttt{/etc/ldap/gldlog.output}, if the configuration option is not specified.

In the message text:

- \texttt{type}\texttt{\hspace{1em}Data set type.}
- \texttt{name}\texttt{\hspace{1em}Log file data set name.}
- System action: The LDAP server continues, but logging using this file is not done.
- Operator response: None.
- System programmer response: None.
GLD1312E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Examine and correct the logfile and logFileRolloverDirectory configuration options in the LDAP server configuration file. Then, restart the program, if logging is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1312E Unable to open log file filename: error_code/reason_code- error_text(operation operation, info 0xvalue, error code 0xdyn_error_code).

Explanation: The LDAP server is unable to open a log file. See the description of fopen() in /OS XL C/C++ Runtime Library Reference, the section about Using the __amrc structure in /OS XL C/C++ Programming Guide, and the section about Interpreting DYNALLOC return codes in /OS MVS Programming: Authorized Assembler Services Guide for more information about the error.

For activity logging, the name of the file is specified by the logfile and logFileRolloverDirectory configuration options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the configuration option is not specified.

In the message text:

filename
Log file file name.

error-code
Error code from fopen().

reason-code
Reason code from fopen().

error_text
Error text corresponding to the error code.

operation
Last I/O operation.

value
DYNALLOC information.

dyn_error_code
Error code from DYNALLOC.

System action: The LDAP server continues, but logging using this file is not done.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. If the corrective action does not require a change to the LDAP server configuration file and logging is needed, try starting activity logging again with the LOG operator modify command. If the corrective action requires a change to the LDAP server configuration file and logging is needed, make the changes and then restart the LDAP server.
GLD1313E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1313E Unable to open log file filename error_code/reason_code - error_text (operation = operation, Error code 0xio_error_code, Abend code 0xabend_code, rc 0xreturn_code).

Explanation: The LDAP server is unable to open a log file. See the description of fopen() in z/OS XL C/C++ Runtime Library Reference, the section about Using the __amrc structure in z/OS XL C/C++ Programming Guide, and the section about OPEN return and reason codes in z/OS DFSMS Macro Instructions for Data Sets for more information about the error.

For activity logging, the name of the file is specified by the logfile and logFileRolloverDirectory configuration options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the configuration option is not specified.

In the message text:

filename
Log file file name.

error-code
Error code from fopen().

reason-code
Reason code from fopen().

error_text
Error text corresponding to the error code.

operation
Last I/O operation.

io_error_code
I/O error code.

abend_code
ABEND code.

return_code
I/O return code

System action: The LDAP server continues, but logging using this file is not done.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has write access to the log file and to its directory, if the file does not exist. Restart the program, if logging is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
**GLD1314I** LDAP server is in transition mode.

**Explanation:** The LDAP server is starting in transition mode. See Updating LDAP configurations settings in a sysplex without server outage in IBM Tivoli Directory Server Administration and Use for z/OS for more information.

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1315I** LDAP server compatibility level serverCompatLevel.

**Explanation:** Displays the server compatibility level.

In the message text:

*serverCompatLevel*

Server compatibility level.

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** None.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

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**GLD1316W** The server compatibility level serverCompatLevel is deprecated.

**Explanation:** This server compatibility level is deprecated and a higher compatibility level is suggested.

In the message text:

*serverCompatLevel*

Server compatibility level.

**System action:** The program continues.

**Operator response:** None.
GLD1317W  Server compatibility level is being downgraded from higher_level to lower_level. Delete any compatibility level higher_level specific entries.

Explanation: The compatibility level is being downgraded. Any entries added specifically for the higher compatibility level must be deleted manually.

In the message text:

higher_level
  Higher compatibility level.

lower_level
  Lower compatibility level.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See the description of the serverCompatLevel configuration option in Customizing the LDAP server configuration, in Configuration file options, in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information about the features provided by the specific server compatibility levels. If you have previously placed data within the directory related to the features which are now disabled by the downgraded compatibility level, you should consider whether you want to remove that data or retain it for future use when the feature is re-enabled.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1318E  Server in transition mode requires 4 or higher compatibility level.

Explanation: The LDAP server failed to start in transition mode. The compatibility level must be 4 or higher.

System action: The program ends.

Operator response: None.
GLD1319E  The serverCompatLevel option must be set for LDAP server to start in transition mode.

Explanation: The LDAP server failed to start in transition mode. serverCompatLevel is not set in the configuration file. The default value is not allowed in transition mode.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Set the serverCompatLevel that you want in the LDAP server configuration file for the transition mode server. Then, start the transition mode server again to continue the migration to the new server compatibility level. See Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1320E  Failed to start server in transition mode. The sysplex owner is not on release V2R2 or higher.

Explanation: A transition server requires all other server instances in the sysplex group to be z/OS Version 2 Release 2 or higher.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.
Administrator response: You cannot use transition mode to update your LDAP server configuration in a sysplex without downtime if one of your servers active in the sysplex is running on a level earlier than z/OS Version 2 Release 2. You can avoid a total outage if you have at least two servers running z/OS Version 2 Release 2 or later and perform the transition mode update with only those servers active during transition mode. If only one server is running z/OS Version 2 Release 2 or later, then you must have all servers down to perform the update and you cannot use transition mode. See Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1321E  Failed to start LDAP server in transition mode. The sysplex group's configuration and compatibility level were not updated.

Explanation: The LDAP server failed to start in transition mode. Either the compatibility level or backend settings must be changed when using transition mode.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure your LDAP server configuration file is changed appropriately before starting the transition server. If the changes you are making to the LDAP server configuration file are not applicable to transition mode, then you cannot use transition mode to perform these updates. See Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1323E • GLD1324E

Administrator response: Start the single, active LDAP server without transition mode.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1323E Sysplex group group already has a transition server as a member.

Explanation: There is already a transition server running in the sysplex group. Only one transition server is permitted in a sysplex group.

In the message text:

group
Sysplex group name.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Allow the current transition mode server to complete the transition by stopping the other LDAP servers in the sysplex group. This allows the transition mode server to become sysplex owner and complete its transition to normal mode. See [Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS] for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1324E Failed to retrieve resource information from the sysplex owner.

Explanation: The transition server is unable to retrieve the current resource information from the sysplex owner. This information is necessary to check for configuration changes during transition mode.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure the LDAP server that is the sysplex owner in the sysplex group is functioning properly and that it is running on z/OS Version 2 Release 2 or higher. If so, try starting the transition mode server again. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.
GLD1325E • GLD1326E

| Descriptor code:  None. |
| Automation:  Not applicable. |

GLD1325E  Unable to send request to sysplex group owner: return code return_code.

Explanation:  An error occurred while sending an XCF request to the LDAP cross-system group owner in the sysplex. The return code values are:

1  An unavailable XCF service.
80  An XCF error.

In the message text:

return_code
  Return code.

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the message to correct the error. Verify that the XCF service is available. Restart the program if it ended. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1326E  The transition server failed to become the owner.

Explanation:  The LDAP server is in transition mode, and it is not ready to become sysplex owner before it completes initialization.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  The transition server failed to do an orderly transition from non-owner to owner of the sysplex group because the prior owner did not remain active long enough for the transition server to finish its initialization, and the transition server has terminated. Verify that there are no active servers in the sysplex group. If all are inactive, the intended transition server can be restarted in normal mode with the configuration changes, and then the remaining servers can be activated with the configuration changes. If some other servers in the sysplex group are active without completing the configuration changes, then the entire transition process must be started again. See [Updating LDAP configurations settings in a sysplex without server outage](https://www.ibm.com/support/knowledgecenter/en/SSLTBW_2.2.0/com.ibm.zos.v2r2.LIBM901400v2r2.doc/en/17016.html) in [z/OS IBM Tivoli Directory Server Administration and Use for z/OS](https://www.ibm.com) for more information.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1327E  The transition server failed because a new server joined the sysplex group.
Explanation:  The LDAP server is in transition mode, and it detected a new server joining the sysplex group before it became owner. A transition server must be the last server in the sysplex group so that when all other LDAP servers terminate it can become owner and change the configuration.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Start the transition server again, and do not start additional servers in the sysplex group until the transition server completes its transition and becomes sysplex owner. See Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1328W  The LDAP server does not support ARM after the transition.
Explanation:  The LDAP server does not support ARM, even after the transition server completes the transition and running in normal mode.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  To utilize the ARM feature, the transition mode server must be restarted in normal mode after transition completes and other servers in the sysplex group are started in normal mode with the configuration update. See Updating LDAP configurations settings in a sysplex without server outage in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD1329E  The sysplex owner cannot be contacted.
Explanation: The LDAP server is unable to contact the sysplex owner.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure the LDAP server that is the sysplex owner in the sysplex group is functioning properly. If so, try starting the failing server again. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1330E  The sysplex owner busy, retrying.
Explanation: The LDAP server that is the owner of the sysplex group is busy.
System action: The LDAP server continues and retries the request.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1331E  The backend setting is incompatible with sysplex owner's.
Explanation: At least one of the transition server's backends has a setting that is not compatible with sysplex owner. Any changes on backend name, backend type, database location, and the suffix list might result in this situation.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure the changes to the LDAP server configuration file are correct. If necessary, start the transition server again with **DEBUG ERROR** active. The debug output might help locate and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1332W** The server's backend setting is different from sysplex owner's.

**Explanation:** At least one of the server's backends has a different setting from sysplex owner. The difference includes variation on backend name, backend type, database location, and the suffix list. The addition or removal of a backend is also treated as a different backend setting.

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

Administrator response: Ensure the changes to the LDAP server configuration file are correct. If necessary, stop the server and restart it again with **DEBUG INFO** active. The debug output might help locate and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1333W** Configuration options **db2StartUpRetryLimit**, **db2Terminate**, **srvStartUpError**, **tcpTerminate**, and **fileTerminate** for file based backends are overridden.

**Explanation:** The LDAP server is in transition mode. If an error occurs, a complete transition cannot be done, and the server must be terminated. The configuration option **db2StartUpRetryLimit** is set to 0. Configuration options **db2Terminate**, **srvStartUpError**, **tcpTerminate**, and **fileTerminate** for file based backends are set to **terminate**. The original settings are overridden.

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.
GLD1334W • GLD1336E

Automation: Not applicable.

GLD1334W  Configuration options db2StartUpRetryLimit, db2Terminate, srvStartUpError, tcpTerminate, and fileTerminate for file based backends are restored.

Explanation: Configuration options db2StartUpRetryLimit, db2Terminate, srvStartUpError, tcpTerminate, and fileTerminate for file based backends are restored to the original setting in the LDAP server configuration file when transition is completed.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1335I  The LDAP server completed the transition phase and switched to normal mode.

Explanation: The LDAP server started with parameter -t completed the transition phase to dynamically update the sysplex shared compatibility level or backend settings and is in normal mode now.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1336E  The LDAP server failed to switch from transition mode to normal mode.

Explanation: The LDAP server running in transition mode failed to complete the transition phase and switch to normal mode.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the XCF service is available. If necessary, start the transition server again with DEBUG ERROR active. The debug output might help locate and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1337E The value value1 of configuration option option1 conflicts with the value value2 of configuration option option2.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value that conflicts with the value of another option.

In the message text:

value1

Option value of the first option.

option1

Option name of the first option.

value2

Option value of the second option.

option2

Option name of the second option.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. These two configuration options are related. The values must be consistent. See Customizing the LDAP server configuration Configuration file options, in z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1338E Unable to write log file filename error_code reason_code error_text (operation = operation, Error code 0xio_error_code, Abend code 0xabend_code, rc 0xreturn_code)

Explanation: The LDAP server is unable to write a log file. See the description of fwrite() or fflush() in z/OS XL C/C++ Runtime Library Reference and Using the __amrc structure in z/OS XL C/C++ Programming Guide for more information about the error. For activity logging, the name of the file is specified by the logfile and logFileRolloverDirectory options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the configuration option is not specified.
GLD1339E

In the message text:

- **filename**: Log file file name.
- **error_code**: Error code from *fwrite()* or *fflush()*.
- **reason_code**: Reason code from *fwrite()* or *fflush()*.
- **error_text**: Error text corresponding to the error code.
- **operation**: Last I/O operation.
- **io_error_code**: I/O error code.
- **abend_code**: Abend code.
- **return_code**: I/O return code.

**System action**: The LDAP server continues. Activity logging is turned off automatically.

**Operator response**: None.

**System programmer response**: None.

**User response**: None.

**Problem determination**: Not applicable.

**Module**: None.

**Example**: None.

**Administrator response**: Use the information in the message to correct the error. Verify that the file is not full and can be written to by the LDAP server. Use the LDAP server LOG operator modify command to activate activity logging after the error is corrected.

**Source**: LDAP

**Routing code**: None.

**Descriptor code**: None.

**Automation**: Not applicable.

GLD1339E Unable to clear transition flag within sysplex user state value: Return code *return_code*, Reason code *reason_code*.

**Explanation**: The LDAP server is unable to clear the transition flag in XCF area. The return code value is:

1 **IXCSETUS** failed. The reason code contains the **IXCSETUS** return code in the upper 16 bits and the **Sysplex Services Reference** for more information about the error.

In the message text:

- **return_code**: Return code.
- **reason_code**: Reason code.

**System action**: The program ends.

**Operator response**: None.
GLD1340E • GLD1341E

<table>
<thead>
<tr>
<th>GLD1340E</th>
<th>Value value for configuration option option is out of range, must be min_value to max_value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation:</td>
<td>The LDAP server or utility found an option in the LDAP server configuration file that has a value that is out of supported range.</td>
</tr>
<tr>
<td>In the message text:</td>
<td>value</td>
</tr>
<tr>
<td></td>
<td>LDAP server configuration option value.</td>
</tr>
<tr>
<td>option</td>
<td>LDAP server configuration option.</td>
</tr>
<tr>
<td>min_value</td>
<td>The minimum value of the supported range.</td>
</tr>
<tr>
<td>max_value</td>
<td>The maximum value of the supported range.</td>
</tr>
<tr>
<td>System action:</td>
<td>The program ends.</td>
</tr>
<tr>
<td>Operator response:</td>
<td>None.</td>
</tr>
<tr>
<td>System programmer response:</td>
<td>None.</td>
</tr>
<tr>
<td>User response:</td>
<td>None.</td>
</tr>
<tr>
<td>Problem determination:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Module:</td>
<td>None.</td>
</tr>
<tr>
<td>Example:</td>
<td>None.</td>
</tr>
<tr>
<td>Administrator response:</td>
<td>Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.</td>
</tr>
<tr>
<td>Source:</td>
<td>LDAP</td>
</tr>
<tr>
<td>Routing code:</td>
<td>None.</td>
</tr>
<tr>
<td>Descriptor code:</td>
<td>None.</td>
</tr>
<tr>
<td>Automation:</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

GLD1341E • Unable to start a timer: error_code

| Explanation: | The LDAP server or utility detected an error while trying to start a timer. The return code is from the STIMER macro. See z/OS MVS Programming: Assembler Services Guide for more information about the error. |
| In the message text: |
GLD1342E

*error_code*

Error code from `srv_util_start_timer()`.

**System action:** The DB2-based backends are disabled, and all requests to those backends are rejected.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1342E** Unwilling to open file or directory `name`: File or directory `uid1`, UID of program `uid2`, GID of file or directory `gid`, GIDs of program `gidList`.

**Explanation:** The program, which can be the LDAP server or an LDAP utility, does not open the indicated file or directory. The user ID running the program does not own the file nor is it in the group that owns the file.

In the message text:

*name*  
Name of file or directory.

*uid1*  
UID of file or directory.

*uid2*  
UID of the LDAP server or utility.

*gid*  
GID of file or directory.

*gidList*  
GIDs of the LDAP server or utility.

**System action:**
- If the error occurs during backend initialization, the backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the `fileTerminate` option in the backend section of the LDAP server configuration determines what the server does. If the `fileTerminate` option is set to `terminate`, the program ends. If the `fileTerminate` option is set to `recovery` (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Administrator response:** If the file or directory was created by an unauthorized user, do not use the file. If the file
or directory is legitimate, then see Setting up the user ID and security for the LDAP server to configure the correct
UID and GID values for the user ID running the program.

Problem determination: Not applicable.
Module: None.
Example: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1343E Unable to get groups for user ID user_id: error_code/reason_code - error_text.

Explanation: The program is unable to get the groups for a z/OS UNIX System Services user ID. See the description
of getgroups() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
user_id
User ID.
error_code
Error code from getgroups().
reason_code
Reason code from getgroups().
error_text
Error text corresponding to the error code.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Administrator response: Use the information in the message to correct the error. If the problem persists, contact the
service representative.
Problem determination: Not applicable.
Module: None.
Example: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1344E Unable to get status information for file or directory name: error_code/reason_code - error_text.

Explanation: The program is unable to get status information for a file or a directory. See the description of stat() in
z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
name
File or directory name.
error_code
Error code from stat().
GLD1800E

reason_code
Reason code from stat().

error_text
Error text corresponding to the error code.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Administrator response: Use the information in the message to correct the error. If the problem persists, contact the service representative.
Problem determination: Not applicable.
Module: None.
Example: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

ldif2ds utility messages

GLD1800E Command options option1 and option2 are mutually exclusive.
Explanation: The two command-line parameters indicated in the message cannot both be specified at the same time.
In the message text:

option1
   Command-line parameter name

option2
   Command-line parameter name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Remove one or both of the parameters from the command line. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD1801E  Option option is specified more than once with different values.

Explanation:  The command-line parameter indicated in the message can only have one value.

In the message text:

option  Command-line parameter name

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Remove the duplicate parameter from the command line. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1802E  The summary message frequency must be a non-negative decimal integer.

Explanation:  The frequency value specified for the -q command-line parameter is not a positive integer.

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Specify a valid positive integer for the -q parameter on the command line. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1803E  At least one phase option (-c, -p, -l) must be specified.

Explanation:  At least one phase command-line parameter must be specified for the ldif2ds utility.

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.
GLD1804E • GLD1805E

Module: None.
Example: None.
Administrator response: Specify one or more phase parameters on the command line. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1804E Unable to open name: error_code/reason_code - error_text

Explanation: The file indicated in the message cannot be opened in the required way: read for an input file, write for an output file. The file can be a file system file or a data set. If the file name is "//DD:INTRDR", the failure occurred while opening the internal reader to submit the load jobs. See the description of fopen() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

name
Data set name or file name

error_code
Error code from fopen()

reason_code
Reason code from fopen()

error_text
Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: For an input file, ensure that the file exists and can be opened for read. For an output file, verify that the directory or data set containing the file exists and that the file can be written to that directory or data set. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1805E Unable to read name: error_code/reason_code - error_text

Explanation: The file indicated in the message cannot be read. The file can be a file system file or a data set. See the description of fgets() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

name
Data set name or file name

error_code
Error code fgets()
GLD1806E

reason_code
Reason code fgets()

erm_text
Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1806E Unable to write name using routine error_code/reason_code - error_text

Explanation: An attempt to write to the file indicated in the message failed. The file can be a file system file or a data set. If the file name is //DD:INTRDR, the failure occurred while submitting a load job to the internal reader. The routine used to perform the write is also indicated in the message. See the description of the routine in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
name
  Data set name or file name
routine
  Routine that failed
error_code
  Error code from the routine
reason_code
  Reason code from the routine
error_text
  Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
GLD1807E  GLD1810I

Automation: Not applicable.

GLD1807E  At least one LDIF file must be specified.
Explanation: The -c (check) or -p (prepare) parameter is specified on the ldif2ds command line but no LDIF files are specified with either the -i or -e command-line parameter.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Add either the -i or -e parameter to the command line. Both of these parameters are not allowed to be specified together. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1808I  Preparing LDIF file filename.
Explanation: The ldif2ds utility is starting the prepare phase for the directory entries in the indicated LDIF file.
In the message text:
filename
    LDIF file name
System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1810I  ldif2ds utility version version.release, Service level level.
Explanation: The ldif2ds utility with version, release, and service level indicated in the message is running.
In the message text:
version
    Utility version
**GLD1811E** Utility release

**GLD1812I** Utility service level

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1811E** ldif2ds utility terminating due to error condition.

**Explanation:** The ldif2ds utility is ending due to an error. Previous messages indicate the reason for the failure.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the earlier messages to correct the problem. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1812I** name: number entries have been processed. error of them encountered errors.

**Explanation:** The utility has processed the indicated number of entries. This message is issued when all of the directory entries have been processed for the check or prepare phase. It is also issued as an intermediate status message as determined by the -q command-line parameter. Note that the program might have encountered errors during this processing. If so, processing of some entries may not have completed successfully. Additional messages are issued to indicate these errors.

In the message text:

- **name**
  - Program name

- **number**
  - Number of entries
**GLD1813E • GLD1814E**

*error*

Number of error entries

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1813E** Incorrect continuation at line *line_number* of *filename*.

**Explanation:** The ldif2ds utility has encountered a continuation line at the start of a directory entry definition in the input LDIF file indicated in the message. A directory entry cannot begin with a continuation line.

In the message text:

*line_number*

Line number

*filename*

LDIF file name

**System action:** The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Remove the continuation line from the LDIF file. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD1814E** Syntax error at line *line_number* of *filename*.

**Explanation:** The ldif2ds utility has encountered a syntax error in the LDIF statement beginning at the indicated line of the LDIF file.

In the message text:

*line_number*

Line number
GLD1815E

Unable to decode binary value at line \( \textit{line\_number} \) of \textit{filename}.

**Explanation:** The \texttt{ldif2ds} utility is unable to decode a base64-encoded value in the LDIF statement beginning at the indicated line of the LDIF file. The LDIF statement format is \texttt{name::value}, indicating that the value must be base64-encoded.

In the message text:

```
\( \textit{line\_number} \)
   Line number

\textit{filename}
   LDIF file name
```

**System action:** The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Correct the LDIF file by base64-encoding the value or by changing the statement format to \texttt{name\::value}. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD1816E  LDIF version is not supported.

Explanation: The version directive in an LDIF file specifies a version number that is not supported by the ldif2ds utility. The utility only supports LDIF version 1. A previous message indicates the name of the LDIF file.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the version number in the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1817E  Unsupported 'changetype' directive at line line_number of filename.

Explanation: An entry in the LDIF file at the indicated line contains a changetype directive that does not specify an add operation. Only changetype: add is supported by the ldif2ds utility. Note that the changetype directive is not required.

In the message text:

line_number  Line number

filename  LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either correct the changetype directive by specifying add or remove the directive from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1818E  Zero-length distinguished name found at line line_number of filename.

Explanation:  The ldif2ds utility found a zero-length distinguished name for a directory entry at the indicated line of the LDIF file. Every entry must have a distinguished name.

In the message text:

line_number
  Line number

filename
  LDIF file name

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Specify a distinguished name for the entry in the LDIF file. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1819E  Unable to normalize value at line line_number of filenames error_text.

Explanation:  The ldif2ds utility cannot convert the value on the indicated line to normalized format. The value is either a distinguished name or an attribute value.

In the message text:

line_number
  Line number

filename
  LDIF file name

error_text
  Error message text

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the message to correct the value in the LDIF file. Then restart the program.

Source:  LDAP
GLD1820E • GLD1821E

Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1820E Unable to resolve attribute type attribute: error_text.

Explanation: The ldif2ds utility is unable to find the attribute indicated in the message in the LDAP server schema. Every attribute contained in the entry, including the attributes in the relative distinguished name (RDN) of the entry, must be already defined in the schema. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

attribute
  Attribute type

error_text
  Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.

Module: None.
Example: None.

Administrator response: Either add the missing attribute to the LDAP server schema or remove the attribute from the LDIF file. Then restart the program. To add the attribute to the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the ldif2ds utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1821E Unable to resolve object class objectclass: error_text.

Explanation: The ldif2ds utility is unable to find the object class indicated in the message in the LDAP server schema. Every object class contained in the entry, including any object classes in the relative distinguished name (RDN) of the entry, must be already defined in the schema. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

objectclass
  Object class

error_text
  Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either add the missing object class to the LDAP server schema or remove the object class from the LDIF file. Then restart the program. To add the object class to the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the ldif2ds utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1822E No backend configured for DN 'name'.

Explanation: The ldif2ds utility encountered an entry whose distinguished name (DN) does not belong to any suffix in the backends that are contained in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either add the appropriate suffix option in the backend section of the LDAP server configuration file or change the distinguished name of the entry in the LDIF file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD1823E Entry 'name' is not in the same backend as previous entries.

Explanation: The ldif2ds utility encountered an entry whose distinguished name (DN) belongs to a different backend in the LDAP server configuration file than the entries processed before this one. Each invocation of the ldif2ds utility can only load entries into one backend. All the entries in the LDIF files must belong to the same backend, using any of the suffixes listed for that backend in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
GLD1824E  •  GLD1825I

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Either change the distinguished name of the entry so that it has one of the suffixes of the backend being loaded or remove the entry from the LDIF file. Then restart the program.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1824E  Entry 'name' is not in a TDBM backend.

Explanation:  The ldif2ds utility encountered an entry whose distinguished name (DN) belongs to a backend in the LDAP server configuration file that is not a TDBM backend. The ldif2ds utility can only load entries into a single TDBM backend, thus all entries in the LDIF files must belong to the same TDBM backend. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name  Entry distinguished name

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Either change the distinguished name of the entry so that it has one of the suffixes of the TDBM backend being loaded or remove the entry from the LDIF file. Then restart the program. Other types of backends can only be loaded using an add operation while the LDAP server is running.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1825I  Using TDBM backend name.

Explanation:  The ldif2ds utility is processing entries for the TDBM backend whose name is indicated in the message. This name is either the name specified in the database option for this TDBM backend in the LDAP server configuration file or, if no name is specified in the option, is a name generated by LDAP based on the position of the backend section in the LDAP server configuration file.

In the message text:

name  Backend name
GLD1826E  •  GLD1828E

System action: The utility continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1826E  Unable to encrypt attribute value for entry 'name': error_text.

Explanation: The ldif2ds utility encountered an error while trying to encrypt or hash a value of an attribute that requires encryption or hashing; userPassword, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw. The type of encryption or hashing in use is determined by the values of the pwEncryption and secretEncryption options within the TDBM backend section in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:
attribute
  Attribute type
name
  Entry distinguished name
error_text
  Error message text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1828E  An internal error has occurred.

Explanation: An internal programming error has been detected by the utility.
System action: The program ends.
Operator response: None.
GLD1829E • GLD1831I

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Try running the utility again with -d ERROR specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1829E Entry 'name' already exists.
Explanation: The ldif2ds utility encountered an entry that already exists, either as a prior entry in this LDIF file or in an LDIF file processed before this file, or as an existing entry in the TDBM backend being loaded. The duplicate entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.
In the message text:

name
  Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the entry is a duplicate of a previous entry in an LDIF file, remove one of these entries. If the entry is a duplicate of an entry in the TDBM directory, remove the entry from the LDIF file. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1831I ldif2ds utility is done.
Explanation: The ldif2ds utility has finished.
Note: If -l (load) was specified on the command line, then the load jobs have been successfully submitted, but this message does not indicate that the load jobs have ended successfully. The processing of the load jobs by DB2 is outside the scope of the ldif2ds utility. Review the output generated by each load job to determine if it is successful.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If appropriate, review the output of each load job to determine if it is successful. If a load job fails, use the information in the description of the ldif2ds utility to determine how to proceed.
Note: If a load job fails, do not run the ldif2ds utility again because this can add duplicate data to the database.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1832I Checking LDIF file filename.

Explanation: The ldif2ds utility is starting the check phase for the directory entries in the indicated LDIF file. The check phase is performed when the -c or -p option is specified on the command line.

In the message text:
filename
    LDIF file name
System action: The utility continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: None.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1833E Unable to get directory entry 'name': error_text.

Explanation: The ldif2ds utility has detected an entry whose parent entry cannot be retrieved from the TDBM database. The distinguished name of the parent entry is indicated in the message. A previous message indicates the name of the LDIF file containing the child entry.

In the message text:
name
    Parent entry distinguished name
error_text
    Error message text
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
GLD1834E • GLD1835E

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1834E The parent for entry 'name' does not exist.

Explanation: The ldif2ds utility encountered a non-suffix entry for which there is no parent. Every non-suffix entry must have a parent entry, either as a prior entry in this LDIF file or in an LDIF file processed before this file, or as an existing entry in the TDBM database being used. The entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.
In the message text:

name
Child entry distinguished name

System action: If the error occurs during the check phase, the utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded. If the error occurs during the prepare phase, the program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: In the LDIF file, either remove the child entry, add an entry for the parent before the child entry, or change the distinguished name of the child entry to one for which the parent entry exists. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1835E Parent entry 'name' is a referral or an alias.

Explanation: The ldif2ds utility encountered an entry for which the parent entry is an alias entry or a referral entry. Alias and referral entries cannot have children. The parent entry can be a prior entry in this LDIF file or in an LDIF file processed before this file or it can be an existing entry in the TDBM backend being loaded. A previous message indicates the name of the LDIF file containing the child entry.
In the message text:

name
Parent entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the child entry from the LDIF file or change the distinguished name of the child entry to one for which the parent is not an alias or referral entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD1836E**  DN 'name' exceeds the maximum length of length.

Explanation: The ldif2ds utility encountered an entry for which the normalized distinguished name (DN) is longer than the maximum length allowed. The maximum length of a DN is determined by the size of the DN column in the DIR_ENTRY table, set when creating the TDBM database tables. The normalized DN is stored in this column. The normalized DN may not be same as the DN specified for the entry in the LDIF file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

- name: Entry normalized distinguished name
- length: Maximum DN length
- System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
- Operator response: None.
- System programmer response: None.
- User response: None.
- Problem determination: Not applicable.
- Module: None.
- Example: None.
- Administrator response: Shorten the distinguished name of the entry. Then restart the program.
- Source: LDAP
- Routing code: None.
- Descriptor code: None.
- Automation: Not applicable.

---

**GLD1837E**  No base structural object class specified for 'name'.

Explanation: The ldif2ds utility encountered an entry which does not contain a base structural object class. Every entry must have a single base structural object class, specified on the objectclass attribute within the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

- name: Entry distinguished name
GLD1838E • GLD1839E

**System action:** The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Add a base structural object class to the entry. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1838E  Multiple base structural object classes specified for 'name'.

**Explanation:** The `ldif2ds` utility encountered an entry which contains more than one base structural object class. Every entry must have a single base structural object class, specified on the `objectclass` attribute within the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

```
name
    Entry distinguished name
```

**System action:** The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Remove the extra base structural object classes from the entry. Verify that all the attributes used in the entry and in the relative distinguished name (RDN) of the entry are included in the remaining object classes. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD1839E  Entry 'name' contains obsolete attribute type 'attribute'.

**Explanation:** The `ldif2ds` utility encountered an entry which contains an attribute that is marked as obsolete in the LDAP server schema. Obsolete attribute types cannot be used in an entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

```
name
    Entry distinguished name
```
attribute

Obsolete attribute name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the obsolete attribute type from the entry in the LDIF file or modify the LDAP server schema to remove the obsolete specification from the attribute definition. Then restart the program. To modify the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the ldif2ds utility to load entries into the server. See [LDAP directory schema](#) for more information about modifying the LDAP server schema.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD1840E Entry 'name' contains abstract class 'objectclass' as a base object class.

Explanation: The ldif2ds utility encountered an entry which contains an abstract object class as one of its base object classes. An abstract class cannot be a base object class; it must be derived from another object class specified in the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name

Entry distinguished name

objectclass

Abstract object class name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the abstract object class from the entry. Verify that all the attributes used in the entry and in the relative distinguished name (RDN) of the entry are included in the remaining object classes. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD1841E  Entry 'name' contains restricted attribute type 'attribute'.

Explanation:  The ldif2ds utility encountered an entry which contains an attribute that cannot be set when adding an entry. The value for this attribute is instead generated by the LDAP server itself. Except for the ibm-EntryUUID, creatorsName, createTimestamp, modifiersName, and modifyTimestamp attribute types, an attribute type that is marked as NO-USER-MODIFICATION in its definition in the LDAP schema may not be used to create a new directory entry. A previous message indicates the name of LDIF file containing the entry.

In the message text:

name  Entry distinguished name

attribute  Attribute type

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Remove the restricted attribute from the entry. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1842E  Entry 'name' contains obsolete object class 'objectclass'.

Explanation:  The ldif2ds utility encountered an entry which contains an object class that is marked as obsolete in the LDAP server schema.Obsolete object classes cannot be used in an entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name  Entry distinguished name

objectclass  Obsolete object class name

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Either remove the obsolete object class from the entry in the LDIF file or modify the LDAP server schema to remove the obsolete specification from the object class definition. Then restart the program. If the object class is removed, verify that all the attributes used in the entry and in the relative distinguished name (RDN)
of the entry are included in the remaining object classes. If modifying the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the ldif2ds utility to load entries into the server. See [LDAP directory schema] for more information about modifying the LDAP server schema.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1843E The userPassword attribute is not allowed for entry 'name'.

Explanation: The ldif2ds utility encountered an entry which is set up for using native authentication but which also contains the userPassword attribute. This attribute cannot be included in an entry which is using native authentication. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Either remove the userPassword attribute from the entry in the LDIF file or change the entry so that it does not use native authentication. Then restart the program. Setting up an entry for native authentication involves including special attributes in the entry and specifying certain options in the TDBM backend section of the LDAP server configuration file. See [Native authentication] for more information.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1844E Entry 'name' cannot be both an alias and a referral.

Explanation: The ldif2ds utility encountered an entry which is both an alias entry and a referral entry. This combination is not supported by the LDAP server. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
GLD1845E  GLD1846E

Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Change the entry so that it is an alias entry or a referral entry but not both. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1845E  The aclPropagate attribute for entry 'name' requires the aclEntry attribute.

Explanation:  The ldif2ds utility encountered an entry which contains the aclPropagate attribute but does not contain the aclEntry attribute. aclEntry must be specified along with aclPropagate. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
  Entry distinguished name

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response:  None.
System programmer response:  None.
User response:  None.

GLD1846E  The ownerPropagate attribute for entry 'name' requires the entryOwner attribute.

Explanation:  The ldif2ds utility encountered an entry which contains the ownerPropagate attribute but does not contain the entryOwner attribute. entryOwner must be specified along with ownerPropagate. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
  Entry distinguished name

System action:  The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either add the entryOwner attribute to the entry or remove the ownerPropagate attribute. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1847E Schema check failed for entry 'name': error_text.

Explanation: The ldif2ds utility encountered an entry whose attributes or object classes violate the LDAP server schema. The entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name
error_text
Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the entry in the LDIF file. The error is usually that the entry contains an attribute that is not listed in any of the object classes specified in the entry or that the entry does not contain an attribute that is required by one of the object classes specified in the entry. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1848E The -o option must be specified if -p or -l is specified.

Explanation: The ldif2ds utility cannot be invoked without the -o command-line parameter when either the -p (prepare) or -l (load) command-line parameter is specified. -o is required during the prepare and load phases to identify the prefix part of the name of the output data sets.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
GLD1849E • GLD1850E

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Add the -o parameter to the command line. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1849E The output dataset name prefix is too long.
Explanation: The maximum length of the output data set name prefix is 22. The prefix is specified by the -o parameter on the ldif2ds utility command line.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Specify a value that is at most 22 characters long for the -o parameter on the command line. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1850E Unable to assign database attribute identifier: error_text.
Explanation: The ldif2ds utility could not assign an internal identifier for an attribute type that is not currently known to the TDBM backend being loaded.
In the message text:
error_text
   Error message text
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the problem. Then restart the program. If more information is needed, try running the utility again with -d ERROR specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1851E Unable to assign database entry identifier: error_text.

Explanation: The ldif2ds utility could not assign an internal entry identifier for a new entry.
In the message text:
error_text
   Error message text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the problem. Then restart the program. If more information is needed, try running the utility again with -d ERROR specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1852E Alias entry 'name' points to itself.

Explanation: The ldif2ds utility encountered an alias entry in which a value of the aliasedObjectName attribute is the same as the distinguished name of the alias entry. This would cause an infinite loop when dereferencing the entry, thus is not allowed. A previous message indicates the name of the LDIF file containing the entry.
In the message text:
name
   Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Change the aliasedObjectName attribute value so that it is not the distinguished name of the entry or remove the alias entry from the LDIF file. Then restart the program.

Source: LDAP
Routing code: None.
GLD1853E  The JCL dataset must contain fixed-length 80-byte records.

Explanation: The ldif2ds utility has determined that the format of the JCL data set is not correct. The JCL data set must be a PDS or PDSE with a record format of RECFM=F or RECFM=FB and with a logical record length of LRECL=80. The name of this data set is \texttt{dsprefix.BULKLOAD.JCL}, where \texttt{dsprefix} is the value of the \texttt{-o} command-line parameter.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Reallocate the JCL data set. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1854E  Unable to retrieve file information: \texttt{error_code}/\texttt{reason_code} - \texttt{error_text}

Explanation: The utility could not obtain file information for an open file. For the ldif2ds utility, the file is \texttt{dsprefix.BULKLOAD.JCL}, where \texttt{dsprefix} is the value of the \texttt{-o} command-line parameter. See the description of \texttt{fldata()} in \texttt{z/OS XL C/C++ Runtime Library Reference} for more information about the error.

In the message text:

\begin{verbatim}
error_code
   Error code from \texttt{fldata()}

reason_code
   Reason code from \texttt{fldata()}

error_text
   Error text corresponding to the error code
\end{verbatim}

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
GLD1855E  The SYSTEM member contains an unrecognized directive: value.

Explanation:  The ldif2ds utility has found a record that it does not support in the SYSTEM member of the JCL data set. The supported records begin with # (a comment), HLQ, or JOBCARD. The name of the JCL data set is dsprefix.BULKLOAD.JCL, where dsprefix is the value of the -o command-line parameter.

In the message text:

value

Unrecognized directive

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Remove the unsupported record from the SYSTEM member of the JCL data set. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD1856E  The HLQ directive in the SYSTEM member is not valid.

Explanation:  The ldif2ds utility has found a value that is not supported for the HLQ record in the SYSTEM member of the JCL data set. This value is the high-level-qualifier of the DB2 data sets, and must be at most 35 characters long. The name of the JCL data set is dsprefix.BULKLOAD.JCL, where dsprefix is the value of the -o command-line parameter.

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Correct the value specified on the HLQ record in the SYSTEM member of the JCL data set. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD1857E  No job name specified in the SYSTEM member.

Explanation: The ldif2ds utility has not found a job name in the SYSTEM member of the JCL data set. The job name must appear on the first JOBNAME record. The value of this record must begin with //job_name. Either there are no JOBNAME records in the SYSTEM member or the first record does not have the required format. The name of the JCL data set is dsprefix.BULKLOAD.JCL, where dsprefix is the value of the -o command-line parameter.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the SYSTEM member of the JCL data set contains a JOBNAME record with the correct format. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1858E  The load datasets are not in the correct state.

Explanation: The ldif2ds utility has been invoked with the -l (load) command-line parameter to submit the database load jobs, but it has determined that the load data sets may not be valid. ldif2ds expects the load phase to be run after the new entries in the LDIF files have been prepared, by specifying the -p (prepare) command-line parameter. When the utility successfully completes the prepare phase, it sets the first record in the STATUS member of the JCL data set to STATUS P. When the utility begins the load phase, it checks that the first record of the STATUS member is STATUS P. The load phase fails if there is no record or if the value is not correct. If the status is correct and the load phase completes successfully, then the status is reset to STATUS L. This prevents the ldif2ds utility from being run again to load the same data, which can result in a corrupted DB2 database that is not usable by the LDAP server. The name of the JCL data set is dsprefix.BULKLOAD.JCL, where dsprefix is the value of the -o parameter.

Note: If the load phase is successful, then the load jobs have been successfully submitted, but this does not indicate that the load jobs have ended successfully. The processing of the load jobs by DB2 is outside the scope of the ldif2ds utility. Review the output generated by each load job to determine if it is successful.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the ldif2ds utility has not yet been run with the -p command-line parameter to prepare the entries for loading, do that before using the -l command-line parameter to load the data. Both parameters can also be specified at the same time. Otherwise, if it is certain that the load data sets contain valid load data, prepared using the current LDAP server schema and the current TDBM database to be loaded, and that the data has not already been loaded into the database, then edit the STATUS member of the JCL data set, set the first record to STATUS P, and then restart the program to load the entries.
Source: LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1859E  Unable to allocate an internal reader: Error error_code, Reason reason_code.

Explanation:  The ldif2ds utility has been unable to allocate an internal reader, needed to submit the load jobs. See the description of dynalloc() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
  Error code from dynalloc()

reason_code
  Reason code from dynalloc()

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD1860I  ldif2ds usage message.

Explanation:  The ldif2ds utility help and usage menu.

In the message text:

utility_name
  Utility name

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
GLD1862E • GLD1863E

Automation: Not applicable.

GLD1862E  The following specified options are ignored when performing phase: options.

Explanation: The ldif2ds utility has been invoked with one or more command-line parameters that do not apply to the requested phases of processing (check, prepare, and load). The extraneous parameters are ignored.

In the message text:
phase
  Processing phases
options
  Ignored command-line parameters

System action: The utility continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that only the parameters that pertain to the requested phases of processing are specified on the utility command line.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1863E  The 'attribute' attribute cannot be used in the entry distinguished name for entry name.

Explanation: The ldif2ds utility encountered an entry which contains an attribute in its relative distinguished name (RDN) that is not allowed to be part of the RDN. The following attributes cannot be used in an entry RDN: aclEntry, aclPropagate, entryOwner, ownerPropagate, ibm-EntryUUID, creatorsName, createTimestamp, modifiersName, modifyTimestamp. A previous message indicates the name of the LDIF file containing the entry.

In the message text:
attribute
  Attribute type

name
  Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the RDN of the entry so that all its attributes are allowed in an RDN. Then restart the program.
The dynamic group URL 'url' on entry 'name' is not valid.

Explanation: The ldif2ds utility encountered a dynamic group entry with a memberURL attribute value that is not supported. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. The format of a dynamic group URL is ldap:///dn?scope?filter, where dn is the distinguished name of the base entry for the search, scope is the search scope, and filter is the search filter. The valid values for the search scope are base, one, and sub. All of the attribute types specified in the search filter must be defined in the LDAP server schema and each assertion value must conform to the matching rule for the associated attribute type. BINARY attribute types cannot be specified in a search filter.

In the message text:

url  Dynamic group URL
name  Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the memberURL attribute contains valid values for the distinguished name, search scope, and search filter. Then restart the program.

An unsupported value 'value' is specified for attribute 'ref' in entry 'name'.

Explanation: The ldif2ds utility encountered a referral entry with a ref attribute value that is not supported by the LDAP server. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. If the value is ", then a 0-length string was specified for the value. This could occur if the attribute is specified without a value.

In the message text:

value  Unsupported attribute value
name  Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
GLD1866E • GLD1867E

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure that the ref attribute contains non-blank values. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1866E  Entry 'parent_name' which is a parent of 'child_name' failed objectclass checking: error_text.
Explanation: The ldif2ds utility encountered a child entry with an objectclass that is not allowed based on the objectclass attribute values in the parent entry. A previous message indicates the name of the LDIF file containing the entry.
In the message text:

  parent_name
     Parent entry distinguished name

  child_name
     Child entry distinguished name

  error_text
     Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the error text in the message to ensure that the indicated parent entry contains the correct objectclasses for the indicated child entry. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1867E  Entry 'cn=localhost' is not allowed an objectclass value of 'ibm-replicationContext'.
Explanation: The ldif2ds utility encountered a cn=localhost entry with the ibm-replicationContext objectclass attribute value. The cn=localhost entry is not allowed to be the root of a replication context. A previous message indicates the name of the LDIF file containing the entry.
System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.
Operator response: None.
GLD1868E  Entry 'name' must be a master server if it has both 'ibm-replicaSubEntry' and 'ibm-replicaGateway' objectclass values.

Explanation: The ldif2ds utility encountered an entry with objectclass attribute values of ibm-replicaSubEntry and ibm-replicaGateway and the ibm-replicaServerIsMaster attribute value is not set to TRUE. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
   Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove either the ibm-replicaSubEntry or ibm-replicaGateway objectclass attribute value or set the ibm-replicaServerIsMaster attribute value to TRUE to designate this server as a master server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1869W  A mismatch is detected between the serverCompatLevel (value) and the database version value (major) in the name backend. The utility checks entries based on the serverCompatLevel setting.

Explanation: The ldif2ds utility detected a mismatch between the serverCompatLevel value in the server configuration file and the database version for the backend identified in the message. The ldif2ds utility does entry checking based on the serverCompatLevel setting which indicates the entries that are supported in the backend.

In the message text:

value
   serverCompatLevel option value
GLD1870E

Entry 'name' requires password policy entry 'pwdname'. The password policy entry was not found.

Explanation: The ldif2ds utility encountered an error processing the entry specified in the message. If the entry has an ibm-pwdIndividualPolicyDN or an ibm-pwdGroupPolicyDN attribute value, the password policy entry specified must exist under the cn=ibmpolicies subtree in the CDBM backend.

In the message text:

name
   Entry distinguished name

pwdname
   Password policy entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add the specified password policy entry to the CDBM backend under the cn=ibmpolicies subtree or update the ibm-pwdIndividualPolicyDN or ibm-pwdGroupPolicyDN attribute values in the entry to specify a valid password policy. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Entry 'name' has a duplicate replication consumer URL 'url'.

Explanation: The ldif2ds utility encountered an entry with an objectclass attribute value of ibm-replicationAgreement that contains a value for ibm-replicaURL that already exists for the replication context. The values for the ibm-replicaURL attribute type under an advanced replication context must all be unique.

In the message text:

name
  Entry distinguished name
url
  Replication consumer URL

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the ibm-replicaURL attribute contains a unique value within the scope of the replication context. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

The replication filter 'value' on entry 'name' is not valid.

Explanation: The ldif2ds utility encountered a replication filter entry with an ibm-replicationFilterAttr attribute value that is not supported. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. The format of a replication filter is: (objectclass=objclass):![attr1][attr2...] where objclass is an objectclass attribute value and attr1, attr2, and so on, is a list of attribute values to filter separated by a comma. The objclass and any attribute values specified in the replication filter entry must be defined in the LDAP server schema.

In the message text:

value
  Filter value
name
  Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
GLD1873E • GLD1874E

Administrator response: Ensure that the `ibm-replicationFilterAttr` attribute value in the replication filter entry is in the correct format. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1873E Unable to decode the 'replicateOperationalAttributes' control found at line `line_number` of `filename`.

Explanation: The `ldif2ds` utility encountered an error decoding the `replicateOperationalAttributes` control. The `replicateOperationalAttributes` control contains base64 encoded values for the `creatorsName`, `createTimestamp`, `modifiersName`, and `modifyTimestamp` operational attribute values.

In the message text:

```
line_number
  Line Number

filename
  LDIF file name
```

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the `replicateOperationalAttributes` control is properly encoded. Then restart the program. If the problem persists, remove the `replicateOperationalAttributes` control from the LDIF file.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD1874E Replication context entry 'name' missing explicit propagating type specification.

Explanation: The `ldif2ds` utility encountered an error processing the entry specified in the message. If a replication context entry is not a suffix level entry, an `aclEntry` and `entryOwner` attribute value must be defined explicitly in that entry.

In the message text:

```
name
  Entry distinguished name

type
  Attribute type
```

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Add the specified attribute type to the entry. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

This section lists the messages issued by the utility programs.

GLD2001I  No Directory Server service has been configured.
Explanation: No LDAP server backends have been configured.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Configure appropriate backends as needed in the configuration profile. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2002I  Directory Server configuration utility has started.
Explanation: The dsconfig utility has started.
System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2003I  Directory Server configuration utility has ended.
Explanation: The dsconfig utility has ended.
System action: The program ends.
Operator response: None.
GLD2004D  GLD2005I

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2004D  The output data set name has been previously used. Existing members may be overwritten and data lost. Do you wish to continue? (yes/no)

Explanation: The output data set specified on the dsconfig command already contains output from a previous run. This prompt is asking the user if they want to overwrite existing members in the output data set. If the output data set is currently being used for an LDAP server, a different output data set should be used for this invocation of the dsconfig utility.

In the message text:

name
Output data set name

System action: The utility continues after a yes response has been entered. The utility ends if the response is no.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Respond by entering either yes or no.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2005I  Terminating upon user request.

Explanation: The dsconfig utility is terminating upon user request.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2006I  dsconfig usage message.
Explanation: The dsconfig utility help and usage menu.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2007E  A blank option was found in file filename and is not allowed.
Explanation: The dsconfig utility has detected a blank option in the input profile.
In the message text:
filename
   File that contains the blank option
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the blank option. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
The value for option name contains non-printable characters.

Explanation: The dsconfig utility has detected that the value of the indicated option contains characters that cannot be printed.

In the message text:

name

Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the value. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

An option was specified for a database backend (type) that is not configured.

Explanation: A database backend option is specified but the corresponding database backend is not configured.

In the message text:

type

Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the database backend option or configure the corresponding database backend. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

ADDRMODE 'value' must be either 31 or 64.

Explanation: The ADDRMODE option must have a value of 31 or 64.

In the message text:
value
  ADDRMODE option value
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Change the ADDRMODE value to either 31 or 64. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2017E  option with value 'current_value' in file filename was previously set to 'original_value'.
Explanation: An option is specified more than once in the file. This option can only be specified once.
In the message text:
  option
    Option name
  current_value
    Current option value
filename
    File that contains the duplicate options
original_value
    Original option value
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Remove all but one of the duplicate options. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD2018E • GLD2019E

GLD2018E  File *filename*: *error_text*

Explanation: An error occurred while processing a file or data set.

In the message text:

*filename*
File or data set associated with the error

*error_text*
Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2019E  Option *option* is not allowed in file *filename*.

Explanation: The indicated option is not allowed in the indicated profile.

In the message text:

*option*
Option name not allowed

*filename*
File containing the incorrect option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD2020E Unable to allocate storage.
Explanation: An attempt to allocate storage was unsuccessful.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Increase the storage available for use by the utility. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2021E The configuration profile has not been specified.
Explanation: The configuration profile name was not specified in the \texttt{dsconfig} command.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Reissue the \texttt{dsconfig} command and specify the configuration profile using the \texttt{-i} command-line parameter.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2022E No network interface has been configured.
Explanation: No \texttt{LISTEN} option was found in the configuration profile.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
GLD203E • GLD2024E

Administrator response: Add one or more appropriate LISTEN options to the configuration profile. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2023E  option in file filename has no input value.
Explanation: A required option is missing.
In the message text:

option
Option name having no input value

filename
File in which option value must be included

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Add the required option to the indicated profile. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2024E  The value for option1 must be different from the value for option2.
Explanation: Values for the indicated options must be unique.
In the message text:

option1
Option name

option2
Option name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: Database directory names cannot be the same for LDBM, CDBM, and file-based GDBM backends. DB2 database user IDs cannot be the same for TDBM and DB2-based GDBM backends. Similarly, DB2 database names must be unique.
Administrator response: Change one of the option values so that the two option values are different. Then restart
the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2025E  Operand missing for command parameter
\textit{parameter}.

Explanation: No value was specified for the indicated \texttt{dsconfig} command-line parameter. This parameter must have
a value.

In the message text:

\texttt{parameter}

Command-line parameter

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Reissue the \texttt{dsconfig} command and either specify a value for the parameter or remove
the parameter from the command (if it is optional).

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2026E  Value \texttt{value} for option \texttt{option} is too long. It must be \texttt{number} characters or less.

Explanation: The \texttt{dsconfig} utility has detected that an option value is longer than the maximum characters allowed
for that option.

In the message text:

\texttt{value}

Option value

\texttt{option}

Option name

\texttt{number}

Maximum option length

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
GLD2027E • GLD2028E

Example: None.

Administrator response: Edit the option value such that its length does not exceed the maximum allowed. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2027E  Command input 'value', is not valid.

Explanation: The dsconfig utility detected an incorrect command-line parameter. Either the parameter is not known or the value specified for the parameter is not supported. See [dsconfig utility] for more information about the dsconfig utility.

In the message text:

value
  Incorrect command input

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Reissue the dsconfig command and either specify a valid value for the parameter or remove the parameter from the command (if it is optional).

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2028E  An internal program error occurred.

Explanation: The dsconfig utility detected an internal program error.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.
GLD2029E  A required option has no input value.

Explanation:  The dsconfig utility detected an option with no value. A previous message indicates the name of the option.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Review earlier messages to determine which option has no value. Provide a correct value for the option. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD2030E  Value 'value' for option option is not valid.

Explanation:  The dsconfig utility has detected that an option value is not valid.
In the message text:

value
  Option value
option
  Option name

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Specify a valid value for the option. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD2031E The SERVERCOMPATLEVEL option must be value or greater when the option option is specified.

Explanation: The usage of the configuration option indicated in the message text requires a minimum setting for the SERVERCOMPATLEVEL configuration option.

In the message text:

- **value**: Option value
- **option**: Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the specified option or update the SERVERCOMPATLEVEL option to the minimum level specified. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2032E The value (value1) specified for option option1 and the value (value2) specified for option option2 are not compatible.

Explanation: The values indicated in the message cannot be specified at the same time in the dsconfig utility input profile(s).

In the message text:

- **value1**: Option value of the first option
- **option1**: Option name of the first option
- **value2**: Option value of the second option
- **option2**: Option name of the second option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify one or both of the options values in the input profiles. Then restart the program.
GLD2256I utility_name: number entries have been processed.

Explanation: The utility has processed the number of entries indicated in the message. If errors are encountered during processing, additional messages are issued to indicate these errors. The number of entries processed may not match the number of entries present in the output LDIF file if errors are encountered during processing.

In the message text:

utility_name
    Utility name

number
    Number of entries processed

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2257I utility_name has completed successfully.

Explanation: The utility has successfully completed.

In the message text:

utility_name
    Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
**GLD2258A • GLD2259I**

Descriptor code: None.
Automation: Not applicable.

---

**GLD2258A**  *utility_name* has failed.

Explanation: The utility has ended after encountering a severe error. Previous messages issued by the utility indicate the actual problem.

In the message text:

*utility_name*
  Utility name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information provided by the previous error messages to correct the error. To obtain additional debug information, specify `-d ALL` on the command line of the utility. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD2259I**  *utility_name* has terminated because there are no entries to process.

Explanation: The utility found no entries in the LDBM, TDBM, or CDBM backend to unload.

In the message text:

*utility_name*
  Utility name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the backend that is to be unloaded contains entries. If necessary, correct the value specified for either the `-s` or the `-n` command line options. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD2260I  ds2ldif usage message.

Explanation: The utility help and usage menu.

In the message text:

utility_name
  Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2262A  There are no TDBM, LDBM, CDBM, or schema backends which contain a subtree or filter DN entry for name.

Explanation: The ds2ldif utility or the LDAP server is unable to find the subtree entry in a TDBM, LDBM, CDBM, or schema backend or the filter entry cannot be found within a TDBM, LDBM, or CDBM backend. The DN is the subtree or filter DN value specified on the -s (subtree DN) or the -q (filter DN) command-line parameter of the utility.

In the message text:

name
  Distinguished name of entry

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the LDAP server configuration file used by the ds2ldif utility includes the subtree or filter entry within a TDBM, LDBM, CDBM, or schema backend. Verify that the TDBM, LDBM, CDBM, or schema backend is configured correctly and that the syntax of the DN specified on the -s (subtree DN) or the -q (filter DN) command-line parameter of the ds2ldif utility is correct. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD2263E  utility_name found more than one backend section. Either use the -s or -n option to specify which TDBM, LDBM, or CDBM section to process or remove all but one of the database sections from the configuration file.

Explanation: If there are more than one TDBM, LDBM, or CDBM backends present in the LDAP server configuration file, it is necessary to specify which backend needs to be unloaded by using the -n or -s command-line parameter on the ds2ldif utility. The utility is unable to determine which TDBM, LDBM, or CDBM backend needs to be unloaded if there are multiple TDBM, LDBM, or CDBM backends in the LDAP server configuration file.

In the message text:

utility_name
  Utility name

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  The ds2ldif utility provides two command-line parameters that are used to specify which TDBM, LDBM, or CDBM backend to process. These two parameters cannot be specified at the same time.

• The -s parameter specifies a subtree DN (distinguished name) whose entries are to be unloaded. The ds2ldif utility selects the TDBM, LDBM, or CDBM backend database section which contains this subtree from the LDAP server configuration file.

• The -n parameter indicates the name of a TDBM, LDBM, or CDBM backend whose entries are to be unloaded. This name is the optional fourth parameter that can be specified on the database option in the LDAP server configuration file. The ds2ldif utility selects the TDBM, LDBM, or CDBM database section with this name from the LDAP server configuration file.

Alternatively, modify the LDAP server configuration file and remove all TDBM, LDBM, or CDBM database sections except the one that needs to be unloaded.

Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD2264E  Unable to write record to output file filename error_code reason_code - error_text

Explanation:  The ds2ldif utility or the LDAP server encountered an error while attempting to write a record to the output file. The output file is either a z/OS UNIX System Services file, a partitioned data set, or a sequential data set that is specified on -o command-line parameter of the ds2ldif utility. The error code, reason code, and error text are returned from one of the following: fputs(), fflush(), or fclose(). See the descriptions of these routines in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

filename
  Output file name

error_code
  Error code from function
GLD2265A

reason_code
   Reason code from function

error_text
   Text corresponding to the error code

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD2265A  There are no TDBM, LDBM, or CDBM backends with name 'name'.

Explanation:  The ds2ldif utility is unable to find a TDBM, LDBM, or CDBM backend in the LDAP server configuration file with the backend name indicated in the message. This backend name is the value specified on the -n command-line parameter of the ds2ldif utility.

In the message text:

name
   Backend name

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Ensure that the LDAP server configuration file used by the ds2ldif utility has a database option for a TDBM, LDBM, or CDBM backend that includes the backend name indicated in the message. The backend name is the optional fourth parameter on the database configuration option. Verify that the TDBM, LDBM, or CDBM backend that is to be unloaded is correctly configured. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD2266I  Unloading directory data from backend named backend_name under subtree DN: entry_name.

Explanation: The ds2ldif utility is unloading the entries under the indicated subtree DN (distinguished name) in the TDBM, LDBM, or CDBM backend with the indicated name.

In the message text:

backend_name
  Backend name

entry_name
  Distinguished name

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2267I  Unloading the cn=schema entry.

Explanation: The ds2ldif utility is unloading the LDAP server schema entry.

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2268E  Unable to open file filename: error_code/reason_code - error_text

Explanation: The ds2ldif utility encountered an error while attempting to open the indicated file for writing. See the description of fopen() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

filename
  File name
GLD2269I  •  GLD2270E

error_code
  Error code from fopen()

reason_code
  Reason code from fopen()

error_text
  Text corresponding to the error code

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the message to correct the error. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD2269I  ds2ldif utility is starting.
Explanation:  The ds2ldif utility has started.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD2270E  Option 'option' is specified more than once with different values.
Explanation:  The ds2ldif utility encountered an error because it detected multiple specifications of the same command-line parameter with different values. The utility is not able to determine which value to use for the parameter.
In the message text:

  option
      Command-line parameter

System action:  The program ends.
Operator response:  None.
GLD2271E  Do not specify both of the following options: 'option1' and 'option2'.

Explanation: The ds2ldif utility encountered an error because it detected that the two indicated parameters are both specified on the utility command line, but they are mutually exclusive. These two command-line parameters cannot be specified at the same time. See [ds2ldif utility] for more information about the ds2ldif utility.

In the message text:

option1  Command-line parameter

option2  Command-line parameter

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Remove one of the mutually exclusive parameters from the command line of the ds2ldif utility. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2272I  ds2ldif version version.release, Service level level.

Explanation: The ds2ldif utility with version, release, and service level indicated in the message is running.

In the message text:

version  Utility version
release  Utility release
level  Utility service level
GLD2273D • GLD2274I

System action: The program continues.
Operator response: None.

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD2273D Enter the LDAP administrator password to unload the directory:

Explaination: The ds2ldif utility has determined that it is necessary to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62), either because the LDAP server is already running or because the -r parameter is specified on the ds2ldif command line. When the utility uses the unloadRequest extended operation, it must first bind to the targeted LDAP server using the LDAP root administrator distinguished name, specified in the adminDN option in the LDAP server configuration file. The password used for the bind can be specified by the -w parameter on the ds2ldif command line, else by the adminPW option in the LDAP server configuration file. If neither of these are set, this prompt is displayed to obtain the password.

System action: The utility waits for a response from the user.
Operator response: None.

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Enter the LDAP root administrator password.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD2274I Connecting to the LDAP server with the backend to unload.

Explanation: The ds2ldif utility has determined that it is necessary to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the wanted data. This is either because the -r parameter is specified on the ds2ldif command line or because the backend to be unloaded cannot successfully be started by the ds2ldif utility. Before attempting the unloadRequest extended operation, a connection must be established with the targeted LDAP server. This ensures that the LDAP server with the backend that is to be unloaded is running.

System action: The program continues.
Operator response: None.

System programmer response: None.
User response: None.
GLD2275I • GLD2276A

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD2275I Unloading directory data by using the unloadRequest extended operation.

Explanation: The ds2ldif utility is sending the unloadRequest extended operation (OID 1.3.18.0.2.12.62) to the LDAP server that is running to directly unload the wanted directory data. The utility sends the necessary information, including the values of the subtree DN (-s utility command-line parameter), the backend name (-n parameter), and the LDIF output file name (-o parameter) on the unloadRequest extended operation to the LDAP server.

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD2276A The unloadRequest extended operation encountered an error: error_code - error_message.

Explanation: The unloadRequest extended operation (OID 1.3.18.0.2.12.62) encountered an error on the targeted LDAP server while attempting to unload the wanted directory data.

In the message text:

```
error_code
   unloadRequest server error code

error_message
   unloadRequest server error message
```

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
**Administrator response:** Use the information returned from the targeted LDAP server in the message to correct the error. The error code is a standard LDAP protocol return code defined in RFC 2251 or in the /usr/lpp/ldapclient/include/ldap.h file. The information provided in the error message should be sufficient for determining the exact problem that was encountered on the LDAP server while attempting to perform the unloadRequest extended operation. It might be necessary to correct the LDAP server configuration file, restart the LDAP server, and then restart the ds2ldif utility with different command line options. If the problem persists, contact the service representative and provide the LDAP server configuration file and the ds2ldif command that was attempted.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**Explanation:** An unexpected error was encountered while attempting to BER encode the unloadRequest extended operation (OID 1.3.18.0.2.12.62).

In the message text:

```
error_code
  unloadRequest encode error
```

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Examine the ds2ldif command line options and verify that all values are printable characters. To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the utility. The error code is an internal error code that occurred during the encoding of the unloadRequest extended operation. If the problem persists, contact the service representative and provide the ds2ldif debug trace, the LDAP server configuration file, and the ds2ldif command that was attempted.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**Explanation:** An unexpected error was encountered while attempting to BER decode the unloadResponse extended operation (OID 1.3.18.0.2.12.63) that was received from the targeted LDAP server. The unloadResponse extended operation is not valid.

In the message text:

```
error_code
  unloadResponse decode error
```

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.
GLD2279A

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** The error code is an internal return code. To determine why the LDAP server constructed an unloadResponse extended operation that is not valid, turn on LDAP debug tracing by specifying `-d ALL` on both the `ds2ldif` utility and the LDAP server command lines (or use the LDAP server DEBUG operator modify command). Then restart the utility and the LDAP server if it is not running. If the problem persists, contact the service representative and provide the LDAP server and `ds2ldif` debug traces, the LDAP server configuration file, and the `ds2ldif` command that was attempted.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD2279A  Error encountered in getpass(): error_code/reason_code - error_text

**Explanation:** An error was encountered while attempting to obtain the password for the LDAP root administrator so that an unloadRequest extended operation can be attempted. See the description of `getpass()` in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/knowledgecenter/SSLTBW_2.2.0/com.ibm.swg.zos.bks5r3001.doc/ctoc.html) for more information about the error.

In the message text:

```plaintext
error_code
  Error code from getpass()

reason_code
  Reason code from getpass()

error_text
  Text corresponding to the error code
```

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** `getpass()` is not supported in a TSO or batch environment. If the `ds2ldif` utility is run in those environments, you must specify the LDAP root administrator password using either the `adminPW` option in the LDAP server configuration file or the `-w` parameter on the `ds2ldif` utility command line. If you do not want to specify the LDAP root administrator’s password in the clear, then run the `ds2ldif` utility from OMVS so that `getpass()` works correctly. If a problem with `getpass()` is encountered in an OMVS environment, verify that a password is entered. If the problem persists in an OMVS environment, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD2280A  A fully qualified LDIF output filename must be specified on the -o option.

Explanation: The ds2ldif utility encountered an error in the LDIF output file name specified on the -o parameter on the utility command line. The ds2ldif utility requires a fully qualified file name on the -o parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDIF output file name that is specified on the -o command-line parameter is in one of the following formats:

- Fully qualified z/OS UNIX System Services file name
  Example: /var/ldap/output.1dif

- Fully qualified file in a sequential data set
  Example: //USER.OUTPUT.LDIF

- Fully qualified file in a partitioned data set
  Example: //USER.OUTPUT(LDIF)

- Fully qualified file specified as a DD card in JCL
  Example: DD:OUTNAME

The fully qualified UNIX System Services file names must start with an / and represent the path name from the root directory. The fully qualified sequential and partitioned data set names must start with the following two characters: // When ds2ldif is invoked from the shell, quotation marks must be used around the data set name. For example, the sequential data set name above would be specified as "/" USER.OUTPUT.LDIF". The DD card specified in JCL must start with the following three characters: DD: However, a DD card cannot be used to specify the LDIF output file name if an unloadRequest extended operation is to be performed. Correct the -o parameter on the command line of the ds2ldif utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2281A  Error return_code reported by ldap_extended_operation().

Explanation: The ds2ldif utility encountered an error in ldap_extended_operation() while sending the unloadRequest extended operation to the targeted LDAP server.

In the message text:

return_code
  Return code from ldap_extended_operation()

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.
GLD2282A

Example: None.

Administrator response: An error occurred in the ldap_extended_operation() routine. The following are the common client errors:

81 The network connection to the targeted LDAP server failed.
89 A parameter that is specified on ldap_extended_operation is not valid.
90 Insufficient storage is available.
92 The LDAP protocol version must be V3 to initiate the unloadRequest extended operation.
252 An unbind request is issued for the LDAP handle.

The following are the common server errors that are returned on the ldap_extended_operation() routine:

2 The server does not support the unloadRequest extended operation.
12 A critical server control is either not recognized or is not supported for the unloadRequest extended operation.
53 The server is unable to perform the requested unloadRequest extended operation.

Depending upon the return code from ldap_extended_operation(), it might be necessary to correct the LDAP server configuration file, restart the LDAP server, and restart the ds2ldif utility. To obtain more debug information, turn on LDAP debug tracing by specifying -d ALL on both the ds2ldif utility and the LDAP server command lines (or use the LDAP server DEBUG operator modify command). Then restart the utility and the LDAP server if it is not running. If the problem persists, contact the service representative and provide the LDAP server and ds2ldif debug traces, the LDAP server configuration file, and the ds2ldif command that was attempted.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD2282A An unexpected error occurred during the running of ds2ldif.

Explanation: The ds2ldif utility encountered an unexpected error during its processing.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the program. Analyze the debug trace output and correct the error. If the problem persists, contact the service representative and provide the ds2ldif debug trace, the LDAP server configuration file, and the ds2ldif command that was attempted.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD2283A  A DD card is not allowed to be specified when performing an unloadRequest extended operation.

Explanation: The ds2ldif utility does not allow a DD: card to be specified on the -o option when performing an unloadRequest extended operation. The ds2ldif utility performs an unloadRequest extended operation when the LDAP server is already running or the -r option is specified on the ds2ldif command line.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the -o parameter on the command line of the ds2ldif utility to no longer specify the DD: card. To use the same LDIF output file name that is specified on the DD card, update the -o option to specify that file name. If the unloadRequest extended operation is not wanted, stop the LDAP server and do not specify the -r option on the ds2ldif command line. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2284A  There is no TDBM, LDBM, or CDBM backend present in the LDAP server configuration file to unload.

Explanation: When the ds2ldif utility is invoked without the -n or -s option, the utility searches for a TDBM, LDBM, or CDBM backend in the LDAP server configuration file. The utility was unable to find a TDBM, LDBM, or CDBM backend to unload.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the correct LDAP server configuration file has been specified on the -f option or the CONFIG DD card in JCL. The only backends that can be unloaded with the ds2ldif utility are the schema, LDBM, TDBM, and CDBM backends. If the schema backend is to be unloaded, specify the -s option with a value of cn=schema. If a TDBM, LDBM, or CDBM backend is to be unloaded, either make sure that there is only a single TDBM, LDBM, or CDBM backend in the LDAP server configuration file or use the -n or -s option to indicate which one of the TDBM, LDBM, or CDBM backends to unload. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD2285E The 'option1' option requires the 'option2' option.

Explanation: The ds2ldif utility encountered an error because it detected that option1 was missing required option2. If option1 is specified then option2 must be specified. See ds2ldif utility for more information about the ds2ldif utility.

In the message text:

option1
  Command-line parameter

option2
  Command-line parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove option1 from the ds2ldif command line or specify both option1 and option2 on the ds2ldif command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2286I Filtering directory data being unloaded using filters in filter DN: name.

Explanation: The ds2ldif utility is using filters that are specified in the ibm-replicationfilterattr attribute values contained in the indicated filter DN (distinguished name). These filters may prevent some entries from being unloaded or may remove some attribute types and values from some unloaded directory entries.

In the message text:

name
  Entry distinguished name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD2287E  Unable to format the type attribute value in entry name.

Explanation:  The ds2ldif utility is unable to unload the entry because the attribute type and value for the entry could not be formatted into LDIF format. This formatted data is written to an internal buffer before it is written to the output LDIF file.

In the message text:

<table>
<thead>
<tr>
<th>type</th>
<th>Attribute type</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Entry distinguished name</td>
</tr>
</tbody>
</table>

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Verify that the attribute values for the entry contain appropriate data so that they can be properly formatted to the output LDIF file. If necessary, perform an LDAP search request to retrieve the entry and the attribute values to verify them. Then restart the program. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD2288E  Unable to decrypt the attribute attribute value in entry name - 'error_text'.

Explanation:  The ds2ldif utility is unable to unload the entry because the encrypted attribute value cannot be decrypted. The ds2ldif utility decrypts AES or DES encrypted attribute values when unloading them so that they are portable to other servers. The decrypted attribute values are base64 encoded to better protect them.

In the message text:

<table>
<thead>
<tr>
<th>attribute</th>
<th>Attribute type</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Entry distinguished name</td>
</tr>
<tr>
<td>error_text</td>
<td>Error message text</td>
</tr>
</tbody>
</table>

System action:  The program ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  If the attribute value is encrypted in AES or DES and the key label resides in the ICSF
CKDS, verify that ICSF is started and the user invoking the ds2ldif utility is able to access that key label. If the attribute value is encrypted in AES or DES and the key label resides in the LDAPKEYS data set, verify that the -k option for the ds2ldif utility specifies the correct location of the key labels. The error message text in this message may also provide additional information about why the decryption failed. See "LDAP server reason codes" on page 424 for more information. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

Encrypt all passwords that are presently unencrypted, AES encrypted, or DES encrypted (yes/no)?

Explanation: The db2pwden utility replaces any clear text (unencrypted), AES encrypted, or DES encrypted userPassword attribute values that exist in the directory with encrypted or hashed userPassword values based upon the setting of the pwEncryption option in the LDAP server configuration file. This message prompts the user of the db2pwden utility to ensure that encryption or hashing of the userPassword attribute values is really wanted.

System action: If the response is yes, y, or Y, the utility continues. Otherwise, the utility ends without encrypting or hashing userPassword attribute values.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: None.
Module: None.
Example: None.

Administrator response: If clear text (unencrypted), AES encrypted, or DES encrypted userPassword attribute values in the directory are to be encrypted or hashed in the directory, enter yes, y, or Y. Otherwise, enter any other response to end the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

No base is defined

Explanation: The utility encountered an error because a base DN (distinguished name) is not specified for the utility. The base DN can be specified on the -b command-line parameter of the utility or set on the LDAP_BASEDN environment variable. If set both ways, the command line value is used.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: None.
Module: None.
Example: None.

Administrator response: Specify the base DN (distinguished name) either by using the -b command-line parameter of the utility or by setting it on the LDAP_BASEDN environment variable. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2403A db2pwden ends without encrypting passwords.

Explanation: The db2pwden utility has ended and no passwords have been encrypted or hashed. Either the user responded to the utility prompt to end the utility or an error occurred during utility processing.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the utility ended due to an error, refer to any previous error messages and correct any errors that are identified. To obtain additional debug information, specify `-d ALL` on the command line of the utility. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2410A Memory allocation failed.

Explanation: An attempt to allocate storage was unsuccessful.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Increase the storage available for use by the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2411A The only supported mechanisms are EXTERNAL, GSSAPI, CRAM-MD5, and DIGEST-MD5.

Explanation: The utility encountered an error because an incorrect authentication mechanism is specified on the `-m` or `-S` command-line parameter.

System action: The program ends.
Operator response: None.
GLD2414A  •  GLD2417A

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the -m or -S command-line parameter by specifying a valid authentication mechanism. The only supported authentication mechanisms are EXTERNAL, GSSAPI, CRAM-MD5, or DIGEST-MD5. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2414A  Error reported by LDAP client initialization.

Explanation: The ds2ldif utility encountered an error while attempting to complete the necessary initialization required for connecting to the targeted LDAP server. This occurred when the ds2ldif utility was attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62).
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure that the targeted LDAP server is running before starting the ds2ldif utility and performing an unloadRequest extended operation. Verify that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2417A  Error return_code reported parsing LDAP results.

Explanation: The ds2ldif utility encountered an error while attempting to parse LDAP results from the targeted LDAP server when performing the unloadRequest extended operation. The return code is from the ldap_result() routine. See the description of this routine in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.
In the message text:
return_code
  Return code from parsing results
System action: The program ends.
Operator response: None.
System programmer response: None.
GLD2425A  A user name is required when doing a DIGEST-MD5 bind.

Explanation: When the -m DIGEST-MD5 or -S DIGEST-MD5 command-line parameter of the db2pwden utility is specified, the -U (user name) command-line option must also be specified.

System action: The program ends.

Administrator response: Specify the user name on the -U command-line parameter of the db2pwden utility or change the -m or -S command-line parameter. Then restart the utility.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2426A  Debug value is not valid.

Explanation: The utility encountered an error with the debug value that is specified on the -d command-line parameter of the utility. See the documentation for the utility for more information about valid debug values.

System action: The program ends.

Administrator response: Specify a valid debug value on the -d command-line parameter of the utility or remove the parameter. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD2429A  Credentials are not valid for the specified LDAP server.

**Explanation:** The ds2ldif utility encountered an error while attempting to perform the LDAP root administrator authentication for the `unloadRequest` extended operation. The credentials specified on the `-w` command-line parameter are not valid for the `adminDN` configuration option.

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Specify the correct credentials for the `adminDN` in the LDAP server configuration file on the `-w` command-line parameter of the ds2ldif utility. Then restart the program.

**Source:** LDAP

---

GLD2435E  Unable to retrieve LDAP results: `error_code` -`error_text`

**Explanation:** The utility encountered an error while retrieving results from the targeted LDAP server. If running the ds2ldif utility, this occurred while attempting to perform an `unloadRequest` extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of `ldap_result()` in [z/OS IBM Tivoli Directory Server Client Programming for z/OS](https://www.ibm.com/support/docview.len?rs=6100&uid=swg21389343) for more information about the error.

In the message text:

- `error_code`
  - Error code from `ldap_result()`

- `error_text`
  - Error text corresponding to the error code

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Verify that the targeted LDAP server is still running when the request is sent and that TCP/IP is working properly between the utility and the LDAP server. To obtain additional debug information, specify `-d ALL` on the command line of the program. Then restart the utility. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.
GLD2436E  Unable to parse LDAP server results: error_code - 'error_text'.

Explanation: The utility encountered an error while attempting to parse results from the targeted LDAP server. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of ldap_parse_result() in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:

error_code
   Error code from ldap_parse_result()

error_text
   Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running and that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2437E  Unable to authenticate with targeted LDAP server: error_code - 'error_text'.

Explanation: The utility encountered an error while attempting to authenticate to the targeted LDAP server. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_code
   Error code from targeted LDAP server

error_text
   Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
GLD2438E  GLD2439E

Administrator response: If running the ds2ldif utility, verify that the correct LDAP administrator password is specified in the LDAP server configuration file or on the -w command line parameter of the ds2ldif utility. Verify that the correct adminDN is specified in the LDAP server configuration file used by the ds2ldif utility. Ensure that the LDAP administrator's account is not locked and the LDAP administrator's password is not expired. If the LDAP administrator's account is locked or the password has expired, the account must be unlocked or the password must be changed. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2438E  Additional error information: error_text

Explanation: The targeted LDAP server returned an additional reason code message to the utility indicating a more specific reason for the request error. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_text
  Error text from ldap_parse_result()

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If running the ds2ldif utility, verify that the correct LDAP root administrator password is specified in the LDAP server configuration file or on the -w command line parameter of the ds2ldif utility. Verify that the correct adminDN is specified in the LDAP server configuration file used by the ds2ldif utility. Ensure that the LDAP root administrator's account is not locked and the LDAP root administrator's password is not expired. If the LDAP root administrator's account is locked or the password has expired, the account must be unlocked or the password must be changed. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2439E  Unable to parse password policy control response: error_code - error_text.

Explanation: The utility encountered an error while parsing the password policy control response from the targeted LDAP server. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of ldap_parse_pwdpolicy_response() in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:

error_code
  Error code from ldap_parse_pwdpolicy_response()

error_text
  Error text corresponding to the error code
GLD2440E • GLD2441W

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure that the password policy response control is returned correctly from the targeted LDAP server and it is encoded properly. To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2440E  Password policy control error response: error_text

Explanation: The targeted LDAP server returned a password policy control error message to the utility. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_text
  Password policy control error text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: The password policy control error message indicates the reason why authentication may have failed on the targeted LDAP server. If running the ds2ldif utility, verify that the password for the LDAP root administrator is valid and the account is not locked. After the LDAP root administrator’s password is reset and the account is unlocked, restart the utility.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2441W  Password policy control warning response: warning_text

Explanation: The targeted LDAP server returned a password policy control warning message to the utility. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:
GLD2442W

warning_text
   Password policy control warning text

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The password policy control warning message indicates an informational message returned by the targeted LDAP server. If running the ds2ldif utility, this occurred while authenticating as the LDAP root administrator to the targeted LDAP server. The LDAP root administrator's password should be changed to allow continued access to the LDAP server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD2442W Time before password expiration is \textit{num\_days days and num\_hours\_num\_minutes\_num\_seconds}.

Explanation: The targeted LDAP server returned a password policy control warning message to the utility indicating that the password is set to expire in the amount of time indicated in the message. If running the ds2ldif utility, this occurred while attempting to perform an \texttt{unloadRequest} extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

\texttt{num\_days}
   Number of days

\texttt{num\_hours}
   Number of hours

\texttt{num\_minutes}
   Number of minutes

\texttt{num\_seconds}
   Number of seconds

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The authenticated user's password should be changed within the time indicated in this message to allow continued access to the targeted LDAP server. If the password is not changed within the time indicated in the message, the user's account could be locked or exceed the configured grace login limit on the LDAP server. If running the ds2ldif utility, the authenticated user is the LDAP root administrator.

Source: LDAP
Routing code: None.
GLD2443E Unable to connect to targeted LDAP server: error_code - "error_text"

Explanation: The utility encountered an error while attempting to connect to the targeted LDAP server during authentication. If running the ds2ldif utility, this occurred while attempting to perform an unloadRequest extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of ldap_sasl_bind() in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:

error_code
   Error code from ldap_sasl_bind()

error_text
   Error text corresponding to the error code

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running and that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify -d ALL on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
Chapter 3. TDBM messages (3000)

This section lists the messages issued by the TDBM backend.

GLD3301E  Unable to load type backend named name because attribute type attribute is not defined.

Explanation: The LDAP server or utility found an attribute type used by an entry in the indicated backend is not defined in the LDAP schema.

In the message text:

type
Backend type

name
Backend name

attribute
Undefined attribute type

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server or utility without the backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then restore the backend section and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3302E  Unable to load type backend named name because object class objectclass is not defined.

Explanation: The LDAP server or utility found an object class used by an entry in the indicated backend is not defined in the LDAP schema.

In the message text:

type
Backend type

name
Backend name

objectclass
Undefined object class

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the
GLD3303E  •  GLD3304E

srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the backend is needed, restart the LDAP server or utility without the backend section in the LDAP server configuration file and add the missing object class to the LDAP server schema. Then restore the backend section and restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3303E  TDBM backend specified for a non-TDBM database.

Explanation: The LDAP server or utility found that the TDBM backend DLL, GLDBTD31/GLDBTD64, is specified on a database option in the LDAP server configuration file but the type parameter on the option is not TDBM.

System action: The TDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the database option in the LDAP server configuration file so that the DLL and backend type match. Restart the program if it ended or if the TDBM backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3304E  type initialization terminated because DB2 is not available.

Explanation: The LDAP server or utility cannot initialize the indicated backend because DB2 is not available.

In the message text:

*type*  Backend type

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
GLD3305E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the DB2 problem and ensure that DB2 is active. Restart the program if it ended or if the backend is needed.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3305E Native return code code, SQL state state, SQL message: text

Explanation: The LDAP server or utility encountered an error while performing a DB2 database operation. This message provides information about the error. See IBM Information Management Software for z/OS Solutions Information Center for more information about DB2 errors.

In the message text:

    code
    Native return code

    state
    SQL state

    text
    SQL message text

System action: If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. Contact your DB2 database administrator if you are unable to resolve the problem.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD3306E  Error code code received for ODBC function name.

Explanation: The LDAP server or utility encountered an error for an ODBC (Open Database Connectivity) function. This message may be followed by additional messages providing further information about the error. See IBM Information Management Software for z/OS Solutions Information Center for more information about ODBC errors.

In the message text:

code  
  ODBC error code

name  
  ODBC function that returned the error code

System action: If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. Contact your DB2 database administrator if you are unable to resolve the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3307E  Unable to create key identifier: error_code/reason_code - error_text

Explanation: The LDAP server or utility encountered an error when creating a key identifier. See the description of pthread_key_create() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

thread_key_create()  
  error_code from pthread_key_create()

reason_code  
  Reason code from pthread_key_create()

thread_key_create()  
  error_text from pthread_key_create()

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.
GLD3308E  An internal type backend error has occurred.

Explanation: The LDAP server or utility has detected an internal programming error.

In the message text:

type
  Backend type

System action: If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3309E  Unable to get thread-specific value: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to retrieve a thread-specific value. See the description of pthread_getspecific() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
  Error code from pthread_getspecific()

reason_code
  Reason code from pthread_getspecific()

error_text
  Error text corresponding to the error code

System action: If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the
configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD3310E**

Unable to set thread-specific value: error_code/reason_code - error_text

**Explanation:** The LDAP server or utility is unable to set a thread-specific value. See the description of pthread_setspecific() in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/docview/document/6043) for more information about the error.

In the message text:

- **error_code**
  - Error code from pthread_setspecific()

- **reason_code**
  - Reason code from pthread_setspecific()

- **error_text**
  - Error text corresponding to the error code

**System action:** If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD3311E • GLD3312I

GLD3311E  Database access unavailable for type backend named name because DB2 is terminating.

Explanation: The DB2 database manager is terminating and the db2Terminate option in the LDAP server configuration file is set to recover or restore (this is the default value).

In the message text:

- **type**
  - Backend type
- **name**
  - Backend name

System action: The LDAP server continues to run but access to the indicated backend is not available until the DB2 database is available. Client requests to that backend are rejected.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the DB2 database manager.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD3312I  Database access available for type backend named name because DB2 has restarted.

Explanation: The DB2 database manager is restarting and the LDAP server can once more access the indicated backend.

In the message text:

- **type**
  - Backend type
- **name**
  - Backend name

System action: The LDAP server continues. Client requests to that backend are now processed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD3313E  Column *name* is not defined for the *owner.*table table.

Explanation: The LDAP server or utility found that a required column is not defined for the indicated DB2 table.

In the message text:

*name*  
Column name

*owner*  
Database owner

*table*  
Database table

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Review the SPUFI script used to create the DB2 database and ensure that all tables and columns used by the IBM Tivoli Directory Server for z/OS are defined. A DB2 database created using the SPUFI script shipped in the Integrated Security Services LDAP server must be migrated before it can be used by the IBM Tivoli Directory Server for z/OS. Correct or migrate the DB2 database. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3314E  Column *name* in the *owner.*table table is not defined correctly.

Explanation: The LDAP server or utility has found that a required column in the indicated DB2 table is not defined correctly. Either a non-modifiable column has the wrong length or a modifiable column has a length less than 8.

In the message text:

*name*  
Column name

*owner*  
Database owner

*table*  
Database table

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Review the SPUFI script used to create the DB2 database and ensure that the column sizes are acceptable for the IBM Tivoli Directory Server for z/OS. A DB2 database created using the SPUFI script shipped in the Integrated Security Services LDAP server may not have acceptable column sizes for the IBM Tivoli Directory Server for z/OS. Correct the DB2 database. Then restart the program if it ended or if the backend is needed.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD3315E  type database version major.minor is not supported.

Explanation:  The DB_VERSION value in the DB2 DIR_MISC table for this backend is set to an unsupported database version for this level of the LDAP server. The serverCompatLevel configuration option sets the DB_VERSION value in the DB2 DIR_MISC table.

In the message text:

type  Backend type
major  Database version number
minor  Database version number

System action:  The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  The DB_VERSION value in the DB2 DIR_MISC table is not correct for this release of the z/OS LDAP server. The DB_VERSION value may have been updated when running this DB2-based backend on a later release of the z/OS LDAP server because the serverCompatLevel value was set or allowed to default to the incorrect value. See the serverCompatLevel option in Customizing the LDAP server configuration in IBM Tivoli Directory Server Administration and Use for z/OS for information about the server compatibility levels supported at each z/OS LDAP server release. Also, see Fallback from a TDBM or DB2-based GDBM backend in z/OS IBM TDS to an earlier z/OS IBM TDS version for fallback procedures to run on the later release. Then restart the program if it ended or if the backend is needed.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD3316E  Attribute type identifier 'name' is too long.

Explanation: The LDAP server or utility found an attribute type in the schema whose identifier is too long. The TDBM database limits the maximum length of attribute type identifiers to 200 characters.

In the message text:

name  
Attribute type identifier

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the program ended or if the backend is needed, restart the LDAP server without the TDBM backend section in the LDAP server configuration file and modify the LDAP server schema to specify a shorter name for the attribute type. Then restore the backend section in the configuration file and restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3317E  Object class identifier 'name' is too long.

Explanation: The LDAP server or utility found an object class in the schema whose identifier is too long. The TDBM database limits the maximum length of object class identifiers to 200 characters.

In the message text:

name  
Object class name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the program ended or if the backend is needed, restart the LDAP server without the TDBM backend section in the LDAP server configuration file and modify the LDAP server schema to specify a shorter name for the object class. Then restore the backend section in the configuration file and restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3318W  Database suffix 'suffix' is not configured.

Explanation: A backend directory contains a suffix entry that is not in the list of suffixes specified by the suffix options for this backend in the LDAP server configuration file.

In the message text:

   suffix
   Database suffix distinguished name

System action: Backend initialization continues, but directory entries under this suffix are not accessible.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If access to the entries using this suffix is needed, add a suffix option specifying this suffix to the backend section of the LDAP server configuration file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3319E  Database suffix 'directory_suffix' overlaps configured suffix 'configured_suffix'.

Explanation: The LDAP server or utility found that a backend directory contains a suffix entry that is an ancestor or descendant of a suffix in the list of suffixes for this backend. The list of suffixes is specified by the suffix options for this backend in the LDAP server configuration file.

In the message text:

   directory_suffix
   Distinguished name of existing suffix in directory

   configured_suffix
   Configured suffix distinguished name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the LDAP server configuration file either by removing the suffix option for the
GLD3320E  suffix that is overlapped or by changing it to match the suffix that exists in the directory. Then restart the program if it ended or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3320E  type backend named name database XCF data record is not valid.

Explanation: The LDAP server cannot decode a cross-system notification containing information about a change to a database.

In the message text:

- **type**
  - Backend type

- **name**
  - Backend name

System action: The LDAP server continues, but the backend is not notified of the change. As a result, the backend database on this LDAP server may be out of sync with the other LDAP servers in the cross-system group. Thus, this server may return different results for an LDAP request than the other servers. There are two additional consequences for a TDBM backend. A persistent search is not notified if the database change is within the scope of the search. Also, no replication of the change to replica servers for this backend is performed if this server is the database owner in the cross-system group.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: For a TDBM database, restart the LDAP server to resynchronize the TDBM backend with the other servers in the cross-system group. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3321E  The DIR_REPENTRY.CHNGDN column is smaller than the DIR_ENTRY.DN column.

Explanation: The LDAP server or utility found that a column in a DB2 table is too small. The size of the CHNGDN column in the DIR_REPENTRY table must be at least as large as the size of the DN column in the DIR_ENTRY table in the DB2 database for this backend.

System action: The backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
GLD3322E  The attribute attribute for replication entry 'name' is not valid.

Explanation: A replica entry contains an attribute whose value is not supported. Basic replication is not performed for the replica identified by this entry until the value is corrected.

In the message text:
attribute
    Attribute type
name
    Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the attribute value in the replica entry to correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD3323E  Unable to add 'name' to the replication list.

Explanation: The LDAP server is unable to add the indicated replica entry to the replica list. Basic replication is not performed for the replica identified by this entry until the error is corrected. A previous message may indicate the cause of the failure.

In the message text:
name
    Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.
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Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the earlier message to correct the error. If there is no earlier message, use the LDAP server DEBUG operator modify command to turn on the ERROR debug level and then reissue the operation. The output may assist in locating and correcting the problem.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3324E Unable to wait for network event: error_code/reason_code - error_text

Explanation: The LDAP server is unable to wait for a network event. See the description of selectex() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
Error code from selectex()

reason_code
Reason code from selectex()

error_text
Error text corresponding to the error code

System action: The LDAP server continues, however, TDBM basic replication is not available.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Restart the program if basic replication is needed. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3325E Replication entry 'name' requires SSL but SSL support is not configured.

Explanation: The replicaUseSSL attribute is set to TRUE in the replica entry but SSL support is not configured in the LDAP server configuration file. Basic replication is not performed for the replica identified by this entry until the error is corrected.

In the message text:

name
Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.
GLD3326E

Replication failed with host:port: Error error_code - error_text.

Explanation: The LDAP server is unable to replicate a directory modification to the indicated replica.

In the message text:
- host: Replica server host name
- port: Replica server port number
- error_code: Error code
- error_text: Error text corresponding to the error code

System action: The LDAP server continues. The failing replication request is periodically tried again until basic replication is successful.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. The associated replica entry should be deleted from the directory if replication is no longer wanted for the failing replica. Deleting and then adding the replica entry resets the replication status so that only future directory modifications are replicated to the replica.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
Unable to create LDAP handle for replication with host:port.

**Explanation:** The LDAP server is unable to create an LDAP handle for use with the indicated replica. This indicates the ldap_init() or ldap_ssl_init() routine failed.

In the message text:

- **host**
  - Replica server host name

- **port**
  - Replica server port number

**System action:** The LDAP server continues. Basic replication does not occur for that replica.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the replica host name and port are correct. If not, modify them in the associated replica entry. If SSL is being used, verify that SSL is configured in the LDAP server configuration file and is available.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

Additional information: text

**Explanation:** This message provides additional information for a replication error. The text is the error message returned by the replica server.

In the message text:

- **text**
  - Additional text

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to help correct the error.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD3329E  Group owner for type backend named name cannot be contacted.

Explanation: The LDAP server is unable to contact the LDAP server that owns the indicated database in the LDAP cross-system group in the sysplex.

In the message text:

- **type**
  - Backend type

- **name**
  - Backend name

System action: The LDAP server continues. Changes to the backend database may not be replicated to the replica servers for the backend.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the owning system by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the DISPLAY XCF operator modify command for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF command. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD3330E  Unable to decrypt change request: Error_text.

Explanation: The LDAP server encrypts pending replication requests when the request contains attributes subject to encryption or hashing based on the pwEncryption or the secretEncryption option settings (for example, userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw attribute values) and the secretEncryption option is specified in the LDAP server configuration file. The request must then be decrypted before it is sent to a replica server. This error indicates the LDAP server is unable to decrypt the request.

In the message text:

- **Error_text**
  - Error text

System action: The LDAP server continues, however, TDBM basic replication may stall because this replication request cannot be processed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the encryption key label specified in the secretEncryption option in the LDAP
server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3331E Unable to decrypt replica credentials: error_text.

Explanation: The LDAP server encrypts the password specified by the replicaCredentials attribute in a replica entry if the secretEncryption option is specified in the LDAP server configuration file. The password must then be decrypted before the LDAP server can bind to the replica server. This error indicates the LDAP server is unable to decrypt the replica password.

In the message text:

error_text

System action: The LDAP server continues. Basic replication does not occur for that replica.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the encryption key label specified in the secretEncryption option in the LDAP server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3332I type backend named name schema migration has started.

Explanation: A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. The LDAP server has begun to merge the TDBM backend schema into the LDAP server schema.

In the message text:

   type
   Backend type

   name
   Backend name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
GLD333I | GLD334E

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD333I**  *type* backend named *name* schema migration has ended.

**Explanation:** A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. The LDAP server has completed merging the TDBM backend schema into the LDAP server schema.

In the message text:

- `type`: Backend type
- `name`: Backend name

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

---

GLD3334E  Schema migration has failed. *error_text*.

**Explanation:** A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. An error occurred while the LDAP server was merging the TDBM backend schema into the LDAP server schema.

In the message text:

- `error_text`: Error text

**System action:** The TDBM backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.

**Operator response:** None.

**System programmer response:** None.
GLD3335I • GLD3336E

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error. Then restart the program if it stopped or if the backend is needed.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3335I The option option is not supported in multi-server mode with DB_VERSION less than 4. The option is ignored.

Explanation: The option indicated in the message is specified in the LDAP server configuration file. However, the database for this backend is running in multi-server mode and has a DB_VERSION less than 4. This indicates that the TDBM database is being shared with an earlier version of the LDAP server. The configuration option is not supported in this environment.

In the message text:

option
   LDAP server configuration option

System action: The LDAP server continues. The option is ignored.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Remove the option from the LDAP server configuration file.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3336E Unable to decode a type entry (name) for persistent search, rc=code.

Explanation: The LDAP server is unable to decode an entry passed in a notification from another LDAP server in the sysplex group.

In the message text:

type
   Backend type
name
   Entry distinguished name
code
   LDAP return code

System action: The LDAP server continues. Any persistent searches do not receive this notification and thus the
entry is not returned if it would have matched the persistent search.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Extract the entry contents and apply the contents to whichever application requested the persistent search. Make sure that the server has enough storage.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD337E  Backend *backend_name* on LDAP server *server_name* in the sysplex group has different persistent search settings than this server.

Explanation: This LDAP server does not have persistent search enabled but another server in the sysplex group does have persistent search enabled. All LDAP servers in a sysplex group must have the same persistent search settings.

In the message text:

*backend_name*  Backend name
*server_name*  LDAP server name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: To disable persistent search on the server named in the message, set the *persistentSearch* option to *off* in the LDAP server configuration file on that server. To enable persistent search on this server, set the *persistentSearch* option to *on* in the LDAP server configuration file on this server. The LDAP server containing the configuration file that is changed must be restarted to put the change into effect.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD3338E  The *option* option is not supported in multi-server mode with DB_VERSION less than 4.

Explanation: The option indicated in the message is specified in the LDAP server configuration file. However, the TDBM database for this backend is running in multi-server mode and has a DB_VERSION less than 4. This indicates that the TDBM database is being shared with an earlier version of the LDAP server. The configuration option or its value is not supported in this environment. If the option is:
• **pwEncryption** - AES encryption cannot be used. DES encryption can be used if the DES keys are stored in ICSF. All other encryption methods are supported.

• **secretEncryption** - cannot be used. Even when this option is not specified, there can be problems using the **secretKey** and **replicaCredentials** attributes in this environment.

• **pwCryptCompat** - cannot be set to **no**. The earlier LDAP server only supports the EBCDIC version of the crypt() algorithm.

In the message text:

```plaintext
option
  LDAP server configuration option

System action: The backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Remove the option or change its value in the LDAP server configuration file. Restart the program if it ended or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
```

---

**GLD3339W**  No DB2 statistics gathered on table `{owner.table}`.

**Explanation:** The LDAP server did not find statistics for the specified TDBM table. This may be an indication that the DB2 RUNSTATS utility has not been successfully run.

In the message text:

```plaintext
owner
  Database owner

table
  Database table

System action: The LDAP server continues, however, database queries may not have optimal performance.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the DB2 RUNSTATS utility has been successfully run. See [Performance tuning](#) for more information about running the RUNSTATS utility for the LDAP server.

Source: LDAP
```
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3340I  Found num_values frequent values for column column of table owner.table. Table cardinality is cardinality and least frequent value has a frequency of frequency.

Explanation: The LDAP server has successfully found RUNSTATS information in the DB2 catalog for the indicated TDBM database. The number of frequent values found is governed by the options given to the RUNSTATS utility. The table cardinality indicates the number of rows in the table. The frequency of the least frequent value indicates how many times that value appears in the table. If the frequency is a large percentage of the table cardinality, it may indicate that there are more frequent values to be gathered. In this case the DB2 RUNSTATS utility can be rerun, with updated options to gather more frequent values for the column indicated above. See Performance tuning for more information about running the RUNSTATS utility for the LDAP server.

In the message text:
num_values
  Number of frequent values
column
  Database column
owner
  Database owner	
Table
  Database table
cardinality
  Database table cardinality
frequency
  Lowest frequency

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: The information in this message may be useful for tailoring the use of the RUNSTATS utility for improved performance in the DB2-based backend.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3341W  Insufficient row statistics gathered on column column of table owner.table.

Explanation: The LDAP server did not find any row statistics for the specified columns in the DB2 catalog. This may indicate that the DB2 RUNSTATS utility was run without the options suggested to gather statistics for the indicated table and columns.

In the message text:
GLD3342I

column
   Database column
owner
   Database owner
table
   Database table

System action: The LDAP server continues, however database queries may not have optimal performance.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Review the DB2 RUNSTATS utility input. If necessary, update the utility input to include the options to gather statistics for the indicated table and columns. See Performance tuning for more information about running the RUNSTATS utility for the LDAP server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3342I  type backend named name is enabled for partition based key assignment.

Explanation: The specified backend of the LDAP server or utility assigns keys to new directory entries using the partition based key assignment algorithm.
In the message text:

   type
      Backend type
   name
      Backend name

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD3343E  The partitioning information stored in type backend named name is no longer consistent with the information stored in the DB2 database for this backend.

Explanation: The partitioning information of the DIR_SEARCH table space stored in memory by the specified backend is no longer consistent with the information stored in the DIR_EID table by that backend. The user must have repartitioned the DIR_SEARCH table space and then started another LDAP server that is sharing the same DB2 database.

In the message text:

- type  Backend type
- name  Backend name

System action: The program continues. The request fails. Future entries added to this backend are not guaranteed to succeed until the program is restarted.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Restarting the LDAP server or utility updates the partition control blocks for the specified backend, making them consistent with the information stored in the DIR_EID table. If the DIR_SEARCH table space has indeed been repartitioned by the user, you should unload the data from the specified backend using the ds2ldif utility, recreate the database belonging to this backend, and reload the data back using the ldif2ds utility. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3344E Unable to add new entries to the DB2 database in type backend named name because all unique keys have been exhausted.

Explanation: The LDAP server or utility is unable to accept new entries because there are no unique keys available.

In the message text:

- type  Backend type
- name  Backend name

System action: The program continues, but the request fails. Future entries added to this backend do not succeed.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Restart the program. If the problem persists, contact the service representative.
GLD3345E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3345E Unable to process the DB2 database belonging to type backend named name: error code error_code.

Explanation: The LDAP server or utility is unable to process the DB2 database belonging to the specified backend. The error code has the following values:

1  The DIR_EID table is required by the partitioned entry identifier assignment algorithm, but it is not defined in the DB2 database belonging to the specified backend. This scenario should never happen. If it does happen, this is most likely the result of someone dropping the DIR_EID table from the DB2 database manually. Important entry identifier information is lost if the DIR_EID table is dropped.

2  The value detected for the PARTITIONED_EID column of the DIR_MISC table in the DB2 database belonging to the specified backend is not valid. The PARTITIONED_EID column, besides being a NULL column, only allows values 'T' or 'F'.

3  The number of entry identifiers that have been assigned and recorded in the DB2 database belonging to the specified backend has exceeded the maximum number of entry identifiers allowed by the LDAP server.

In the message text:

  type
  Backend type

  name
  Backend name

  error_code
  Error code

System action: The specified backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the problem. For error codes 1 and 3, consider unloading the data from the specified backend using the ds2ldif utility, rebuilding the DB2 database belonging to this backend, and reloading the data back using the ldif2ds utility. Restart the program if it did not start or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD3346E Unable to initialize the entry identifier assignment algorithm for type backend named name.

Explanation: The LDAP server or utility is unable to initialize the entry identifier assignment algorithm. A previous message indicates the reason for the failure.

In the message text:

  type
    Backend type

  name
    Backend name

System action: The specified backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the problem. Restart the program if it did not start or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3347W Group owner for type backend named name is busy, retrying.

Explanation: A request was sent from this LDAP server to the LDAP server that owns the indicated database in the LDAP cross-system group in the sysplex. The database owner is either too busy to respond to the request or it is waiting for a DB2 connection.

In the message text:

  type
    Backend type

  name
    Backend name

System action: The LDAP server continues and retries the request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the owning system by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the DISPLAY XCF operator modify command for the owning LDAP server and verify that this server is really the group owner. Either fix the DB2 connection problem on the owning server or restart the owning...
LDAP server if there is no response to the DISPLAY XCF command. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3350E The name backend requires that the serverCompatLevel (value) match the database version value (major).

Explanation: The TDBM backend has detected that it is a sysplex replica server and that the serverCompatLevel value in the server configuration file for this server does not match the database version for the backend identified in the message.

In the message text:

name Backend name
value serverCompatLevel option value
major database version number

System action: The specified backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify the serverCompatLevel configuration option value is the same for all servers sharing the backend. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD3351E The 'type' backend named 'name' requires an EBCDIC encoding scheme. Encoding Scheme 'codeset' was found for table 'owner.table'.

Explanation: The LDAP server has detected that a DB2 database table for a TDBM or GDBM backend was created with a non-EBCDIC encoding scheme. The LDAP server only supports DB2 database tables that are created with an EBCDIC encoding scheme.

In the message text:

type Backend type
name Backend name
codeset
   Encoding scheme code set

owner
   Database owner

table
   Database table

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The DB2 database must be re-created with an EBCDIC encoding scheme.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Chapter 4. LDBM messages (6000)

This section lists the messages issued by the LDBM backend.

GLD6001E Insufficient storage available for database control block.

Explanation: The LDAP server or utility is unable to allocate storage.

System action: Depending on where the error occurs, the LDAP server might end. If the server does not end, the LDBM backend might not start or some LDBM function might not be available.

Operator response: Increase the storage available for use by the LDAP server or utility and restart the program. If the problem persists, contact the service representative.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If you are running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6004E Unable to get status for database file filename: error_code/reason_code - error_text

Explanation: The LDAP server is unable to get status information about the indicated database file. See the description of fstat() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

filename
  Database file name

error_code
  Error code from fstat()

reason_code
  Reason code from fstat()

error_text
  Error text corresponding to the error code

System action:
• If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
• If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDBM server continues, but requests to the affected backend fail.
• Otherwise, the fileTerminate option in the backend section of the LDAP server configuration determines what the server does. If the fileTerminate option is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.
GLD6005E • GLD6006E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server BACKEND operator modify command. Then retry the request.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6005E type backend named name disabled.

Explanation: The LDAP server is unable to load the database for a backend and has put the backend in disabled state. A previous message indicates the reason for the failure.

In the message text:

*type*
  Backend type

*name*
  Backend name

System action: The LDAP server continues, however, the backend can no longer process requests.

Administrator response: Use the information in the earlier message to correct the error. Restart the LDAP server if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6006E Unable to load type backend named name because attribute type attribute is not defined.

Explanation: The LDAP server or utility found an attribute type used by an entry in the indicated backend is not defined in the LDAP server schema.

In the message text:

*type*
  Backend type

*name*
  Backend name
attribute
  Undefined attribute type

System action: The backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server without the backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD6007E Unable to load type backend named name because object class objectclass is not defined.

Explanation: The LDAP server or utility found an object class used by an entry in the indicated backend is not defined in the LDAP server schema.

In the message text:

type
  Backend type

name
  Backend name

objectclass
  Undefined object class

System action: The backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server without the backend section in the LDAP server configuration file and add the missing object class to the LDAP server schema. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.
GLD6008E • GLD6009E

Descriptor code: None.
Automation: Not applicable.

GLD6008E Unable to load type backend named name because database file filename is not valid.

Explanation: The LDAP server or utility is unable to decode an entry in the indicated database file. This indicates that the database file has been modified and is no longer usable.

In the message text:

* type
  Backend type

* name
  Backend name

* filename
  Database file name

System action:
- If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the fileTerminate option in the backend section of the LDAP server configuration determines what the server does. If the fileTerminate option is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is marked as disabled and requests to the affected backend fail.
- Otherwise, the fileTerminate option in the backend section of the LDAP server configuration determines what the server does. If the fileTerminate option is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If the backend is needed, restore the indicated database file from a backup. Then restart the program. If you need to determine which entry in the database file is not valid, restart the LDAP server with -d ERROR specified on the command line.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6009E Unable to open directory path: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to open the indicated file directory. See the description of opendir() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

* path
  LDBM database directory path
GLD6010E

Error code
Error code from opendir()

Reason code
Reason code from opendir()

Error text
Error text corresponding to the error code

System action:
• If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
• If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the directory exists and can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6010E Unable to read directory path: error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to read the indicated file directory. See the description of readdir_r() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
path
LDBM database directory path

error_code
Error code from readdir_r()

reason_code
Reason code from readdir_r()

error_text
Error text corresponding to the error code

System action:
• If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
• If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the directory exists and can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

**GLD6011E**  Unable to delete database file *filename* error_code/reason_code - error_text

Explanation: The LDAP server or utility is unable to delete the indicated database file. See the description of remove() in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com) for more information about the error.

In the message text:

*filename*  
LDBM database file name

erro,r_code  
Error code from remove()

reason_code  
Reason code from remove()

erro,r_text  
Error text corresponding to the error code

System action:

- If the error occurs during backend initialization, the backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.
System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD6012E  Unable to open database file filename: error_code/reason_code - error_text

Explanation: The LDAP server is unable to open the indicated database file. See the description of open() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
filename
- Database file name
error_code
- Error code from open()
reason_code
- Reason code from open()
error_text
- Error text corresponding to the error code

System action:
- If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the fileTerminate option in the backend section of the LDAP server configuration determines what the server does. If the fileTerminate option is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server BACKEND operator modify command. Then retry the request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6013E  Unable to read database file filename: error_code/reason_code - error_text

Explanation: The LDAP server is unable to read the indicated database file. The error occurred in the read() or readv() routine. See the description of these routines in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
filename
- Database file name
error_code
- Error code from routine
GLD6014E

*reason_code*
- Reason code from routine

*error_text*
- Error text corresponding to the error code

**System action:**
- If the error occurs during backend initialization, the backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to *ignore*, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to *terminate* (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the *fileTerminate* option in the backend section of the LDAP server configuration determines what the server does. If the *fileTerminate* option is set to *terminate*, the program ends. If the *fileTerminate* option is set to *recover* (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error. Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server BACKEND operator modify command. Then retry the request.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD6014E Unable to write database file *filename* error_code/reason_code - *error_text*

**Explanation:** The LDAP server is unable to write the indicated database file. The error occurred in the *write()* or *writev()* or *close()* routine. See the description of these routines in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/docview.wss?rs=96&context=DB2V93&lang=en) for more information about the error.

In the message text:

*filename*
- Database file name

*error_code*
- Error code from routine

*reason_code*
- Reason code from routine

*error_text*
- Error text corresponding to the error code

**System action:**
- If the error occurs during backend initialization, the backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to *ignore*, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to *terminate* (this is the default if the configuration option is not specified), the program ends.
If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.

Otherwise, the `fileTerminate` option in the backend section of the LDAP server configuration determines what the server does. If the `fileTerminate` option is set to `terminate`, the program ends. If the `fileTerminate` option is set to `recover` (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server `BACKEND` operator modify command. Then retry the request.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6015E  type version number file_type files are not supported.

Explanation: The indicated file format is not supported by the current level of the LDAP server.

In the message text:

```
type
  Backend type
number
  File version number
file_type
  File type
```

System action:
- If the error occurs during initialization, the backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs after initialization, the program continues but replication is not performed.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Either restore the LDAP server to the level used to create the database file or remove the indicated backend from the LDAP server configuration file. Restart the LDAP server if it ended or if the backend is needed.

Source: LDAP
Routing code: None.
GLD6016I  •  GLD6020E

Descriptor code: None.
Automation: Not applicable.

GLD6016I  Suffix suffix in database file filename is not configured and will be ignored.

Explanation: A backend directory contains a suffix entry that is not in the list of suffixes specified by the suffix options for this backend in the LDAP server configuration file.

In the message text:

suffix
   Database suffix distinguished name
filename
   Database file name

System action: Backend initialization continues, but directory entries under this suffix are not accessible.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If access to the entries using this suffix is needed, add a suffix option specifying this suffix to the backend section of the LDAP server configuration file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6020E  Suffix suffix is not configured but the checkpoint file is not empty.

Explanation: A suffix has been removed from the LDBM backend section of the LDAP server configuration file, but there are one or more checkpoint records to be processed for that suffix.

In the message text:

suffix
   Database suffix distinguished name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Add a suffix option with the indicated value to the LDBM backend section of the LDAP server configuration file. Then restart the LDAP server. After LDAP server initialization is complete and the checkpoint records have been processed, you can stop the LDAP server and remove the added suffix option if you
do not need that suffix. The LDAP server can now be started without the indicated suffix in the LDAP server configuration file.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6021W  Group 'name' contains an incorrect memberURL attribute value.

Explanation: The dynamic group membership URL cannot be evaluated. The format of a dynamic group URL is ldap://dn?scope?filter, where dn is the distinguished name of the base entry for the search, scope is the search scope, and filter is the search filter. The valid values for the search scope are base, one, and sub. All of the attribute types specified in the search filter must be defined in the LDAP server schema and each assertion value must conform to the matching rule for the associated attribute type. BINARY attribute types cannot be specified in a search filter.

In the message text:

name
  Dynamic group distinguished name

System action: The LDAP server continues. The dynamic group is not used in determining group memberships.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Modify the dynamic group URL to contain valid values for the base distinguished name, search scope, and search filter.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6022E  Time limit exceeded while loading type backend named name from group owner.

Explanation: The LDAP server waits a maximum of 60 seconds after requesting a copy of the indicated backend database from the LDAP server that owns the database in the cross-system group. This message indicates that the owning LDAP server is not responding to the request.

In the message text:

type
  Backend type

name
  Backend name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
Operator response: None.
System programmer response: None.
GLD6023E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the owning system for this backend by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue DISPLAY XCF for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF command. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

Database owner for type backend named name cannot be contacted rc=return_code.

Explanation: The LDAP server is unable to obtain a current copy of the database indicated in the message from the LDAP server that owns the database in the cross-system group. The return code displayed in the message is either from the attempt to send an XCF message to the database owner or from the reply from the owner if it could not send back the database.

In the message text:

type
  Backend type

name
  Backend name

return_code
  LDAP return code

System action:
• If the error occurs during initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
• If the error occurs after initialization, the program continues. Update operations to the LDAP server probably fail. Search operations may succeed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the owning system for this backend by issuing the LDAP server DISPLAY XCF operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue DISPLAY XCF for the owning LDAP server and verify that this server is really the group owner. Restart the owning LDAP server if there is no response to the DISPLAY XCF command. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.
GLD6024E  type backend named name database XCF data record is not valid.

Explanation: A cross-system database record received by the indicated backend is not valid.

In the message text:

type
  Backend type

name
  Backend name

System action:

- If the error occurs during initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
- If the error occurs after initialization, the program continues but some operations may fail. A follow-on message indicates the effect on the program.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the follow-on message to resolve the problem. Restart the program if it ended or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6025E  Suffix list for type backend named name does not match owner suffix list.

Explanation: The suffix list defined for the indicated backend in the LDAP server configuration file is not the same as the suffix list defined in the LDAP server configuration file of the LDAP server that owns the cross-system group resources.

In the message text:

type
  Backend type

name
  Backend name

System action: The backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.
GLD6026E • GLD6028E

Module:  None.

Example:  None.

Administrator response:  Ensure that the same suffixes are specified in the suffix option in the backend section of the LDAP server configuration file of each LDAP server in the cross-system group. Restart the program if it ended or if the backend is needed.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD6026E  Unable to send type backend named name database update to group members.

Explanation:  The LDAP server is unable to send a database update to the other members of the cross-system group. The indicated backend directory is successfully updated on this LDAP server, but the other members in the group do not have the updated database entry. A previous message indicates the reason for the failure.

In the message text:

type
   Backend type

name
   Backend name

System action:  The LDAP server continues, but an LDAP operation for the indicated backend may return different results depending on if it is processed by this LDAP server or by another LDAP server in the cross-system group.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the earlier message to correct the error. Then restart the LDAP server on each of the other systems to refresh its copy of the directory.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD6028E  type directory path does not match group owner directory owner_path.

Explanation:  The directory path specified by the databaseDirectory option in the backend section of the LDAP server configuration file is not correct. When multi-server mode is active, the directory path must be the same for this backend in each LDAP server in the cross-system group.

In the message text:

type
   Backend type

path
   Directory path in the LDAP server

owner_path
   Directory path in the owning LDAP server
System action: The backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the `databaseDirectory` option in the backend section of the LDAP server configuration file to specify the same directory path for each LDAP server in the cross-system group. Restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6029E  LDBM backend specified for a non-LDBM database.

Explanation: The LDAP server or utility found that the LDBM backend DLL, GLDBLD31 or GLDBLD64, is specified on a `database` option in the LDAP server configuration file but the `type` parameter on the option is not LDBM.

System action: The LDBM backend does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the `database` option in the LDAP server configuration file so that the DLL and backend type match. Restart the program if it ended or if the LDBM backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6030E  Unable to truncate database file `filename`: `error_code`/`reason_code` - `error_text`

Explanation: The LDAP server is unable to truncate the indicated database file. See the description of `ftruncate()` in [z/OS XL C/C++ Runtime Library Reference](https://www.ibm.com/support/knowledgecenter/en:SSS7H_8.1.0/ix811016tag126708181412397_8.1.0.pdf) for more information about the error.

In the message text:

`filename`  Database file name
GLD6031E

error_code
   Error code from ftruncate()

reason_code
   Reason code from ftruncate()

error_text
   Error text corresponding to the error code

System action: If the fileTerminate option in the backend section of the LDAP server configuration file is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Correct the file system problem. Verify that the file can be accessed by the LDAP server. Then restart the program if it has ended or change the backend to read/write mode using the LDAP server BACKEND operator modify command.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6031E  Setting backend named name to read-only because fileTerminate option is set to 'recover'.

Explanation: A write error is encountered while an LDAP server file-based backend is writing to the file system. Since the fileTerminate option in the backend section of the LDAP server configuration file is set to recover or the option is not specified at all, the LDAP server forces the backend directory into read-only mode.

In the message text:

name  Backend name

System action: The LDAP server continues to run. The backend contents cannot be modified.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions to the database directory and files. A previous message indicates the reason for the failure.

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the earlier message to correct the file system error. Then issue the LDAP server BACKEND operator modify command to change the backend to read/write mode.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD6032A  Terminating LDAP server because fileTerminate option is set to 'terminate' in backend named name.

Explanation: A write error is encountered while an LDAP server file-based backend is writing to the file system. Since the fileTerminate option in the backend section of the LDAP server configuration file is set to terminate, the program is ending. A previous message indicates the reason for the failure.

In the message text:

name

Backend name

System action: The program ends.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions on the database directory and files.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the file system error. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6033I  Committing changes to database for type backend named name.

Explanation: The indicated LDAP server backend is going to commit changes in its checkpoint file to its database files. This can occur periodically during normal processing or when the server is shutting down. See Database commit processing for more information about file-based backend committing.

In the message text:

type

Backend type

name

Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD6034I  Completed committing changes to database for type backend named name.

Explanation: The indicated LDAP server backend committed changes in its checkpoint file to its database files. This can occur periodically during normal processing or when the server is shutting down. See Database commit processing for more information about file-based backend committing.

In the message text:

- **type** Backend type
- **name** Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

GLD6035E  Unable to commit changes to database for type backend named name, rc=code.

Explanation: The indicated LDAP server file-based backend failed to commit changes in its checkpoint file to its database files. A previous message indicates the reason for the failure. The contents of the backend are still there but the changes present in the checkpoint file were not successfully added to the appropriate database files. See Database commit processing for more information about file-based backend committing.

In the message text:

- **type** Backend type
- **name** Backend name
- **code** LDAP return code

System action: If the fileTerminate option in the backend section of the LDAP server configuration file is set to terminate, the program ends. If the fileTerminate option is set to recover (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions on the database directory and files.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.
GLD6036W • GLD6037E

**Administrator response:** Use the information in the earlier message to correct the file system error. Then restart the program if it has ended or change the backend to read/write mode using the LDAP server BACKEND operator modify command.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD6036W**  
*type* backend named *name* database owner is busy, retrying.

**Explanation:** A request was sent from this LDAP server to the LDAP server that owns the database in the cross-system group. The database owner is either too busy to respond to the request or it is waiting for a DB2 connection.

In the message text:

- *type* backend type
- *name* Backend name

**System action:** The LDAP server continues and retries the request.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** If the database owner is waiting for a DB2 connection, either fix the DB2 connection problem or shut down the LDAP server that owns the database.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD6037E**  
*Value* value for attribute *type* in replication entry *name* is not valid.

**Explanation:** The replica entry contains an attribute value that is not supported. See [Basic replication](#) for more information about the attribute and its values.

In the message text:

- *value* Attribute value
- *type* Attribute type that contains value
- *name* Replica entry distinguished name

**System action:** The LDAP server continues to run. Basic replication is not performed to the replica server identified by this entry.

**Operator response:** None.

**System programmer response:** None.
GLD6038E  GLD6039E

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Modify the replica entry to correct the error.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6038E  Unable to add 'name' to the replication list.
Explanation: The LDAP server is unable to synchronize the directory tree with the replication progress file.

In the message text:

name
   Entry distinguished name

System action: The LDAP server continues. Basic replication is not performed to the replica server identified by this entry.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Resynchronize the replica server. See Recovering from basic replication out-of-sync conditions for more information.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6039E  Unable to wait for network event: error_code/reason_code - error_text
Explanation: The LDAP server is unable to wait for a network event. See the description of selectex() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
   Error code from selectex()
reason_code
   Reason code from selectex()
error_text
   Error text corresponding to the error code

System action: The LDAP server continues, but basic replication is not performed.
Operator response: None.
System programmer response: None.
GLD6040E  Replication entry 'name' requires SSL but SSL support is not configured.

Explanation: The indicated replica entry specifies TRUE for the replicaUseSSL attribute but SSL support is not configured in the LDAP server configuration file.

In the message text:

name
  Replica entry distinguished name

System action: The LDAP server continues. Basic replication is not performed to the replica server identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either configure SSL support in the LDAP server configuration file and then restart the LDAP server, or modify the value of the replicaUseSSL attribute to FALSE.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6041E  Replication failed with host:port: Error error_code - error_text.

Explanation: The LDAP server is unable to replicate a directory modification to the indicated replica server.

In the message text:

host
  Replica server host name

port
  Replica server port number

error_code
  Error code

error_text
  Error text corresponding to the error code

System action: The LDAP server periodically retries the failing replication request until replication is successful.
GLD6042E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response:
- If the replica server is down, then restart the replica server.
- If the replica credentials are not valid, then correct either the LDAP server configuration file on the replica server or the replica entry on this LDAP server. The distinguished name and password specified in the replica entry must match the values specified in the backend section of the LDAP server configuration file on the replica server. See Basic replication for more information about replica credentials.
- If the operation cannot take place because the replica server is missing updates, then resynchronize the replica server. See the Recovering from basic replication out-of-sync conditions section in the Basic replication chapter of z/OS IBM Tivoli Directory Server Administration and Use for z/OS for more information.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6042E Unable to create LDAP handle for replication with host:port.

Explanation: The LDAP server is unable to create an LDAP handle for use with the indicated replica server. Either the ldap_init() or the ldap_ssl_init() routine failed. See the descriptions of ldap_init() or ldap_ssl_init() in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:
host
Replica server host name
port
Replica server port number

System action: The LDAP server continues. Basic replication does not occur for the indicated replica server.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the replica host name and port are correct. If not, modify the replica entry to correct the values. If SSL is being used, verify that SSL is configured in the LDAP server configuration file and is available.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD6043E  Additional information: error_text

Explanation:  This message provides additional information for a replication error. The text is the error message returned by the replica server.

In the message text:

  error_text
  Additional error text

System action:  The LDAP server continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Use the information in the message to correct the error.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD6044E  Unable to decrypt replica credentials: text.

Explanation:  The LDAP server encrypts the password specified by the replicaCredentials attribute in a replica entry if the secretEncryption option is specified in the LDAP server configuration file. The password must then be decrypted before the LDAP server can bind to the replica server. The LDAP server is unable to decrypt the replica password.

In the message text:

  text
  Error text

System action:  The LDAP server continues. Basic replication does not occur to this replica server. If the error occurs while adding or modifying a replica entry, the operation fails.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Verify that the encryption key label specified in the secretEncryption option in the LDAP server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD6045E  Replica object name does not have corresponding progress table entry.

Explanation: The LDAP server has found a replica entry for which there is no replication progress information in the replica progress file.

In the message text:

name
Replica entry distinguished name

System action: The LDAP server continues. Basic replication does not occur to the replica server identified by this replica entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Resynchronize the replica server. See Recovering from basic replication out-of-sync conditions for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6046E  Progress table entry uuid does not have corresponding Replica object.

Explanation: The LDAP server detected data for a replica in the progress file that does not have a corresponding replica entry in the directory for this backend. The ibm-entryUUID of each replica entry is kept in the progress file to associate the progress data with the replica to which it pertains.

In the message text:

uuid
Replica entry ibm-entryUUID

System action: The LDAP server continues. The data for the replica is deleted from the progress file and replication to that replica server does not occur.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Search the backend for the specified ibm-entryUUID value to locate the replica entry for the replica. Delete and add the replica entry to restart basic replication to the replica.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD6047E Unexpected state of replica type file, attempting recovery.

Explanation: The LDBM backend maintains several types of files containing replication information. When one of these files is changed, the current version of the file is renamed and eventually deleted when the new version of the file is created. The backend has found an old version of the file when it is not expected.

In the message text:

- type
  Type of replica file

System action: The LDAP server tries to correct the error and continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD6048E Partial record read from file filename length=amount.

Explanation: The LDAP server is not able to read an entire record from the replication operations progress file. In the message text:

- filename
  Replication operations progress file

- amount
  The amount of the record that was read

System action:
- If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
- If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed with basic replication, the replica servers for this backend need to be resynchronized. See Recovering from basic replication out-of-sync conditions for more information. You might need to first delete the file displayed in the message. If basic replication is not needed, then stop the LDAP server if it is running, delete the indicated file, and restart the server.

Source: LDAP
GLD6050E • GLD6051I

Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6050E   File filename missing.

Explanation: The replication progress file is not present when the replication queue file is present. Both files are needed for basic replication processing.

In the message text:
filename
   Missing file name

System action:

- If the error occurs during backend initialization, the backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
- If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the backend is needed with basic replication, the replica servers for this backend need to be resynchronized. See Recovering from basic replication out-of-sync conditions for more information. You might need to first delete the replication queue file. If basic replication is not needed, then stop the LDAP server if it is running, delete the replication queue file, and restart the server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD6051I  No database changes to commit for type backend named name.

Explanation: The indicated backend has no changes to commit in its checkpoint file. See Database commit processing for more information about file-based backend committing.

In the message text:

  type
   Backend type
  name
   Backend name

System action: The LDAP server continues.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD6052E** Unable to unload data from LDBM backend named *name* because *file* cannot be found.

**Explanation:** The *ds2ldif* utility found a *new* or *old* version of the LDBM database file indicated in the message, but not the *db* version of the file. This indicates that part of the directory in the backend to be unloaded may be missing. The unload cannot proceed. The *new* and *old* files are temporary versions of the database file created during checkpoint replay processing, when the database is updated using the contents of the checkpoint file. The temporary files are removed when the final updated *db* database file is created. For some reason, this process must not have completed the last time it occurred.

In the message text:

*name*
   Backend name

*file*
   Database file name

**System action:** The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has write access to the file directory specified by the *databaseDirectory* option in the named LDBM backend section of the LDAP server configuration file. Start the LDAP server, which attempts to fix the problems in the database files. Then restart *ds2ldif* using the -r option to force *ds2ldif* to use an *unloadRequest* extended operation to unload the requested entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD6053E** Unable to load directory data for *type* backend named *name* because of an inconsistent commit state.

**Explanation:** The utility found that the checkpoint file was committed while processing the LDBM or CDBM database files. This might result in a partial load of the updates committed in the checkpoint file resulting in an inconsistent state. See [Database commit processing](#) for more information about file-based backend committing.

In the message text:

*type*
   Backend type

*name*
   Backend name

**System action:** The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the LDAP server is running, issue the COMMIT operator modify command to force a commit of all file-based backends. This merges all updates in the file-based checkpoint files into

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
Chapter 5. GDBM, advanced replication, and ldapdiff messages (8000)

This section lists the messages issued by the GDBM backend ("GDBM backend messages"), advanced replication ("Advanced replication messages" on page 312), and the ldapdiff utility ("ldapdiff utility messages" on page 372).

GDBM backend messages

GLD8001E Unable to load the GDBM database because attribute type 'attribute' is not defined.

Explanation: An attribute type that is used by an entry in the GDBM directory is not defined in the LDAP server schema.

In the message text:

attribute

Undefined attribute type

System action: The GDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the GDBM backend is needed, restart the LDAP server without the GDBM backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then, restore the GDBM backend section in the configuration file and restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8002E Unable to load the GDBM database because object class 'objectclass' is not defined.

Explanation: An object class that is used by an entry in the GDBM directory is not defined in the LDAP server schema.

In the message text:

objectclass

Undefined object class

System action: The GDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
GLD8003E  GDBM backend specified for a non-GDBM database.

Explanation: The GDBM backend DLL, GLDBGD31, or GLDBGD64, is specified on a database option in the LDAP server configuration file but the type parameter on the option is not GDBM.

System action: The GDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

Advanced replication messages

GLD8501E  Unable to connect to replica 'host_name' on port port_number. Verify that the replica is started.

Explanation: The LDAP server is unable to establish a connection to the consumer server and port number that is specified in the message.

In the message text:

*host_name*
  - LDAP host name

*port_number*
  - LDAP port number
**System action:** The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the consumer server is started or contact the operator to start the consumer server. Ensure that the consumer server information in the `ibm-replicaURL` attribute value of the replication agreement entry is correct.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**Explanation:** The current status of the specified replication context entry is displayed in this message. In the message text:

- `context_name`: Replication context entry distinguished name
- `repl_type`: Replication type
- `repl_state`: Replication state
- `repl_serverId`: Replication server ID
- `repl_subentry_name`: Replica subentry distinguished name
- `num_agreements`: Number of replication agreements under replication context
- `referral_list`: Replication referral list

**System action:** The LDAP server continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the replication context entry is configured properly and is working as expected.

**Source:** LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8503W  The DN of the credential entry 'credential_name' defined for the replication agreement 'agreement_name' cannot be found.

Explanation:  The supplier server credentials entry that contains authentication information that is used to bind with the consumer server cannot be found. The supplier server credentials entry is specified in the ibm-replicaCredentialsDN attribute value in the replication agreement entry.

In the message text:

credential_name
  Credentials entry distinguished name

agreement_name
  Replication agreement entry distinguished name

System action:  The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Verify that the supplier server credentials entry distinguished name that is specified in the replication agreement entry by the ibm-replicaCredentialsDN attribute value is correct and the entry exists. See Credentials entries for information about the supplier server credentials entry.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8504E  The credential entry 'credential_name' defined for the replication agreement 'agreement_name' is not valid.

Explanation:  The object class of the supplier server credentials entry defined in the ibm-replicaCredentialsDN attribute value for the replication agreement entry is not valid. The only supported object class values for supplier server credential entries are ibm-replicationCredentialsSimple and ibm-replicationCredentialsExternal.

In the message text:

credential_name
  Credentials entry distinguished name

agreement_name
  Replication agreement entry distinguished name

System action:  The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response:  None.
System programmer response:  None.
User response:  None.
GLD8505E • GLD8506I

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Ensure that the correct entry is specified in the ibm-replicationCredentialsDN attribute value of the replication agreement entry. Verify that the object class for the supplier server credentials entry is ibm-replicationCredentialsSimple or ibm-replicationCredentialsExternal. See [Credentials entries] for more information about the supplier server credentials entry.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8505E The credential entry 'credential_name' is in use and cannot be deleted.

Explanation: The supplier server credentials entry specified in the message cannot be deleted because it is referenced by a replication agreement entry in the ibm-replicaCredentialsDN attribute value.

In the message text:

**credential_name**

Credentials entry distinguished name

System action: The LDAP server continues however the requested delete client operation is not successful.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that the entry being deleted is not already referenced in the ibm-replicaCredentialsDN attribute value of any replication agreement entries. Either delete the replication agreement entry or modify the ibm-replicaCredentialsDN attribute value so that there are no longer any references to the entry that is being deleted. Then retry the delete client operation.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8506I Replication agreement agreement_name/context DN: context_name/state: repl_state ibm-replicaURL: repl_url ibm-replicaCredentialsDN: credentials_name ibm-replicationFilterDN: filter_name ibm-replicaScheduleDN: schedule_name/bind-info: bind_dn="bind_name", method=bind_type/connection-status: connected=conn_state, connection type=conn_type/agreement-status: last changeID sent=changeId, errors logged=error_count, on hold=on_hold/pending change count: pending_count

Explanation: The status of the specified replication agreement entry is displayed in this message.

In the message text:

**agreement_name**

Replication agreement entry distinguished name

**context_name**

Replication context entry distinguished name
Example:

Administrator response: Verify that the replication agreement entry is configured properly and is working as expected.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
In the message text:

```
context_name
```

Replication context distinguished name.

**System action:** The LDAP server continues. Generated updates to user password policy attributes during authentication on the read-only replica do not propagate to the master server nor to other servers throughout the advanced replication topology for the specified replication context.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** To allow replication of password policy operational attributes for future binds, complete the configuration settings by adding the `ibm-replicaReferralUrl` to the replication context with a URL of a working supplier server.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD8508E LDAP server cannot connect to supplier server `referral_url` for context `context_name`.

**Explanation:** The LDAP server cannot connect to the supplier server specified by the referral URL.

In the message text:

```
referral_url
```

The referral URL.

```
context_name
```

Replication context distinguished name.

**System action:** The LDAP server continues. The LDAP server attempts to contact other supplier servers that are listed in the `ibm-replicaReferralUrl` attribute in the replication context. This message is issued for each server in the list that cannot be contacted. If none are contacted successfully, propagation of generated updates of user password policy attributes during authentication on the read-only replica is suspended for the specified replication context. This suspension of update propagation is indicated by message GLD8509E. If a server in the list becomes available later, message GLD8511I is issued indicating a successful connection. Updates occurring while replication is suspended are not propagated when the connection is reestablished.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Check the referral URL and ensure that the supplier server is active.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** None.
GLD8509E LDAP server cannot contact any supplier servers for replication context 'context_name'. Replication of password policy attributes is suspended.

Explanation: The LDAP server cannot contact any of the supplier servers that are specified in the ibm-replicaReferralURL attribute for the specified context.

In the message text:

context_name Replication context distinguished name.

System action: The LDAP server continues. Propagation of generated updates of user password policy attributes during authentication on the read-only replica is suspended for the specified replication context. If a supplier server listed in the ibm-replicaReferralUrl attribute for the specified context becomes available, message GLD8511I is issued indicating a successful connection. Updates occurring while replication is suspended are not propagated when the connection is reestablished.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Check that one of the supplier servers that are listed in the ibm-replicaReferralURL attribute for the specified context is active and reachable. Use the ldapdiff utility to synchronize the supplier and consumer directories for updates that are not propagated.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8510E The consumer URL defined in replication agreement entry 'agreement_name' is a duplicate.

Explanation: In this replication context, the supplier server already has a replication agreement entry that has the same consumer server URL defined in the ibm-replicaURL attribute value. Within a replication context, each replication agreement entry must have a unique ibm-replicaURL attribute value. A supplier server is only allowed one connection to the same consumer server URL.

In the message text:

agreement_name Replication agreement entry distinguished name.

System action: The LDAP server continues however the requested client add or modify operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: In the replication agreement entry that is being added or modified, verify that the consumer server URL in the ibm-replicaURL attribute value is correct and does not have the same value as any existing replication agreement entry within this replication context. Then, retry the requested client add or modify operation.
GLD8511I • GLD8512I

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8511I Replication of password policy attributes is resumed for replication context 'context_name'.
Explanation: The LDAP server successfully contacted one of the supplier servers that are specified in the
ibm-replicaReferralURL attribute for the specified context.
In the message text:
context_name
Replication context distinguished name.
System action: The LDAP server continues. Propagation of generated updates of user password policy attributes
during authentication on the read-only replica is active again for the specified replication context. Updates that
occurred before this message, while replication was suspended, are not propagated.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the ldapdiff utility to synchronize the supplier and consumer directories for the
updates that were not propagated.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8512I LDAP server connected to supplier server 'referral_url' for context 'context_name'.
Explanation: The LDAP server successfully connected to the supplier server specified by the referral URL.
In the message text:
referral_url
The referral URL.
context_name
Replication context distinguished name.
System action: The LDAP server continues. Generated updates of user password policy attributes during
authentication on the read-only replica are propagated to the specified supplier server.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
GLD8516E Internal processing error in server; replication thread cannot start.

Explanation: An internal error occurred while attempting to initialize the thread for advanced replication. A previously issued message specifies the replication agreement entry that had problems initializing.

System action: The LDAP server continues however advanced replication does not initialize.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: This is an internal processing error that occurred while initializing the advanced replication thread. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8517I Replication starting for replica 'agreement_name'.

Explanation: Replication to the consumer server identified by the replication agreement entry is initializing.

In the message text:

agreement_name

Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD8518I  Replication terminating for replica 'agreement_name'.

Explanation:  Replication to the consumer server identified by the replication agreement entry is ending.

In the message text:

agreement_name

Replication agreement entry distinguished name

System action:  If there are additional replication agreements active, the LDAP server continues however replication to the consumer server identified by the replication agreement is ending. If there are no active replication agreements active, the LDAP server ends.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8519E  Unable to create schedule for replica 'agreement_name'; all changes will be replicated immediately.

Explanation:  An internal error occurred while attempting to initialize the replication schedule for the replication agreement entry specified in the message.

In the message text:

agreement_name

Replication agreement entry distinguished name

System action:  The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  This is an internal processing error that occurred while initializing the replication scheduling support for the replication agreement entry. If the problem persists, contact the service representative.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.
GLD8520E  Unable to locate schedule entry with DN 'schedule_name'.

Explanation: The replication schedule entry which contains scheduling information for the replication agreement cannot be found. The replication schedule entry is specified in the ibm-replicaScheduleDN attribute value in the replication agreement entry which is specified in a previously issued message.

In the message text:

schedule_name  
Replication schedule entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the ibm-replicaScheduleDN attribute value is correct for the replication agreement entry and that the replication schedule entry exists. Either add the replication schedule entry to the directory or remove the ibm-replicaScheduleDN attribute value from the replication agreement entry. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8521E  Error on schedule entry with DN 'schedule_name' attribute attribute_name value 'attribute_value'. Value ignored.

Explanation: The daily replication schedule entry does not have the correct time format for the attribute type and value specified in the message. The attribute type and value are ignored in the daily replication entry.

In the message text:

schedule_name  
Replication schedule entry distinguished name

attribute_name  
Attribute type

attribute_value  
Attribute value

System action: The LDAP server continues however the specified time in the daily replication schedule entry is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the time format for the daily replication schedule entry attribute type and value is the following: Thhmmss where time is based on a 24-hour clock. Modify the attribute value in the daily schedule...
replication entry specified in the message to have the correct time format. See **Schedule entries** for information about replication schedule entries.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD8522W**

Replica 'agreement_name' missing schedule DN; all changes will be replicated immediately.

**Explanation:** The replication agreement entry does not have a replication schedule entry specified in the ibm-replicaScheduleDN attribute so the replication agreement defaults to replicating all updates immediately.

In the message text:

`agreement_name`

Replication agreement entry distinguished name

**System action:** The LDAP server continues with replication updates to the consumer server identified by the replication agreement immediately occurring.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

---

**GLD8523E**

Error retrieving pending changes for replica 'agreement_name'. Will try again.

**Explanation:** An internal search error occurred while retrieving the pending replication changes from the backend where the replication agreement entry resides.

In the message text:

`agreement_name`

Replication agreement entry distinguished name

**System action:** The LDAP server continues however the pending replication changes cannot be retrieved from the backend where the replication agreement entry resides.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.
**GLD8524E • GLD8525E**

**Administrator response:** Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

**Source:** LDAP  
**Routing code:** None.  
**Descriptor code:** None.  
**Automation:** Not applicable.

---

**GLD8524E**  
**Error retrieving data for replica 'agreement_name' change ID changeID entry 'name'. Will try again.**

**Explanation:** An internal search error occurred while retrieving the replication change ID from the backend replication table where the replication agreement entry resides.

In the message text:

- `agreement_name`
  Replication agreement entry distinguished name

- `changeID`
  Replication change identifier

- `name`
  Entry distinguished name

**System action:** The LDAP server continues however the change ID cannot be retrieved from the backend replication table where the replication agreement entry resides.

**Operator response:** None.  
**System programmer response:** None.  
**User response:** None.  
**Problem determination:** Not applicable.  
**Module:** None.  
**Example:** None.

**Administrator response:** Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

**Source:** LDAP  
**Routing code:** None.  
**Descriptor code:** None.  
**Automation:** Not applicable.

---

**GLD8525E**  
**Error while removing status entry for replica 'agreement_name'.**

**Explanation:** An internal error occurred while deleting the replication agreement entry from the backend replication status table where the replication agreement entry resides.

In the message text:

- `agreement_name`
  Replication agreement entry distinguished name

**System action:** The LDAP server continues however the replication agreement cannot be deleted from the backend replication status table.

**Operator response:** None.  
**System programmer response:** None.  
**User response:** None.  
**Problem determination:** Not applicable.
GLD8526E  Error while updating status for replica 'agreement_name' to last change ID changeID.

Explanation: An internal error occurred while updating the last change ID in the backend replication status table where the replication agreement entry resides.

In the message text:

*agreement_name*
  Replication agreement entry distinguished name

*changeID*
  Replication change identifier

System action: The LDAP server continues however the replication agreement status cannot be updated in the backend replication status table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD8527W  Error while parsing data for change ID changeID for replica 'agreement_name'. Will try again.

Explanation: An internal error occurred while parsing the replication change ID data from the backend replication table where the replication agreement entry resides.

In the message text:

*changeID*
  Replication change identifier

*agreement_name*
  Replication agreement entry distinguished name

System action: The LDAP server continues however the change ID cannot be retrieved from the backend replication table where the replication agreement entry resides.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
**GLD8528I • GLD8529I**

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD8528I**  Dropping connection to replica 'agreement_name' on host 'host_name' port port_number.

Explanation: The LDAP server is no longer connected to the consumer server and port number identified by the replication agreement entry in the ibm-replicaURL attribute value.

In the message text:

- **agreement_name**: Replication agreement entry distinguished name
- **host_name**: LDAP host name
- **port_number**: LDAP port number

System action: The LDAP server continues. However, replication to the consumer server identified by the replication agreement no longer occurs.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the consumer server for the replication agreement entry is still running and that this server can still successfully connect to it.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD8529I**  Established connection for replica 'agreement_name' on host 'host_name' port port_number.

Explanation: The LDAP server has successfully established a non-secure connection to the replica server and port number identified by the replication agreement entry. The replica server and port number are specified in LDAP URL format in the ibm-replicaURL attribute value of the replication agreement entry.

In the message text:

- **agreement_name**: Replication agreement entry distinguished name
GLD8530I

host_name
    LDAP host name
port_number
    LDAP port number

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8530I Established secure connection for replica 'agreement_name' on host 'host_name' port port_number.

Explanation: The LDAP server has successfully established a secure connection to the replica server and port number identified by the replication agreement entry. The replica server and port number are specified in LDAP URL format in the ibm-replicaURL attribute value of the replication agreement entry.

In the message text:

agreement_name
    Replication agreement entry distinguished name

host_name
    LDAP host name
port_number
    LDAP port number

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8531I • GLD8532E

GLD8531I  Replicating all pending changes for replica 'agreement_name'.

Explanation: The replication schedule entry identified by the ibm-replicaScheduleDN in the replication agreement entry indicates that all pending replication changes are now allowed to be replicated to the consumer server identified by the replication agreement.

In the message text:

agreement_name
Replication agreement entry distinguished name

System action: The LDAP server continues with scheduled replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8532E  Error 'error_text' occurred for replica 'agreement_name': add failed for entry 'name' change ID changeID.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, an add operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
Error message text

agreement_name
Replication agreement entry distinguished name

name
Entry distinguished name

changeID
Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.
GLD8533E  Error 'error_text' occurred for replica 'agreement_name': modify failed for entry 'name' change ID changeID.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a modify operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
  Error message text
agreement_name
  Replication agreement entry distinguished name
name
  Entry distinguished name
changeID
  Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See [Monitoring and diagnosing advanced replication problems](https://www.example.com) for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8534E  Error 'error_text' occurred for replica 'agreement_name': rename failed for entry 'name' change ID changeID.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a rename operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
  Error message text
agreement_name
  Replication agreement entry distinguished name
name
  Entry distinguished name
GLD8535E

changeID
   Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See [Monitoring and diagnosing advanced replication problems](#) for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD8535E**  
Error 'error_text' occurred for replica 'agreement_name': delete failed for entry 'name' change ID changeID.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a delete operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

`error_text`
   Error message text

`agreement_name`
   Replication agreement entry distinguished name

`name`
   Entry distinguished name

`changeID`
   Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See [Monitoring and diagnosing advanced replication problems](#) for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.
Automation: Not applicable.

Error 'error_text' occurred for replica 'agreement_name': bind failed using masterDn 'master_name'.

Explanation: The supplier server was unable to successfully perform a simple bind to the consumer server. The supplier server credentials entry specified by the \texttt{ibm-masterServerDN} attribute value in the replication agreement entry contains the master server distinguished name and password that is used to authenticate with the consumer server.

In the message text:

\texttt{error_text} \\
Error message text

\texttt{agreement_name} \\
Replication agreement entry distinguished name

\texttt{master_name} \\
Master server entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the \texttt{ibm-replicaCredentialsDN} attribute value in the replication agreement entry has correct values for the \texttt{replicaBindDN} and \texttt{replicaCredentials}. See \texttt{Credentials entries} for more information about the supplier server credentials entry.

If the consumer server is an IBM Tivoli Directory Server with advanced replication, the \texttt{replicaBindDN} attribute value must have the same value as the \texttt{ibm-slapdMasterDN} attribute value in the consumer server credentials entry used by the replication context. The \texttt{replicaCredentials} must have the same value as the \texttt{ibm-slapdMasterPW} attribute value in the consumer server credentials entry used by the replication context. See \texttt{Consumer server entries} for more information about the consumer server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Error 'error_text' occurred for replica 'agreement_name': EXTERNAL bind failed.

Explanation: The supplier server was unable to successfully perform a SASL EXTERNAL bind to the consumer server. The supplier server credentials entry specified by the \texttt{ibm-replicaCredentialsDN} attribute value in the replication agreement entry contains optionally attribute values for the SSL key database file, RACF key ring, PKCS #11 token, certificate label, and SSL key database file password.

In the message text:

\texttt{error_text} \\
Error message text

\texttt{agreement_name} \\
Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.
GLD8539W

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: that the supplier server credentials entry specified by the `ibm-replicaCredentialsDN` attribute value in the replication agreement entry is using the correct SSL certificate label to perform a SASL EXTERNAL bind to the consumer server. See [Credentials entries](https://www.ibm.com/support/knowledgecenter/SSLTBW_22.2.0/com.ibm.zos.matchconn.doc/contents/credentials_entry.html) for more information about the supplier server credentials entry.

If the consumer server is an IBM Tivoli Directory Server with advanced replication configured, ensure that it is properly configured to accept SASL EXTERNAL binds. Verify that the consumer server credentials entry is using the correct distinguished name for the `ibm-slapdMasterDN` attribute value. See [Consumer server entries](https://www.ibm.com/support/knowledgecenter/SSLTBW_22.2.0/com.ibm.zos.matchconn.doc/contents/consumer_entry.html) for more information about the consumer server credentials entry.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8539W  Replication agreement 'agreement_name' has consumer server ID 'consumerID', but connected to server with ID 'serverID'.

Explanation: The consumer server ID defined in the replication agreement entry by the `ibm-replicaConsumerID` attribute value has a different value than the ID of the connected consumer server.

In the message text:

*agreement_name*  
Replication agreement entry distinguished name
*consumerID*  
Replication consumer server identifier
*serverID*  
Replication server identifier

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the replication agreement on the supplier server is connected to the correct consumer server. If the consumer server is an IBM Tivoli Directory Server with advanced replication, ensure that the `ibm-replicaConsumerID` attribute value in the replication agreement entry has the same value as the `ibm-slapdServerID` attribute defined in the `cn=configuration` entry on the consumer server.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

**GLD8540W**  Replication for replica 'agreement_name' will continue to retry the same update after receiving an error.

Explanation: The current replication change failed to replicate to the consumer server so the supplier server retries the failed replication change every minute until it is successful. This error might cause replication from this replication agreement to be stalled until it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles. The *ibm-replicationState* operational attribute in the replication agreement entry is set to retrying to indicate the current replication status.

In the message text:
-agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See [Monitoring and diagnosing advanced replication problems](#) for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

**GLD8541W**  Replication for replica 'agreement_entry' will continue to the next update after receiving an error.

Explanation: The current change failed to replicate to the consumer server so the supplier server continues to the next replication change after receiving this error. This failure might cause replication from this agreement to be stalled unless it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles.

In the message text:
-agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however replication, to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that replication between the supplier and consumer servers is successfully occurring by querying the replication agreement entry operational attribute values which provide replication status. If the *ibm-replicationState* operational attribute is set to retrying or the number of *ibm-replicationFailedChanges* attribute
values is near the maximum number of replication failures allowed per backend (as specified by the ibm-slapdReplMaxErrors attribute value in the cn=Replication,cn=configuration entry), it might be necessary to compare and resynchronize the replication context on both servers. See Monitoring and diagnosing advanced replication problems for information about the replication agreement entry operational attributes.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8542W Replication continuing for replica 'agreement_name' after logging update_type for entry 'name' ignoring error: return_code 'error_text' 'additional_error_text'.

Explanation: This change failed to replicate to the consumer server for the reason specified so the supplier server continues to the next replication change after receiving this error. This failure might cause replication from this agreement to be stalled unless it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles.

In the message text:
agreement_name
Replication agreement entry distinguished name

update_type
Operation type

name
Entry distinguished name

return_code
LDAP return code

error_text
Error text for LDAP return code

additional_error_text
error text

System action: The LDAP server continues, however, replication from this replication agreement might be stalled.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that replication between the supplier and consumer servers is successfully occurring by querying the replication agreement entry operational attribute values which provide replication status from the replication agreement. If the ibm-replicationState operational attribute is set to retrying or the number of ibm-replicationFailedChanges attribute values is near the maximum number of replication failures allowed per backend (as specified by the ibm-slapdReplMaxErrors attribute value in the cn=Replication,cn=configuration entry), it might be necessary to compare and resynchronize the replication context on both servers. See Monitoring and diagnosing advanced replication problems for information about the replication agreement entry operational attributes.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8543W  Replication continuing for replica 'agreement_entry' after skipping update_type for entry 'name' because of error: return_code 'error_text' 'additional_error_text'.

Explanation: After successfully skipping (deleting) the failed replication change, replication to the consumer server identified by the replication agreement is now continuing.

In the message text:

- **agreement_name**
  - Replication agreement entry distinguished name

- **update_type**
  - Operation type

- **name**
  - Entry distinguished name

- **return_code**
  - LDAP return code

- **error_text**
  - Error text for LDAP return code

- **additional_error_text**
  - Additional error text

**System action:** The LDAP server continues with replication to the consumer server identified by the replication agreement.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the entry on the supplier and consumer servers is the same by using the `ldapdiff` utility.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD8545E  Unable to connect to replica 'host_name' on port port_number. Verify that the replica is started.

Explanation: The supplier server was unable to connect with the consumer server host and port number identified in the replication agreement entry.

In the message text:

- **host_name**
  - LDAP host name

- **port_number**
  - LDAP port number

**System action:** The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.
GLD8546W

Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the consumer server for the replication agreement is running and the replication agreement has the correct ibm-replicaURL attribute value specified.
Verify that the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value in the replication agreement entry is using correct bind information. [Credentials entries] for more information about the supplier server credentials entry.
If the consumer server is an IBM Tivoli Directory Server with advanced replication configured, ensure it is properly configured to accept the supplier server bind credentials. Verify that the consumer server credentials entry is using the correct distinguished name for the ibm-slapdMasterDN attribute value. See [Consumer server entries] for more information about the consumer server credentials entry.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8546W The DN of the credential entry 'credential_name' defined for the replication agreement 'agreement_name' cannot be found.

Explanation: The supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute in the replication agreement entry cannot be found. This entry contains the bind information necessary for the supplier server to authenticate with the consumer server.
In the message text:

credential_name
   Credentials entry distinguished name

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: None.
Module: None.
Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value in the replication agreement is correct and exists in the directory. Either add the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value or modify the ibm-replicaCredentialsDN attribute value to specify a valid supplier server credentials entry. See [Credentials entries] for more information about the supplier server credentials entry.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8547E  The DN of the credential entry 'credential_name' defined for the replication agreement 'agreement_name' cannot be found.

Explanation: An internal search error occurred while attempting to retrieve the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value in the replication agreement entry. This entry contains the bind information necessary for the supplier server to authenticate with the consumer server.

In the message text:

credential_name
  Credentials entry distinguished name

agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value in the replication agreement is correct and exists in the directory. Either add the supplier server credentials entry specified by the ibm-replicaCredentialsDN attribute value or modify the ibm-replicaCredentialsDN attribute value to specify a valid supplier server credentials entry. See Credentials entries for more information about the supplier server credentials entry. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8551E Error 'error_text' occurred for replica 'agreement_name': delete failed for entry 'name' change ID changeID.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a delete operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
  Error text

agreement_name
  Replication agreement entry distinguished name

name
  Entry distinguished name

changeID
  Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.
GLD8553E  •  GLD8556E

System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  See [Monitoring and diagnosing advanced replication problems](#) for information about recovering from advanced replication problems.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8553E  Error retrieving pending change count for replica 'agreement_name'.

Explanation:  An internal error occurred while attempting to retrieve the number of pending replication changes from the backend where the replication agreement entry resides. The current number of pending replication changes are returned in the `ibm-replicationPendingChanges` operational attribute in the replication agreement entry.

In the message text:

*agreement_name*

Replication agreement entry distinguished name

System action:  The LDAP server continues however the search of the replication agreement entry is not successful.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8556E  The weekly schedule DN object 'schedule_name' specified in the replication agreement cannot be found or is not a weekly schedule entry.

Explanation:  The weekly schedule entry which contains replication scheduling information for the replication agreement entry cannot be found or is not a valid weekly schedule entry. A valid weekly schedule entry has an object class value of `ibm-replicationWeeklySchedule`. The weekly schedule entry is specified in the `ibm-replicaScheduleDN` attribute value of the replication agreement entry.

In the message text:

*schedule_name*

Replication schedule entry distinguished name

System action:  The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.
GLD8559E  The daily schedule DN object 'schedule_name' specified in the weekly schedule entry cannot be found or is not a daily schedule entry.

Explanation: The weekly schedule entry contains a daily replication schedule entry that cannot be found or is not a valid daily schedule entry. The weekly schedule entry uses the ibm-scheduleSunday, ibm-scheduleMonday, ibm-scheduleTuesday, ibm-scheduleWednesday, ibm-scheduleThursday, ibm-scheduleFriday, and ibm-scheduleSaturday attribute values to point to daily replication schedule entries.

In the message text:

schedule_name
    Replication schedule entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the object class value of the daily schedule entry specified in the weekly schedule entry is ibm-replicationDailySchedule and that the entry exists. See Schedule entries for information about replication schedule entries.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8560E  Error while updating status for replica 'agreement_name' to last change ID changeID.

Explanation: An internal error occurred while updating the last change ID in the backend replication status table where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name
**GLD8563E • GLD8564E**

**changeID**
Replication change identifier

**System action:** The LDAP server continues however the replication agreement status cannot be updated in the backend replication status table.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD8563E** Cannot move *name* from one replication context to another.

**Explanation:** An entry is not allowed to be moved into or out of a replication context using the modify DN operation. When a replication context is configured, a modify dn operation is only allowed to occur within the same replication context.

In the message text:

*name*
Entry distinguished name

**System action:** The LDAP server continues however the requested client modify dn operation is not successful.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** If an entry needs to be moved from one replication context to another, retrieve the entry by performing a search operation and then delete the entry from the replication context. Then, add the entry again with the new distinguished name to the wanted replication context.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD8564E** The replication configuration could not be read.

**Explanation:** An internal error occurred while performing a search for the advanced replication configuration entries in the CDBM backend.

**System action:** The LDAP server continues however advanced replication configuration is not successful.

**Operator response:** None.
GLD8565E  The replication configuration DN object *name* cannot be found.

Explanation: An internal error occurred while performing a search for an advanced replication configuration entry in the CDBM backend.

In the message text:

name
Entry distinguished name

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the CDBM backend is configured correctly, the server has access to the CDBM backend, and that the specified advanced replication configuration entry exists in the CDBM backend. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8566E  Error on configuration entry with DN *name*; required attribute *attribute_name* is missing.

Explanation: An advanced replication configuration entry in the CDBM backend is missing a required attribute.

In the message text:

name
Entry distinguished name

attribute_name
Attribute type

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the CDBM backend is configured correctly, the server has access to the CDBM backend, and that the specified advanced replication configuration entry exists in the CDBM backend. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD8567E • GLD8568E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the specified replication advanced configuration entry has the required attributes and the attribute value data is correct. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8567E  Error on configuration entry with DN 'name' attribute attribute_name value 'attribute_value'. Value ignored.

Explanation: An advanced replication configuration entry in the CDBM backend has an attribute value that is not correct. The attribute value in the configuration entry is ignored.

In the message text:

name
  Entry distinguished name

attribute_name
  Attribute type

attribute_value
  Attribute value

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the specified replication advanced configuration entry has the correct attribute value data. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8568E  Error initializing the backend replication table used for replication failures.

Explanation: An internal error occurred while initializing the backend replication table used for storing replication failures. The backend replication table is used by all replication agreements within the backend.

System action: The LDAP server continues however replication failures are not stored in the backend replication table.

Operator response: None.

System programmer response: None.

User response: None.
GLD8569I • GLD8570E

Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that the backend where the replication agreement entries reside is functioning and handling requests correctly. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8569I Propagation of replication topology entries to host 'host_name' port port_number finished successfully.
Explanation: The Replication topology extended operation has successfully synchronized replication topology entries on the specified consumer server.
In the message text:

host_name
   LDAP host name
port_number
   LDAP port number

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8570E Propagation of replication topology entries to host 'host_name' port port_number failed with error code return_code.
Explanation: An error occurred while using the Replication topology extended operation to synchronize the replication topology entries on the specified consumer server.
In the message text:

host_name
   LDAP host name
port_number
   LDAP port number
return_code
   LDAP return code

System action: The LDAP server continues however the replication topology entries are not successfully synchronized on the specified consumer server.
GLD8571I • GLD8572I

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: A previously issued message indicates the reason for the Replication topology extended operation error. Correct the error on the targeted consumer server and then retry the Replication topology extended operation.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8571I  Propagation of replication topology entries will continue with the next target server.

Explanation: The Replication topology extended operation is continuing to synchronize replication topology entries on the next targeted consumer server.
System action: The LDAP server continues with the Replication topology extended operation on the next targeted consumer server.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8572I  Propagation of replication topology entries is complete.

Explanation: The Replication topology extended operation has successfully synchronized replication topology entries on all consumer servers defined within the replication context.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.

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GLD8578W  The extended operation cannot replicate to target server 'host_name' port port_number because the target server does not support replication topology entries.

Explanation: An error occurred while using the Replication topology extended operation against a consumer server that is not configured for synchronizing replication topology entries. The Replication topology extended operation cannot synchronize replication topology entries on the specified consumer server.

In the message text:

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues, however, the replication topology entries are not successfully synchronized on the specified consumer server.

Operator response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the targeted consumer server supports the Replication topology extended operation. If the targeted consumer server does not support the Replication topology extended operation, exclude that server as a target of the extended operation.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8579E  The extended operation cannot replicate entries to the target server 'host_name' port port_number because the target server does not have the suffix 'name'.

Explanation: An error occurred while using the Replication topology extended operation against a consumer server that does not have the appropriate suffix configured in its server configuration file. Since the consumer server does not have the appropriate suffix configured, the replication topology entries are not allowed to be added.

In the message text:

host_name
   LDAP host name

port_number
   LDAP port number

name
   Entry distinguished name

System action: The LDAP server continues however the replication topology entries are not successfully synchronized on the specified consumer server.

Operator response: None.
GLD8580I • GLD8581I

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: If the consumer server is an z/OS IBM Tivoli Directory Server with advanced replication, update the consumer server configuration file to add an appropriate suffix option for the replication topology entries that are sent by the supplier server. Restart the consumer server and then retry the Replication topology extended operation.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8580I  Replication conflict: a conflict has been detected on host 'host_name' port port_number. A request to re-add the entry of DN 'name' has been received.

Explanation: A replication conflict occurred between the supplier and the targeted consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, a request has been received by the supplier server from the consumer server to resend the conflicted entry back to the consumer server.

In the message text:

host_name
   LDAP host name

port_number
   LDAP port number

name
   Entry distinguished name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8581I  Replication conflict: re-add DN 'name' to solve a replication conflict on host 'host_name' port port_number.

Explanation: A replication conflict occurred between the supplier and the targeted consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, the
conflicted entry has been resent to the consumer server. The intention is to resynchronize the entry on the supplier
and consumer servers.

In the message text:

name
   Entry distinguished name
host_name
   LDAP host name
port_number
   LDAP port number

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8582I Replication conflict: re-add of DN 'name' to host 'host_name' port port_number succeeded.

Explanation: The replication conflict that occurred with the specified entry between the supplier and consumer
servers has been resolved successfully. The entry is now synchronized between the supplier and consumer servers.

In the message text:

name
   Entry distinguished name
host_name
   LDAP host name
port_number
   LDAP port number

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
GLD8583W  Replication conflict: re-add of DN 'name' to host 'host_name' port port_number failed.

Explanation:  The replication conflict that occurred with the specified entry between the supplier and consumer servers has not been resolved successfully. The entry is not synchronized between the supplier and consumer servers. The supplier server does not attempt to resynchronize the conflicted entry on the consumer server.

In the message text:

name  Entry distinguished name

host_name  LDAP host name

port_number  LDAP port number

System action:  The LDAP server continues however the specified entry is not synchronized between the supplier and consumer servers.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Since the entry is not synchronized between the supplier and consumer servers, future replication conflicts might occur with this entry. See [Recovering from advanced replication errors] for information about synchronizing the supplier and consumer servers.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8584E  Replication conflict: re-add of DN 'name' to resolve a conflict will not continue because the entry is too large.

Explanation:  A replication conflict occurred between the supplier and the consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, this supplier server has been requested to resend the conflicted entry to the consumer server however the size of the conflicted entry exceeds the maximum size allowed. The maximum conflicted entry size that a supplier server can resend to the consumer server is specified by the ibm-slapdReplConflictMaxEntrySize attribute value in the cn=Replication,cn=configuration configuration entry.

In the message text:

name  Entry distinguished name

System action:  The LDAP server continues however the specified entry is not synchronized between the supplier and consumer servers.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.
Module: None.

Example: None.

Administrator response: Since the entry is not synchronized between the supplier and consumer servers, future replication conflicts might occur with this entry. See [Recovering from advanced replication errors](#) for information about synchronizing the supplier and consumer servers.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD8586E Attribute 'attribute_name' is missing from entry 'name'.

Explanation: If a replication context is created with an entry that is not a suffix level entry, ACLs must be defined explicitly in that entry. The following ACL attribute values must be added to the replication context entry for non-suffix level entries: aclEntry, aclPropogate, entryOwner, and ownerPropogate.

In the message text:

- attribute_name
  - Attribute type

- name
  - Entry distinguished name

- System action: The LDAP server continues however the requested client add operation is not successful.
- Operator response: None.
- System programmer response: None.
- User response: None.
- Problem determination: Not applicable.
- Module: None.
- Example: None.

Administrator response: Verify that the specified attribute is added to the entry and then retry the client add operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD8587E The Replication Topology extended operation failed to quiesce the context 'context_name' on host 'host_name' port port_number. The operation will not continue with this server.

Explanation: An error occurred while using the Replication topology extended operation to quiesce a replication context on the specified consumer server. The Replication topology extended operation continues to the next targeted consumer server.

In the message text:

- context_name
  - Replication context entry distinguished name

- host_name
  - LDAP host name

- port_number
  - LDAP port number
GLD8588I

System action:  The LDAP server continues, however, the replication context on the consumer server identified by the replication agreement is not quiesced.

Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Verify that the replication context entry on the specified consumer server is not already quiesced and is a valid entry. Then retry the Replication topology extended operation. See [Monitoring and diagnosing advanced replication problems] for information about searching the replication context operational attribute values to obtain the current replication status.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8588I  The Replication Topology extended operation successfully quiesced the context 'context_name' on host 'host_name' port port_number.

Explanation:  The Replication topology extended operation has successfully quiesced the replication context on the specified consumer server.

In the message text:
context_name  Replication context entry distinguished name
host_name  LDAP host name
port_number  LDAP port number

System action:  The LDAP server continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.
GLD8589E  The Replication Topology extended operation failed to unquiesce the context 'context_name' on host 'host_name' port port_number. The operation will not continue with this server.

Explanation: An error occurred while using the Replication topology extended operation to unquiesce the replication context on the targeted consumer server.

In the message text:

context_name
   Replication context entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues however the Replication topology extended operation on the consumer server identified by the replication agreement is still quiesced.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication context entry on the specified consumer server is quiesced and is a valid entry. Then retry the Replication topology extended operation. See Monitoring and diagnosing advanced replication problems for information about searching the replication context operational attribute values to obtain the current replication status.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8590I  The Replication Topology extended operation successfully unquiesced the context 'context_name' on host 'host_name' port port_number.

Explanation: The Replication topology extended operation has successfully unquiesced the replication context on the specified consumer server.

In the message text:

context_name
   Replication context entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.
GLD8591E  The Replication Topology extended operation failed to add a suffix 'name' to the configuration file of target host 'host_name' port port_number. The operation will not continue with this server.

Explanation: An error occurred while using the Replication topology extended operation to add replication topology entries on the targeted consumer server.

In the message text:

name
   Entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues however the Replication topology extended operation on the consumer server identified by the replication agreement is not successful.

If the consumer server is a non-z/OS IBM Tivoli Directory Server, the addition of an ibm-slapdSuffix attribute value to the cn=Directory, cn=RDBM Backends, cn=IBM Directory, cn=Schemas, cn=Configuration entry was not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the Replication topology extended operation was targeted against a non-z/OS IBM Tivoli Directory Server, manually add the suffix on the consumer server.

If the Replication topology extended operation was targeted against a z/OS IBM Tivoli Directory Server, update the server configuration file on the targeted consumer server to add an appropriate suffix option. Then restart the consumer server and retry the Replication topology extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8592I  The Replication Topology extended operation successfully added a suffix 'name' to the configuration file of target host 'host_name' port port_number.

Explanation: If the Replication topology extended operation was targeted against a non-z/OS IBM Tivoli Directory Server, it has successfully added an ibm-slapdSuffix attribute value to the rootDSE entry. This allows the Replication topology extended operation to synchronize replication topology entries on the consumer server identified by the replication agreement.

In the message text:
GLD8593E The Replication Topology extended operation failed to purge the queue that is associated with the replication agreement 'agreement_name' on host 'host_name' port port_number.

Explanation: An error occurred while purging the replication queue for the specified replication agreement entry when using the Replication topology extended operation. The replication queue on the supplier server is purged when the replication agreement entry already exists on the consumer server.

In the message text:

agreement_name
   Replication agreement entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues however the Replication topology extended operation on the consumer server identified by the replication agreement is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the problem by purging the replication queue or by deleting the replication agreement entry on the consumer server. The replication queue for the agreement can be purged by using the Control replication queue extended operation in the ldapexop utility. Then retry the Replication topology extended operation. See Recovering from advanced replication errors for information about recovering from advanced replication problems.

Source: LDAP
Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8594I There is no replication queue that is associated with the replication agreement 'agreement_name' on host 'host_name' port port_number. Or the Replication Topology extended operation successfully purged the queue.

Explanation: The Replication topology extended operation has successfully purged the replication queue associated with the specified replication agreement entry.

In the message text:

agreement_name
Replication agreement entry distinguished name

host_name
LDAP host name

port_number
LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8595E The supplier of the Replication Topology extended operation failed to contact target host 'host_name' port port_number using replication agreement 'agreement_name'.

Explanation: An error occurred while using the Replication topology extended operation to contact the consumer server identified by the replication agreement.

In the message text:

host_name
LDAP host name

port_number
LDAP port number

agreement_name
Replication agreement entry distinguished name

System action: The LDAP server continues however the Replication topology extended operation on the consumer server identified by the replication agreement is not successful.

Operator response: None.

System programmer response: None.

User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the consumer server for the replication agreement is running and the replication agreement has the correct ibm-replicaURL attribute value specified. Then retry the Replication topology extended operation.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD8596I  Topology successfully replicated to number of maximum_number servers.

Explanation: The Replication topology extended operation has successfully synchronized the replication topology entries on the number of consumer servers specified.

In the message text:

number
  Number of consumer servers successfully replicated
maximum_number
  Total number of consumer servers

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

---

GLD8598E  The Replication Topology extended operation timed out.

Explanation: A timeout error occurred while using the Replication topology extended operation. The time limit specified on the Replication topology extended operation has been exceeded.

System action: The LDAP server continues however the Replication topology extended operation is not successful.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the timeout specified on the Replication topology extended operation is
enough time to run the operation on all consumer servers within a replication context. Increase the timeout value and then retry the Replication topology extended operation.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8601I  The update logged as a failure with failure ID failureID for replication agreement DN 'agreement_name' has been removed from the backend replication failure table.

Explanation: The Control replication error log extended operation has successfully removed the specified replication failure ID from the backend replication table.

In the message text:

failureID    Replication failure change identifier
agreement_name    Replication agreement entry distinguished name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

GLD8602I  All updates logged as failures for replication agreement DN 'agreement_name' have been removed from the backend replication failure table.

Explanation: The Control replication error log extended operation has successfully removed all replication failures from the backend replication table.

In the message text:

agreement_name    Replication agreement entry distinguished name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8603E  Unable to log failure in the backend replication failure table for replication agreement DN 'agreement_name' for entry with change ID changeID.

Explanation: An internal error occurred while adding the replication failure ID in the backend replication table.

In the message text:
agreement_name
  Replication agreement entry distinguished name
changeID
  Replication change identifier

System action: The LDAP server continues, however, the replication failure cannot be added to the backend replication table.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. The supplier and consumer servers might no longer be synchronized. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8604W  Reached or exceeded the limit max_replication_errors for the backend replication failure table for replication agreement DN 'agreement_name'.

Explanation: The supplier server has reached or exceeded the maximum number of replication errors allowed for all replication agreement entries within this backend. The maximum number of replication errors allowed is controlled by the ibm-slapdReplMaxErrors attribute value in the cn=Replication,cn=configuration entry.

In the message text:
max_replication_errors
  Maximum number of advanced replication errors allowed
agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is stalled.

Operator response: None.
System programmer response: None.
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User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8608I  Replication for DN 'agreement_name' will use the single threaded, synchronous method.

Explanation: Replication to the consumer server identified by the replication agreement is using the synchronous, single threaded method. The synchronous method is the only supported replication method on the IBM Tivoli Directory Server for z/OS.

In the message text:

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8610E  Replication for DN 'agreement_name' terminated because of an unsupported replication method.

Explanation: Replication to the consumer server identified by the replication agreement is using a replication method that is not supported. The synchronous, single threaded method is the only supported replication method on the IBM Tivoli Directory Server for z/OS.

In the message text:

agreement_name
   Replication agreement entry distinguished name

method
   Replication method

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.
GLD8618E  Replication for replica 'agreement_name' will continue to retry the same failed update with change ID changeID until it is successful.

Explanation: An error occurred while replicating the update with the specified change ID to the consumer server identified by the replication agreement entry. The failed change gets retried every minute until it succeeds or the failed change is removed from the replication queue by the LDAP root administrator or an administrative group member with the root or replication administrator roles. When this failed change occupies the lead position in the pending replication queue, all other replication updates are blocked and replication is stalled.

In the message text:

agreement_name
  Replication agreement entry distinguished name

changeID
  Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is stalled.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8620E  Error occurred processing the replica URL for replication agreement 'agreement_name'.

Explanation: An error occurred while parsing the ibm-replicaURL attribute value in the replication agreement entry. The value specified is not a valid LDAP URL or is empty.

In the message text:
GLD8628I

agreement_name
Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the ibm-replicaURL attribute value in the replication agreement entry so a valid LDAP URL is specified. Verify that the consumer server’s host name and optional port number are correct.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8628I Creating surrogate entry 'name' on partial replica 'host_name' port port_number.

Explanation: The specified entry is being created on the consumer server because this parent entry is missing. If the ibm-replicationCreateMissingEntries optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

name
Entry distinguished name

host_name
LDAP host name

port_number
LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Creation of surrogate entry 'name' on partial replica 'host_name' port port_number failed.

Explanation: An error occurred while attempting to automatically create the specified entry on the consumer server. This parent entry was probably missing because the replication filter excluded it from being replicated to the consumer server. If the \texttt{ibm-replicationCreateMissingEntries} optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

\begin{itemize}
  \item \texttt{name}: Entry distinguished name
  \item \texttt{host_name}: LDAP host name
  \item \texttt{port_number}: LDAP port number
\end{itemize}

\textbf{System action:} The LDAP server continues, however, the add operation on the consumer server identified by the replication agreement is not successful.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} None.

\textbf{Example:} None.

\textbf{Administrator response:} If the specified entry is not present on the consumer server and it is required for children entries, the entry must be manually added to the consumer server. The entries on the supplier and consumer servers might need to be synchronized. See \texttt{Recovering from advanced replication errors} for information about synchronizing the supplier and consumer servers.

\textbf{Source:} LDAP

\textbf{Routing code:} None.

\textbf{Descriptor code:} None.

\textbf{Automation:} Not applicable.

Creation of a surrogate entry 'name' on partial replica 'host_name' port port_number succeeded.

Explanation: The specified entry has successfully been created because this parent entry was originally missing on the consumer server. If the \texttt{ibm-replicationCreateMissingEntries} optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

\begin{itemize}
  \item \texttt{name}: Entry distinguished name
  \item \texttt{host_name}: LDAP host name
  \item \texttt{port_number}: LDAP port number
\end{itemize}

\textbf{System action:} The LDAP server continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8632E  The replication filter entry 'filter_name' defined for the replication agreement 'agreement_name' cannot be found.

Explanation: An internal search error occurred while querying the replication filter entry specified in the ibm-replicationFilterDN attribute value of the replication agreement entry. The replication filter entry specified in the replication agreement cannot be found or the entry specified does not have an object class value of ibm-replicationFilter.

In the message text:

filter_name
  Replication filter entry distinguished name

agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that the ibm-replicationFilterDN attribute value in the replication agreement entry exists and has an object class value of ibm-replicationFilter. If the replication filter entry does not exist, add the entry to the directory. See Partial replication for information about replication filter entries.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8633W  The operational attribute attribute_name specified as part of the replication filter inclusion/exclusion list is not allowed.

Explanation: An error occurred while attempting to add or modify a replication filter that had an operational attribute specified. Operational attributes cannot be specified as part of the filter inclusion or exclusion list. Replication filters are specified in the ibm-replicationFilterAttr attribute value in the replication filter entry.

In the message text:

attribute_name
  Attribute type

System action: The LDAP server continues however the add or modify operation of the replication filter entry is not successful.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Update the add or modify of the `ibm-replicationFilterAttr` attribute value in the replication filter entry to only specify non-operational attributes as part of the inclusion or exclusion list in a replication filter. See [Partial replication] for information about replication filter entries.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

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GLD8634I Modifications to only the ACL attributes of an entry will not be filtered.

Explanation: Partial replication is configured for the replication agreement. However, replication filtering is bypassed since only the ACL attribute values of an entry are modified. Updates to ACL attribute values are always replicated to a consumer server.
System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

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GLD8635I The Replication Topology extended operation is performed against the server at host `host_name` port `port_number` that does not support filtered replication. Hence, the filtered replication related attributes will not be sent to this server.

Explanation: The consumer server identified by the replication agreement entry does not support filtered replication. However, the replication agreement has a replication filter entry specified in the `ibm-replicationFilterDN` attribute value. Although the consumer server does not support partial replication, filtered entries are still replicated to the consumer server.
In the message text:

`host_name`
  LDAP host name

`port_number`
  LDAP port number

System action: The LDAP server continues.
GLD8637I • GLD8639E

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8637I   Restricted Access to the replication topology is set to value.

Explanation: The `ibm-slapdReplRestrictedAccess` attribute value in the `cn=Replication,cn=configuration` entry has been set to the value specified in this message. If set to true, only the LDAP root administrator or an administrative group member with the root or replication administrator roles and the master server DN have access to replication topology entries. If set to false, other users with the proper ACL authority can access the replication topology entries.

In the message text:

value

True or false

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8639E   The filter entry 'filter_name' is in use and cannot be deleted.

Explanation: The replication filter entry cannot be deleted because a replication agreement entry has a reference to this entry in an `ibm-replicationFilterDN` attribute value.

In the message text:

filter_name

Replication filter entry distinguished name

System action: The LDAP server continues however the requested delete client operation is not successful.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Perform a search on all replication agreement entries in the directory to find the entry that has an ibm-replicationFilterDN attribute value with the distinguished name (DN) of the entry being deleted. Modify the ibm-replicationFilterDN attribute value in the replication agreement entry to remove the reference to the entry that is being deleted. Then retry the delete client operation.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8640I  Replication error logging for replication agreement DN 'agreement_name' is unlimited.

Explanation: The number of replication failures stored for the specified replication agreement is unlimited. When the ibm-slapdReplMaxErrors attribute value in the cn=Replication,cn=configuration entry is set to -1, there is no limit on the number of replication failures stored in the backend where the replication agreement entry resides.

In the message text:

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the limit needs to be decreased, modify the ibm-slapdReplMaxErrors attribute value in the cn=Replication,cn=configuration entry and specify a small positive number. The ibm-slapdReplMaxErrors attribute value applies to all replication agreements within the backend.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8642W  Internal search for the parent entry 'name' failed.

Explanation: An internal server error occurred while searching for the specified parent entry in this server. This entry is a missing parent entry on the consumer server and is needed for replication to the consumer server to continue.

In the message text:

name
   Entry distinguished name

System action: The LDAP server continues however the missing parent entry is not added to the consumer server.
Operator response: None.
System programmer response: None.
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User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the missing parent entry exists on this supplier server by performing a search operation. If the entry does not exist, add the entry to the supplier server. The supplier and consumer servers may need to be synchronized. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8643E The attribute attribute_name specified in the replication filter is not found in the schema.

Explanation: The specified attribute type in the replication filter was not found in the schema. A replication filter was specified in the ibm-replicationFilterAttr attribute value in the replication filter entry. Another message identifies the replication filter entry and value that is in error.

In the message text:
attribute_name
  Attribute type

System action: The LDAP server continues however the requested replication filter update client operation is not successful. If the replication filter is an existing replication filter entry, the filter is ignored.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the attribute type specified in the replication filter exists in the schema. Modify the replication filter to use an attribute type that exists in the schema or update the schema to add the missing attribute type.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8644E The objectclass value specified in the replication filter is not found in the schema.

Explanation: The specified object class value in the replication filter was not found in the schema. A replication filter was specified in the ibm-replicationFilterAttr attribute value in the replication filter entry. Another message identifies the replication filter entry and value that is in error.

In the message text:
value
  Objectclass value

System action: The LDAP server continues however the requested replication filter update client operation is not successful. If the replication filter is an existing replication filter entry, the filter is ignored.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the object class value specified in the replication filter exists in the schema. Modify the replication filter to use an object class value that exists in the schema or update the schema to add the missing object class value.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8645E A replication filter 'attribute_value' that is not valid is specified in entry 'name'.

Explanation: The specified filter in the replication filter entry that was added or modified was not valid. There is a specific format required for replication filters that are specified in the ibm-replicationFilterAttr attribute value.

In the message text:
attribute_value
    Attribute value

System action: The LDAP server continues however the requested replication filter update client operation is not successful.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Update the ibm-replicationFilterAttr attribute value in the replication filter entry so that it is in the correct format. See Partial replication for information about the replication filter format.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8647E Kerberos authentication is specified for the replication agreement 'agreement_name'. Kerberos authentication is not supported on this platform.

Explanation: The object class of the supplier server credentials entry defined in the ibm-replicaCredentialsDN attribute value for the replication agreement entry is not valid. The only supported object class values for supplier server credential entries are ibm-replicationCredentialsSimple and ibm-replicationCredentialsExternal. The IBM Tivoli Directory Server for z/OS does not support a supplier server credentials entry that has an object class value of ibm-replicationCredentialsKerberos.

In the message text:
agreement_name
    Replication agreement entry distinguished name
GLD8648E

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the ibm-replicaCredentialsDN attribute value in the replication agreement entry does not reference a supplier server credentials entry with an ibm-replicationCredentialsKerberos object class value. Modify the ibm-replicaCredentialsDN attribute value in the replication agreement entry to reference a supplier server credentials entry with an object class value of ibm-replicationCredentialsSimple or ibm-replicationCredentialsExternal.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8648E Unable to open lost and found log file 'filename'.

Explanation: The lost and found log file that is specified by the ibm-slapdLog attribute value in the cn=Replication,cn=Log Management,cn=Configuration entry cannot be opened. The lost and found log file is created by the consumer server any time a replication conflict occurs. Any entries that are deleted on the consumer server because of a replication conflict are stored in LDIF format in this file.

In the message text:

filename

  Replication lost and found log file

System action: The LDAP server continues, however, replication conflicts are not written to the lost and found log file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has the appropriate access to the directories and to the file itself. Modify the ibm-slapdLog attribute value in the cn=Replication,cn=Log Management,cn=Configuration entry to specify a fully qualified z/OS UNIX System Services file name and directory location where the LDAP server can create the lost and found log file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD8649E  Replication agreement 'agreement_name' is now suspended because 'filter_name' is not a valid filter entry.

Explanation: The replication agreement is now suspended because the replication filter entry specified in the ibm-replicationFilterDN attribute value does not exist or there are no valid ibm-replicationFilterAttr attribute values specified in the entry. The ibm-replicationOnHold attribute value has been automatically set to true in the replication agreement until the problems can be corrected.

In the message text:

agreement_name
   Replication agreement entry distinguished name

filter_name
   Replication filter entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is suspended. Replication updates are queued until replication is resumed for this replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the ibm-replicationFilterDN attribute value in the replication agreement specifies an entry that exists in the directory. If a valid replication filter entry is specified, verify that each of the ibm-replicationFilterAttr attribute values in the replication filter entry is in an acceptable format. See Partial replication in for information about replication filter entries.

When the problems are corrected, use the Control replication extended operation on the ldapexop utility to resume replication. If the extended operation is successful, the ibm-replicationOnHold attribute in the replication agreement entry is changed from true to false.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8650I  Replication agreement 'agreement_name' is active.

Explanation: Replication to the consumer server identified by the replication agreement is active because the ibm-replicationOnHold attribute is set to false or is not present.

In the message text:

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.
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Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8651I  Replication agreement 'agreement_name' is suspended.

Explanation: Replication to the consumer server identified by the replication agreement is suspended because the
ibm-replicationOnHold attribute is set to true.
In the message text:

agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is suspended. Replication updates are queued until replication is resumed for this replication agreement.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Replication to the consumer server identified by the replication agreement can be resumed by using the Control replication extended operation on the ldapexop utility. If the extended operation is successful, the ibm-replicationOnHold attribute in the replication agreement entry is changed from true to false.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8652I  Replication agreement 'agreement_name' is suspended. The Cascading control replication extended operation will skip this agreement.

Explanation: The Cascading control replication extended operation was attempted for a replication context that has one or more suspended replication agreements. The extended operation skips this agreement and continues to the next replication agreement. The replication agreement is suspended because the ibm-replicationOnHold attribute for the agreement entry is set to true.
In the message text:

agreement_name
  Replication agreement entry distinguished name

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: None.
GLD8653W Duplicate ibm-replicaServerID value 'replicaServerId' defined in subentry 'name' for replication context 'context_name'.

Explanation: The ibm-replicaServerID value defined in a replica subentry is already in use by another replica subentry that is defined under the replication context indicated in the message. All replica subentries in the same replication context should have unique ibm-replicaServerID values defined. Specifications for the ibm-replicationServerIsMaster and ibm-replicaGateway attribute values are derived from the last replica subentry processed that matches this server's ibm-slapdServerID. The replication configuration might change when the server is restarted based on the internal processing order of the replica subentries.

In the message text:

replicaServerId
   Value of duplicate serverID

name
   Entry distinguished name containing duplicate serverID

context_name
   Replication context distinguished name related to the subentry

System action: The LDAP server continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that a unique ibm-replicaServerID attribute value has been assigned to each replica subentry under the replication context indicated in the message.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8654I Advanced replication initialization failed.

Explanation: An internal error occurred while attempting to initialize advanced replication support.

System action: If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends that successfully start however advanced replication does not start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Restart the LDAP server with ERROR debug level set. The LDAP trace debug output might help locate and correct the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8797E  Internal processing error in the server; return code return_code from pthread library.

Explanation: An error occurred in one of the following LE pthread library functions:

- pthread_mutex_lock()
- pthread_mutex_unlock()
- pthread_cond_timedwait()
- pthread_setspecific()
- pthread_cond_broadcast()

The name of the pthread routine is in an LDAP ERROR trace. See the description of the LE pthread routines in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

return_code

Return code from pthread library

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the LDAP server with ERROR debug level set to determine the failing LE pthread library routine. Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Idapdif utility messages

GLD8801I  This tool synchronizes a replica server with its master.

Explanation: The ldapdif utility help and usage menu.

System action: The program ends.

System programmer response: None.

User response: None.

Problem determination: Not applicable.
GLD8802I  Only operational attributes differ for this entry.

Explanation: The ldapdiff utility has detected a difference in the operational attributes for the entry. The ldapdiff utility is using the ibm-entryCheckSumOp attribute, which contains a checksum value of the operational attribute values, to quickly detect entry differences.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8803I  Schema compare is complete.

Explanation: The ldapdiff utility has completed schema comparison on both LDAP servers.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8804I  Schema compare is in progress. This might take a few minutes.
Explanation:  The ldapdiff utility is performing schema comparison on both LDAP servers.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8805I  Successfully connected to both servers.
Explanation:  The ldapdiff utility has successfully connected to both LDAP servers that are to be compared.
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8806E  Error occurred while connecting to server: exception_text.
Explanation:  The ldapdiff utility encountered an error while attempting to connect to the LDAP server. The exception occurred while attempting to connect to the LDAP server that is indicated in the exception.
In the message text:
exception_text
   Exception text
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
GLD8807E  •  GLD8808I

Module:  None.
Example:  None.

Administrator response:  Ensure that the targeted LDAP servers are running before starting the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8807E  Incorrect SSL options specified for server "server_host:server_port".

Explanation:  The ldapdiff utility detected missing or incorrect SSL command line parameters while attempting to initialize the SSL connection to the LDAP server and port number indicated in the message. Either the parameter is not known, the value specified for the parameter is not supported, or a parameter is missing.

In the message text:

server_host
  Server host name

server_port
  Server port number

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Correct the command line of the ldapdiff utility to ensure that the correct SSL parameters are specified. See [ldapdiff utility] for the correct ldapdiff utility syntax for the SSL options. Then restart the program.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8808I  Traversing the tree on both the servers.

Explanation:  The ldapdiff utility is retrieving and comparing entries on both LDAP servers residing under the baseDn specified on the -b command line parameter.

System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
GLD8809I • GLD8810I

**Administrator response:** None.
**Source:** LDAP
**Routing code:** None.
**Descriptor code:** None.
**Automation:** Not applicable.

GLD8809I Successfully finished traversing the tree on both the servers.

**Explanation:** The `ldapdiff` utility has successfully retrieved and compared entries on both LDAP servers that reside under the baseDn specified on the `-b` command line parameter.

**System action:** The program continues.
**Operator response:** None.
**System programmer response:** None.
**User response:** None.
**Problem determination:** Not applicable.
**Module:** None.
**Example:** None.

GLD8810I Either normal or operational attributes or both differ for this entry.

**Explanation:** The `ldapdiff` utility has detected a difference in the non-operational or operational attributes for the entry. The `ldapdiff` utility is using the `ibm-entryCheckSum` and `ibm-entryCheckSumOp` attribute values, to quickly detect entry differences. The `ibm-entryCheckSum` attribute value is a checksum value of non-operational attribute values while the `ibm-entryCheckSumOp` attribute value is a checksum value of the operational attribute values.

**System action:** The program continues.
**Operator response:** None.
**System programmer response:** None.
**User response:** None.
**Problem determination:** Not applicable.
**Module:** None.
**Example:** None.
GLD8811E  Unable to start subtree comparison.

Explanation: The ldapdiff utility is unable to start subtree comparison on both LDAP servers for one of the following reasons:
- The baseDn specified on the -b command line parameter does not have valid DN syntax.
- The baseDn specified on the -b command line parameter cannot be found on both the supplier and consumer servers.
- The encryption settings of the supplier and consumer servers cannot be retrieved.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the baseDn that is specified on the -b command line parameter is valid and exists on both LDAP servers. Ensure that the encryption settings for both servers can be retrieved. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8812I  Exceeded the specified number of non-matching entries.

Explanation: The ldapdiff utility has encountered the maximum number of non-matching entries between the LDAP servers being compared. The number of non-matching entries exceeds the number specified on the -C command line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the maximum number of entry mismatches allowed by ldapdiff utility is correct. Consider increasing the number of entry mismatches allowed or removing the -C command line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD8813E  Exception: exception_text
Explanation: The ldapdiff utility encountered an exception while performing the requested task. This message is usually accompanied by another message indicating the operation that resulted in this exception.
In the message text:
exception_text
Exception text
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in this message and other messages issued to correct the problem. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8814I  No attributes returned for name entry.
Explanation: The ldapdiff utility is unable to retrieve attribute values indicating encryption settings or password policy for the entry indicated in the message.
In the message text:
name
Entry distinguished name
System action: The program continues without taking into account the encryption settings or password policy established on the LDAP server.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8815E  Failed to determine the server version for one of the servers.

Explanation:  The ldapdiff utility is unable to determine the LDAP server version because the ibmdirctoryversion attribute value does not exist in the rootDSE entry. The ldapdiff utility only properly works with the IBM Tivoli Directory Servers on z/OS and other platforms.

System action:  The program continues but the results are unexpected.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  Verify each LDAP server targeted by the ldapdiff utility is an IBM Tivoli Directory Server running on z/OS or other platforms. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8816W  Password policy is not enabled on one of the servers. Password policy attributes on entries will be ignored during comparisons.

Explanation:  The ldapdiff utility has determined one of the servers does not have password policy enabled. Any password policy attributes that exist on entries are ignored during comparisons.

System action:  The program continues but any password policy attributes that exist on entries are ignored during comparisons.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  If password policy attributes must be compared on both servers, verify that the cn=pwdpolicy,cn=ibmpolicies entries on the supplier and consumer servers have the ibm-pwdPolicy attribute set to true. Then restart the program.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8817E  Cannot open the specified file for LDIF output generation. LDIF file will not be created.

Explanation:  The ldapdiff utility encountered an error while attempting to open the output LDIF file specified on the -L command line parameter for writing.

System action:  The program continues with the differences between the LDAP servers being written to standard output.

Operator response:  None.
GLD8818E  Exception occurred while closing the LDIF file: exception_text

Explanation: The ldapdiff utility encountered an exception when closing the output LDIF file specified on the -L command line parameter. The exception might have occurred for one of the following reasons:
- The output LDIF file is already closed.
- The output LDIF file does not exist at the specified location.
- The internal file reference is not valid.
- The user running the ldapdiff utility does not have the appropriate permissions to access the output LDIF file.

In the message text:

exception_text

  Exception text

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the output LDIF file specified on the -L command line parameter still exists and the user has the appropriate permissions to access the file. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8819E  Missing arguments: Value not specified for option.

Explanation: The ldapdiff utility has detected that a value has not been specified for the command line parameter specified in the message.

In the message text:

option
  Command line option
GLD8820W The supplier and consumer servers have different encryption seed or salt values. The operation will take longer.

Explanation: The ldapdiff utility has detected that the supplier and consumer servers have different encryption seed or salt values. This message is generally only issued when the ldapdiff utility is targeting a supplier or consumer server that is running against an non-z/OS IBM Tivoli Directory Server. The comparison operation is faster if the supplier and consumer servers have the same encryption seed and salt values.

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8821E Missing required argument; refer to the usage description for valid syntax.

Explanation: The ldapdiff utility has detected one of the following required parameters are missing from the command line:
• -ch host
• -sh host
• -b baseDn or -S

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify the ldapdiff command line has the required parameters specified. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8822E  Exception occurred while adding DN to LDIF file: exception_text
Explanation: The ldapdiff utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.
In the message text:
exception_text
   Exception text
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the exception text indicated in the message to correct the problem. Verify the output LDIF file exists and the user has the appropriate permissions to write to the file. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8823E  Exception occurred while deleting DN from LDIF file: exception_text
Explanation: The ldapdiff utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.
In the message text:
exception_text
   Exception text
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
GLD8824E  Exception occurred while modifying DN in LDIF file: exception_text

Explanation: The ldapdiff utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.

In the message text:

exception_text
  Exception text

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the output LDIF file exists and the user has the appropriate permissions to write to the file. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8825E  Unable to search RootDSE: DirContext is Null.

Explanation: The ldapdiff utility encountered an internal problem while performing a rootDSE search.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8826E No RootDSE attributes were returned.

Explanation: The ldapdiff utility encountered an error while performing a rootDSE search. The rootDSE entry returned from the targeted LDAP server did not have any attribute types or values.

System action: The program continues by using a default distinguished name (DN) of cn=schema for schema comparison on the targeted LDAP servers.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8827E Error occurred during enumeration of attributes from the rootDSE entry.

Explanation: The ldapdiff utility encountered an internal error while retrieving the rootDSE entry attribute values returned on a search.

System action: The program continues by using a default distinguished name (DN) of cn=schema for schema comparison on the targeted LDAP servers.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8828E  Error occurred while reading rootDSE attributes: exception_text

Explanation: The ldapdiff utility encountered an internal error while reading and parsing the rootDSE entry attribute values.

In the message text:

exception_text
   Exception text

System action: The program continues by using a default distinguished name (DN) of cn=schema for schema comparison on the targeted LDAP servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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GLD8829W Number of grace logins remaining is number for entry "name" on server "server_url".

Explanation: The authenticating user is only allowed the specified number of grace logins before the password expires. When the user's password expires, the authenticating user is no longer able to access the server.

In the message text:

number
   Number of grace logins

name
   Entry distinguished name

server_url
   LDAP server url

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password for the authenticating user should be changed before the number of allowed grace logins is exceeded. When the number of grace log ins is exceeded, the authenticating user is no longer able to authenticate to the targeted LDAP server. The password can be modified using the ldapmodify or ldappangepwd utilities. See z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about these utilities.
GLD8830E • GLD8831E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8830E  No subschemasubentry found in rootDSE.

Explanation: The ldapdiff utility is unable to find the subschemasubentry attribute on the search of the rootDSE entry. The subschemasubentry attribute specifies the distinguished name of the schema entry. Generally, this error can only occur when targeting the ldapdiff utility against a non-z/OS IBM Tivoli Directory Server.

System action: The program continues schema comparison by using the default distinguished name (DN) of cn=schema on the targeted LDAP server.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Define a subschemasubentry attribute value on the non-z/OS IBM Tivoli Directory Server. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8831E  An exception occurred during search: exception_text.

Explanation: The ldapdiff utility encountered an internal error while performing a search operation on the LDAP server. The exception is indicated in the message.

In the message text:

exception_text
Exception text

System action: The program continues.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. Ensure that the bound user has the necessary permissions to access the search query results. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
GLD8832E  GLD8833E

Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8832E  Error occurred while processing search results for server: exception_text.

Explanation:  The ldapdiff utility encountered an error while parsing through LDAP search results. The exception is indicated in the message.

In the message text:

```exception_text
Exception text
```

System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the ldapdiff utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify `-d ALL` on the command line. Then restart the program. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8833E  Error occurred while setting environment variables: exception_text.

Explanation:  The ldapdiff utility encountered an error while initializing the environment for a connection to the LDAP server. The exception is indicated in the message.

In the message text:

```exception_text
Exception text
```

System action:  The program continues but the environment settings are not set.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the exception text indicated in the message to correct the problem. Verify that the user has enough permissions to set the environment settings or the system property settings. If additional information is needed to solve the problem, specify `-d ALL` on the command line. Then restart the program. If the problem persists, contact the service representative.
GLD8834W • GLD8835E

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8834W Password expires in number_seconds seconds (number_days days and
number_hours:number_minutes:number_seconds) for entry "name" on server "server_url".

Explanation: The authenticating user is only allowed the specified amount of time before the password expires.
When the user's password expires, the authenticating user is no longer able to access the server.

In the message text:

number_seconds
    Password expiration in seconds

number_days
    Password expiration in days

number_hours
    Password expiration in hours

number_minutes
    Password expiration in minutes

number_seconds
    Password expiration in seconds

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The password for the authenticating user should be changed before the password expiration time is exceeded. Once the password has expired, the authenticating user is no longer able to authenticate to the targeted LDAP server. The password can be modified using the ldapmodify or ldapchangepwd utilities. See [z/OS IBM Tivoli Directory Server Client Programming for z/OS](http://www.ibm.com/support/docview.wss?uid=swg27038757) for more information about these utilities.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8835E Password has expired for entry "name" on server "server_url".

Explanation: The password for the authenticating user has expired. The authenticating user is unable to access the server until the password has been changed.

In the message text:
GLD8836E

name
   Entry distinguished name

server_url
   LDAP server url

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The password for the authenticating user must be reset and changed before the user is allowed access to the server. The password can be modified using the `ldapmodify` or `ldapchangepwd` utilities. See `z/OS IBM Tivoli Directory Server Client Programming for z/OS` for more information about these utilities. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8836E   Account is locked for entry "name" on server "server_url".

Explanation: The authenticating user's account has been locked and is prevented from accessing the specified server.

In the message text:

name
   Entry distinguished name

server_url
   LDAP server url

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: The authenticating user's account must be unlocked by an LDAP root or password administrator. If the authenticating user is the LDAP root administrator (adminDN) and the server being accessed is the z/OS LDAP server, use the UNLOCK ADMIN operator modify command to unlock the account. Once the account is unlocked, the authenticating user has access to the server. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8837I  The specified base DN is not found on the consumer server.

Explanation:  The ldapdiff utility was unable to find the baseDn on the consumer server. The baseDn was specified on the -b command line parameter of the ldapdiff utility.

System action:  The program continues without traversing the subtree on the consumer server. If the -F command line parameter is specified, any entries that exist on the supplier server in that subtree are added to the consumer server.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8838I  The specified base DN is not found on the supplier server.

Explanation:  The ldapdiff utility was unable to find the baseDn on the supplier server. The baseDn was specified on the -b command line parameter of the ldapdiff utility.

System action:  The program continues without traversing the subtree on the supplier server. If the -F command line parameter is specified, any entries that exist on the consumer server in that subtree are deleted.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  None.

Example:  None.

Administrator response:  None.

Source:  LDAP

Routing code:  None.

Descriptor code:  None.

Automation:  Not applicable.

GLD8839W  The supplier and consumer servers have different encryption settings. The operation may take longer.

Explanation:  The ldapdiff utility performed a search of the cn=configuration subtree to obtain the ibm-slapdPwEncryption attribute value. This search is only performed when the ldapdiff utility is used with a non-z/OS IBM Tivoli Directory Server. The ldapdiff utility determined the supplier and consumer servers have different encryption settings so the comparison operation might take longer. The operation is faster if the supplier and consumer servers have the same encryption settings.

System action:  The program continues.

Operator response:  None.
GLD8840E  Error while retrieving attributes of DN: exception_text.

Explanation:  The ldapdiff utility encountered an internal error while adding the attributes to an internal hash table. The exception that occurred is indicated in the message.

In the message text:

exception_text
  Exception text

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8841E  Exception occurred while parsing "name" DN: exception_text.

Explanation:  The ldapdiff utility encountered an exception while parsing the string representation of a distinguished name (DN). The exception that occurred is indicated in the message.

In the message text:

name
  String representation of a DN
exception_text
  Exception text

System action:  If the distinguished name that is being parsed is the baseDn specified on the -b command line parameter, the program ends. If other distinguished names are being parsed, the program continues.
Operator response:  None.
GLD8842E • GLD8843E

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure the syntax of the DN being parsed is correct. Verify that a valid baseDn is specified on the command line parameter. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8842E Exception occurred while fetching attributes from server: "exception_text".

Explanation: The ldapdiff utility encountered an exception while fetching attributes from the LDAP server. The exception is indicated in the message.

In the message text:

\texttt{exception_text}

Exception text

System action: The program continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the attributes that are being compared exist on both LDAP servers. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8843E Traverse exception occurred: exception_text

Explanation: The ldapdiff utility encountered an error while traversing the LDAP servers. The exception is indicated in the message. The error might have occurred for one of the following reasons:

- There is a problem performing a search operation on the LDAP server. Verify that the search request controls are valid.
- There is a problem traversing the search entry results from the LDAP server.
- There is a generic error traversing the LDAP server entries.

In the message text:
GLD8844E  Password must be changed for "name" on server "server_url" this is what the “should” look like

**Explanation:** The password for the authenticating user or the entry being modified must be changed. The effective password policy on the server indicates that the entry's password value must be changed.

In the message text:

- **name**
  - Entry distinguished name
- **server_url**
  - LDAP server url

**System action:** If authentication is being done, the program continues however the comparison and fix operations may fail. If an entry is being modified on the consumer server, the program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Change the password for the authenticating user or the entry that was being modified on the consumer server. The password for the authenticating user or the entry being modified can be changed by using the `ldapmodify` or `ldapchangepwd` utilities. See [z/OS IBM Tivoli Directory Server Client Programming for z/OS](https://www.ibm.com/) for more information about these utilities. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD8845E  Entry format for "option" is not valid.

Explanation:  The ldapdiff utility encountered an error while parsing the -C countNumber, -sp port, or -cp port command line parameters. The number specified is less than zero or not a proper numeric number.

In the message text:

option  
  Option name

System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Specify a valid number for the command line parameter indicated in the message. Then restart the program.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8846E  Missing JSSE package for SSL connection.

Explanation:  The installed version of Java™ is missing the Java secure socket extension (JSSE) package or the JSEE settings are not correct.

System action:  The program continues but connecting with the proper JSSE settings is not successful.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Verify the installed version of Java has the JSSE jar file installed. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8847E  Specified SASL mechanism is not available for server name.

Explanation:  The ldapdiff utility encountered an error because the LDAP server does not support the SASL authentication mechanism specified. This message is usually accompanied by another message indicating the exact cause of the error.

In the message text:
name

Server name

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8848E Unable to fix entry

Explanation: The ldapdiff utility encountered an error while attempting to fix an entry on the consumer server because the bindDn specified on the -cD command line parameter does not have the appropriate permissions. This message is usually accompanied by another message indicating the exact cause of the error.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify the bindDn specified on the -cD command line parameter has the appropriate permissions to add, delete, or modify entries on the consumer server. Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8849E Error occurred while retrieving filter ACL support of the server.

Explanation: The ldapdiff utility encountered an error while retrieving the rootDSE entry attributes from the LDAP server to determine if it supports filter ACL support. This message is usually accompanied by another message indicating the exact cause of the error.
System action: The program continues, however, filter ACL support is assumed not to be supported on the LDAP server.
Operator response: None.
Password may not be modified for "name" on server "server_url".

Explanation: The password for the entry being modified is not allowed to be changed by the authenticated user.

In the message text:

name
Entry distinguished name

server_url
LDAP server url

System action: The program ends.

Administrator response: Verify that the authenticated user has the appropriate permissions to change password values on the consumer server. Ensure that the effective password policy for the entry being modified on the consumer server allows the password to be modified. Use the Effective password policy extended operation in the ldapexop utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the ldapdiff utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Must supply old password for "name" on server "server_url".

Explanation: The old password value must be supplied with the new password value while modifying the entry on the consumer server.

In the message text:

name
Entry distinguished name
**GLD8852E**

**server_url**

LDAP server url

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the `ldapexop` utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the `ldapdiff` utility to allow this password value on the consumer server. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

**GLD8852E**  
**Password syntax is not valid for "name" on server "server_url".**

**Explanation:** The syntax of the password value for the entry being modified on the consumer server is not valid. The effective password policy on the consumer server does not allow this password value because it does not conform to the allowed password syntax.

In the message text:

```
name  
   Entry distinguished name
```

**server_url**

LDAP server url

**System action:** The program ends.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the `ldapexop` utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the `ldapdiff` utility to allow this password value on the consumer server. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.
GLD8853I  GLD8855E

GLD8853I  Finished comparing number entries.
Explanation:  The ldapdiff utility has processed the number of entries indicated in the message.
In the message text:

number
   Number of entries processed
System action:  The program continues.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8854E  Error occurred while setting the replication controls.
Explanation:  The ldapdiff utility encountered an internal error while setting the advanced replication request controls. This message is accompanied by another message indicating the exact cause of the error.
System action:  The program continues without sending the advanced replication controls to the consumer server.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  None.
Example:  None.
Administrator response:  Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

GLD8855E  Supplier and consumer servers cannot be the same.
Explanation:  The ldapdiff utility requires the host and port specified for the supplier and consumer servers be different. The ldapdiff utility does not support comparing and fixing entries on the same server.
System action:  The program ends.
Operator response:  None.
System programmer response:  None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Correct the host and port values specified for the supplier and consumer servers. Then restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8856E Internal error occurred.
Explanation: The ldapdiff utility encountered an internal error while removing controls from the previous request. This message is accompanied by another message indicating the exact cause of the error.
System action: The program continues without removing the control from the previous request.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify -d ALL on the command line. Then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8857E Unable to display DNs only for non-matching entries. Servers must be able to calculate entry checksums in order to use this feature.
Explanation: If the -O command line parameter is specified on the ldapdiff utility, both servers must support entry checksum calculation with the ibm-entryChecksum and the ibm-entryChecksumOp attributes. The utility uses these attribute values to compare each entry on the supplier and consumer servers to quickly detect differences.
System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Verify that both servers support the calculation of entry checksums by searching the rootDSE entry. Each LDAP server must have an ibm-supportedCapabilities attribute value of 1.3.18.0.2.32.56 on the
rootDSE entry to use the -O command line parameter. If both LDAP servers do not have this support, remove the -O command line parameter. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8858W  Schema differences will not be automatically fixed.

Explanation: The ldapdiff utility does not support automatically fixing schema differences. The -F command line parameter is only supported for automatically fixing non-schema related entries.

System action: The program continues but the schema is not automatically fixed.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: If the -L command line parameter is specified, the schema differences between the LDAP servers are written to an output schema LDIF file. This generated LDIF file can be used to manually modify the consumer server. If the -L command line parameter is not specified, the schema differences are written to standard output.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8859E  A KeyStorePwd or TrustStorePwd is required.

Explanation: A KeyStorePwd or TrustStorePwd is required when the keyStoreType or trustStoreType options on the ldapdiff command line are set to JCEKS. The password must be specified on the -sP, -sY, -cP, or -cY command line parameters to gain access to the keyStore or trustStore.

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Specify a password value for the keyStore or trustStore. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD8860E  The "name" DN is not valid.

Explanation: The ldapdiff utility is unable to search the supplier and consumer servers for the distinguished name indicated in the message because the name is not valid.

In the message text:

name
Entry distinguished name

System action: If the -S command line parameter is specified to compare the schema on both LDAP servers, the program continues; otherwise the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the distinguished name indicated in the message is the baseDn specified on the -b command line parameter, verify that it is valid and exists on both LDAP servers being compared. If the distinguished name is not the baseDn, check the entry on the LDAP server to verify that it is valid. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8861E  A specified option is not supported.

Explanation: The ldapdiff utility has detected an option that it does not support.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that each command line parameter specified on the command line of the ldapdiff utility is valid. See ldapdiff utility for the correct ldapdiff utility syntax. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8862W  The -O option overrides the -F and -L options.

Explanation: The -O command line parameter was specified with either the -F or -L parameters on the ldapdiff utility command line. When this occurs, the distinguished names (DNs) of entries that differ between the LDAP servers are only displayed to standard output. The differences are not fixed and are not written to the output LDIF file specified on the -L command line parameter.
GLD8863I  •  GLD8864I

**System action:** The program continues but entry differences are not fixed and are not written to the output LDIF file specified on the -L command line parameter.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** If entry differences need to be fixed or written to the output LDIF file, remove the -O command line parameter. Then restart the program.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

GLD8863I  LDIF output will be written to filename.

**Explanation:** Since the -L command line parameter was specified, the entry differences between the LDAP servers are written to the output LDIF file that is indicated in the message.

In the message text:

filename
  Output LDIF file

**System action:** The program continues.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** None.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

GLD8864I  Schema LDIF output will be written to filename.

**Explanation:** Since the -S and -L command line parameters were specified together on the ldapdiff utility, the schema differences between the LDAP servers are written to the schema output LDIF file that is indicated in the message.

In the message text:

filename
  Schema output LDIF file

**System action:** The program continues.

**Operator response:** None.

z/OS V2R2 IBM Tivoli Directory Server Messages and Codes for z/OS
GLD8865E  Password is too short for "name" on server "server_url".

Explanation: The password value for the entry being modified on the consumer server is too short in length. The effective password policy on the consumer server does not allow the entry to have a password value this short.

In the message text:

name       Entry distinguished name
server_url LDAP server url

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the Effective password policy extended operation in the ldapexop utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the ldappdiff utility to this password value on the consumer server. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8866E  Password is too young for "name" on server "server_url".

Explanation: The password value for the entry being modified on the consumer server is not allowed to be changed because it has been modified too recently. The effective password policy on the consumer server does not allow the entry’s password value to be modified now.

In the message text:

name       Entry distinguished name
GLD8867E

Server URL

LDAP server url

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the Effective password policy extended operation in the Ldapexop utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the ldapdiff utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

GLD8867E Password is in history for "name" on server "server_url".

Explanation: The password value for the entry being modified on the consumer server is not allowed to be changed to this value because it already exists in the entry’s password history. The effective password policy on the consumer server does not allow the entry’s password value to be set to this value.

In the message text:

name
Entry distinguished name

server_url
LDAP server url

System action: The program ends.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the Effective password policy extended operation in the Ldapexop utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the ldapdiff utility to allow this password value on the consumer server. All pwdHistory attribute values for the entry may need to be removed from the consumer server using the ldapmodify utility to allow the entry to be synchronized. Then restart the program.

Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
Chapter 6. Plug-in messages (9000)

This section lists the messages issued by the remote crypto ("Remote crypto plug-in messages") and ICTX ("ICTX plug-in messages" on page 413) plug-ins.

Remote crypto plug-in messages

GLD9101A Unable to get plug-in type: error_code - error_text

Explanation: During initialization the remote crypto plug-in called slapi_pblock_get() to determine the type of plug-in. The call to slapi_pblock_get() failed, with the specified return code. See the description of slapi_pblock_get() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error.

In the message text:

error_code
  Error code from slapi_pblock_get()

error_text
  Error text corresponding to the error code

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9102A Unrecognized plug-in type plugin_type

Explanation: During initialization the remote crypto plug-in calls slapi_pblock_get() with function code SLAPI_PLUGIN_TYPE to determine the type of plug-in. The type returned is not SLAPI_PLUGIN_CLIENTOPERATION. The plug-in type is defined in the LDAP server configuration file. The type must be clientOperation.

In the message text:

plugin_type
  Type of plug-in

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the
GLD9103A

srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Change the plug-in type to clientOperation and restart the program.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.

Unable to explicitly load the ICSF DLL 'CSFDLL64': error_code/reason_code - error_text

Explanation: During initialization the remote crypto plug-in calls dllload() to load the ICSF DLL. The call to dllload() failed, with the specified return code. See the description of dllload() in z/OS XL C/C++ Runtime Library for more information about the error.

In the message text:

error_code
   Error code from dllload()

reason_code
   Reason code from dllload()

erreur_text
   Error text corresponding to the error code

System action: The error occurs during initialization of an LDAP server plug-in. The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
GLD9104A  Unable to register function function: error_code - error_text

Explanation: During initialization the remote crypto plug-in calls slapi_pblock_set() to register for the specified function. The call to slapi_pblock_set() fails, with the specified return code. See the description of slapi_pblock_set() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error.

In the message text:

function
  Function type

error_code
  Error code from slapi_pblock_set()

error_text
  Error text corresponding to the error code

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9105A  Unable to set oid request OID: error_code - error_text

Explanation: During initialization the remote crypto plug-in calls slapi_pblock_set() to register for the specified OID. The call to slapi_pblock_set() fails, with the specified return code. See the description of slapi_pblock_set() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error.

In the message text:

oid
  Request OID

error_code
  Error code from slapi_pblock_set()

error_text
  Error text corresponding to the error code

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.
GLD9106E  •  GLD9107E

Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.

Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

---

GLD9106E  Unable to allocate bytes bytes of storage at function():line_number

Explanation:  The remote crypto plug-in called slapi_ch_malloc() to allocate storage. The allocation failed. See the description of slapi_ch_malloc() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error.

In the message text:

- bytes:  Number of bytes
- function:  Function name where the allocation failed
- line_number:  Line number where the allocation failed

System action:
- If the error occurs during initialization of an LDAP server plug-in, then the plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.
- If the error occurs while processing an LDAP server operation, the LDAP server and plug-in continue. The request fails.

Operator response:  Increase the storage available for use by the LDAP server, then restart the program. If the problem persists, contact the service representative.

System programmer response:  None.
User response:  None.

Problem determination:  Not applicable.
Module:  None.
Example:  None.

Administrator response:  None.
Source:  LDAP
Routing code:  None.
Descriptor code:  None.
Automation:  Not applicable.

---

GLD9107E  Unable to save function_code: error_code - error_text

Explanation:  The remote crypto plug-in called slapi_pblock_set() to save the specified value. The call to slapi_pblock_set() failed, with the specified return code. See the description of slapi_pblock_set() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error.
In the message text:

function_code
  Function code to save

error_code
  Error code from slapi_pblock_set()

error_text
  Error text corresponding to the error code

System action:
• If the error occurs during initialization of an LDAP server plug-in, then the plug-in does not start. If the
  srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run
  with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is
  the default if the configuration option is not specified), the program ends.
• If the error occurs while processing an LDAP server operation, the LDAP server and plug-in continue. The request
  fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error, then restart the program. If the
problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9108E Unable to get function_code: error_code - error_text

Explanation: The remote crypto plug-in called slapi_pblock_set() to get the specified item. The call to
slapi_pblock_set() failed, with the specified return code. See the description of slapi_pblock_set() in z/OS IBM Tivoli
Directory Server Plug-in Reference for z/OS for more information about the error.

In the message text:

function_code
  Function code to get

error_code
  Error code from slapi_pblock_set()

error_text
  Error text corresponding to the error code

System action: The LDAP server and plug-in continue. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.
GLD9109E • GLD9110E

**Administrator response:** Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD9109E   Unable to create mutex mutex: error_code/reason_code - error_text

**Explanation:** The plug-in is unable to create a mutex. See the description of `pthread_mutex_init()` in [Runtime Library Reference](https://www.ibm.com/support/knowledgecenter/SSYGVY_2.2.0/development/h sexually). for more information about the error.

In the message text:

- **mutex**
  - Mutex Name

- **error_code**
  - Error code from `pthread_mutex_init()`

- **reason_code**
  - Reason code from `pthread_mutex_init()`

- **error_text**
  - Error text corresponding to the error code

**System action:** The LDAP server and plug-in continue. The request fails.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** None.

**Example:** None.

**Administrator response:** Use the information in the message to correct the error, then restart the program. If the problem persists, contact the service representative.

**Source:** LDAP

**Routing code:** None.

**Descriptor code:** None.

**Automation:** Not applicable.

---

GLD9110E   Remote crypto plug-in parameter is not valid: value

**Explanation:** The LDAP server encountered a configuration error with the Remote Crypto plug-in because a plug-in parameter that is not valid was specified for the **plugin** configuration option.

In the message text:

- **value**
  - Plug-in parameter value in **plugin** option

**System action:** The plug-in does not start. If the `srvStartUpError` option in the LDAP server configuration file is set to `ignore`, the LDAP server continues to run with those backends and plug-ins that successfully start. If the `srvStartUpError` option is set to `terminate` (this is the default if the configuration option is not specified), the program ends.

**Operator response:** None.

**System programmer response:** None.
GLD9111E  The number of remote crypto plug-in parameters is not valid: parm_count

Explanation: The LDAP server encountered a configuration error with the Remote Crypto plugin because the number of parameters specified for the plugin configuration option was not valid.

In the message text:

parm_count

Number of parameters in plugin option

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to specify valid plug-in parameters for the Remote Crypto plugin configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

---

GLD9112I  The remote crypto plug-in is enabled. CCA enabled: cca_status. PKCS#11 enabled: pkcs11_status

Explanation: The LDAP server has successfully configured the Remote Crypto plugin.

In the message text:

cca_status

CCA support status

pkcs11_status

PKCS#11 support status

System action: The plug-in starts, and the LDAP server continues to run.

Operator response: None.

System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: None.
Example: None.
Administrator response: None.
Source: LDAP
Routing code: None.
Descriptor code: None.
Automation: Not applicable.
ICTX plug-in messages

GLD9201A  No suffix configured for ICTX. Specify suffix "CN=ICTX".

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because a suffix was not specified for the plug-in configuration option. The suffix for the ICTX plug-in must be set to CN=ICTX.

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of CN=ICTX for the ICTX plug-in configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9202A  Too many suffixes configured for ICTX. Specify only suffix "CN=ICTX".

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because there were too many suffixes that are specified for the plug-in configuration option. The suffix for the ICTX plug-in must be set to CN=ICTX.

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of CN=ICTX for the ICTX plug-in configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD9203A  Incorrect suffix configured for ICTX. Specify suffix "CN=ICTX" instead.

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because a suffix that was not valid was specified for the plugin configuration option. The suffix for the ICTX plug-in must be set to CN=ICTX.

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of CN=ICTX for the ICTX plugin configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9204E  Failure encountered in the audit logging facility. RAuditx returned SAF_return, RACF_return_code, RACF_reason_code.

Explanation: The ICTX plug-in extended operations encountered a failure during initialization when invoking the audit logging facility. The RAuditx callable service returned the SAF_return_code, RACF_return_code, and RACF_reason_code.

In the message text:

SAF_return
  SAF return code from RAuditx

RACF_return_code
  RACF return code from RAuditx

RACF_reason_code
  RACF reason code from RAuditx

System action: Initialization continues, but the remote auditing requests fail until an administrator responds to the problem.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the remote auditing function is needed, correct the problem indicated by the RAuditix codes. If SAF_return_code is set to 8, RACF_return_code is set to 8, and RACF_reason_code is set to 4, it indicates the user associated with the LDAP server does not have at least READ access to the FACILITY class profile IRR.RAUDITX. See z/OS Security Server RACF Callable Services for more information about the returned SAF_return_code, RACF_return_code, and RACF_reason_code.
GLD9205A  Incorrect plugin type configured for ICTX. Specify type clientOperation instead.

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because the plugin configuration option did not specify clientOperation as the pluginType. The ICTX plugin option must specify the plug-in type as a clientOperation.

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to specify a plug-in type of clientOperation for the ICTX plugin configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9206A  Unexpected function error encountered during ICTX initialization.

Explanation: The LDAP server encountered an error while initializing the ICTX plug-in. The ICTX plug-in initialization process was terminated prematurely as a result of an unforeseen error.

System action: The plug-in does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Look for associated diagnostic information in the system or job log. Consider restarting the LDAP server with debug tracing activated to obtain additional error information. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
GLD9207A  Suffix suffix_value already in use. Remove duplicate suffix definition.

Explanation: The LDAP server encountered an error while initializing the ICTX plug-in because the suffix_value has already been defined as a suffix for another plug-in or backend. The suffix for the ICTX plug-in must be set to CN=ICTX and not be used by any other plug-in or backend in the LDAP server configuration file.

In the message text:

suffix_value

Suffix value in plugin option

System action: The plug-in does not start. If the srvStartupError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends and plug-ins that successfully start. If the srvStartupError option is set to terminate (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to remove the CN=ICTX suffix from any other configured backends or plug-ins. A subordinate suffix_value in any casing such as cn=abc, cn=ictx is also not allowed in any other backends or plug-ins. Also, verify that the ICTX plugin option was not duplicated accidentally. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.
Chapter 7. Return and reason codes

This section contains LDAP server return codes, LDAP reason codes "LDAP server reason codes" on page 424, remote crypto plug-in reason codes "Remote crypto plug-in reason codes" on page 551, and ICTX plug-in reason codes "ICTX plug-in reason codes" on page 557.

Changed LDAP return codes

For information about changed LDAP return codes, see z/OS V2R2 Migration or see Migration considerations for applications.

LDAP return codes

If errors occur in the LDAP server during a client request, a return code is returned as part of the operations response. The return codes that are returned by the z/OS LDAP server on client requests are documented in /usr/include/ldap.h. However, only a subset of the documented return codes in ldap.h is allowed to be returned by the z/OS LDAP server. When an error occurs in the LDAP server, more specific information about the error is returned to the client application in the reason code message. See "LDAP reason codes" on page 423 for information about the reason codes.

Table 1 summarizes return codes in the ldap.h file which the z/OS LDAP server issues when processing client requests. Some return codes in Table 1 and other return codes that are documented in the ldap.h file, but not found in Table 1, are returned by the LDAP C client programming routines.

Table 1. LDAP server return codes

<table>
<thead>
<tr>
<th>#define in ldap.h file</th>
<th>LDAP return code decimal (hexadecimal)</th>
<th>LDAP return code description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP_SUCCESS</td>
<td>0 (0x00)</td>
<td>The operation is successful.</td>
</tr>
<tr>
<td>LDAP_OPERATIONS_ERROR</td>
<td>1 (0x01)</td>
<td>An internal operations error occurred in the LDAP server.</td>
</tr>
<tr>
<td>LDAP_PROTOCOL_ERROR</td>
<td>2 (0x02)</td>
<td>The LDAP server encountered an LDAP client request that is not a valid LDAP message. Verify that the LDAP client request messages are encoded properly.</td>
</tr>
<tr>
<td>LDAP_TIMELIMIT_EXCEEDED</td>
<td>3 (0x03)</td>
<td>The time limit for the search request has been exceeded. See Customizing the LDAP server configuration about the timelimit option for more information about how time limits are processed in the LDAP server.</td>
</tr>
<tr>
<td>LDAP_SIZELIMIT_EXCEEDED</td>
<td>4 (0x04)</td>
<td>The size limit on the search request has been exceeded. See the Customizing the LDAP server configuration about the sizelimit option for more information about how size limits are processed in the LDAP server.</td>
</tr>
<tr>
<td>#define in ldap.h file</td>
<td>LDAP return code decimal (hexadecimal)</td>
<td>LDAP return code description</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>LDAP_COMPARE_FALSE</td>
<td>5 (0x05)</td>
<td>The attribute value specified for the attribute type on the compare request does not exist in the entry.</td>
</tr>
<tr>
<td>LDAP_COMPARE_TRUE</td>
<td>6 (0x06)</td>
<td>The attribute value specified for the attribute type on the compare request does exist in the entry.</td>
</tr>
<tr>
<td>LDAP_STRONG_AUTH_NOT_SUPPORTED</td>
<td>7 (0x07)</td>
<td>The requested authentication mechanism is not supported by the z/OS LDAP server. The bind mechanisms supported by the z/OS LDAP server are: anonymous, simple, CRAM-MD5, DIGEST-MD5, GSSAPI (Kerberos), and SASL EXTERNAL.</td>
</tr>
<tr>
<td>LDAP_STRONG_AUTH_REQUIRED</td>
<td>8 (0x08)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_PARTIAL_RESULTS</td>
<td>9 (0x09)</td>
<td>The LDAP server encountered an error while processing an LDAP Version 2 search request and a referral entry was encountered. This return code is used to indicate that not all search results have been obtained because LDAP version 2 client applications do not follow referrals automatically.</td>
</tr>
<tr>
<td>LDAP_REFERRAL</td>
<td>10 (0x0A)</td>
<td>The LDAP server encountered a referral while processing a search request. The client application may follow the referral to another LDAP server to process the remainder of the request.</td>
</tr>
<tr>
<td>LDAP_ADMINLIMIT_EXCEEDED</td>
<td>11 (0x0B)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_UNAVAILABLE_CRITICAL_EXTENSION</td>
<td>12 (0x0C)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_CONFIDENTIALITY_REQUIRED</td>
<td>13 (0x0D)</td>
<td>A control specified on an LDAP client request had the control criticality set to true however the server does not recognize the control or the control is not appropriate for the operation. If the control is not critical, set the criticality to false to allow the LDAP server to ignore the control if it is always sent on all client requests. See <a href="#">Supported server controls</a> for more information about the supported controls in the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_SASLbind_IN_PROGRESS</td>
<td>14 (0x0E)</td>
<td>A CRAM-MD5, DIGEST-MD5, or GSSAPI (Kerberos) bind is currently in progress. This is a temporary error that occurs on these multi-handshake binds between the client and server.</td>
</tr>
<tr>
<td>#define in ldap.h file</td>
<td>LDAP return code decimal (hexadecimal)</td>
<td>LDAP return code description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>LDAP_NO_SUCH_ATTRIBUTE</td>
<td>16 (0x10)</td>
<td>An attribute type specified on the LDAP client request does not exist in the entry. Verify that the entry being modified or compared has the attribute that was specified.</td>
</tr>
<tr>
<td>LDAP_UNDEFINED_TYPE</td>
<td>17 (0x11)</td>
<td>An attribute specified on the LDAP client request does not exist in the schema of the LDAP. The attribute must be added to the LDAP server's schema so that it can be used.</td>
</tr>
<tr>
<td>LDAP_INAPPROPRIATE_MATCHING</td>
<td>18 (0x12)</td>
<td>The LDAP server encountered an error during a search request because the search filter is attempting to use a matching rule that is not supported by the attribute type. This can occur while attempting to use an attribute type/value pair in the search filter that has binary syntax. These types of search filters are not supported in the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_CONSTRAINT_VIOLATION</td>
<td>19 (0x13)</td>
<td>The LDAP server encountered a constraint error during a client request. This error can occur if an integer value specified on an integer syntax attribute is too large or small, an entry is attempted to be added or modified with an obsoleted objectclass or attribute type, or a non-user modifiable attribute type in the schema.</td>
</tr>
<tr>
<td>LDAP_TYPE_OR_VALUE_EXISTS</td>
<td>20 (0x14)</td>
<td>The LDAP server encountered an error during a client request because the attribute type or the attribute type and value pair exist in the targeted entry.</td>
</tr>
<tr>
<td>LDAP_INVALID_SYNTAX</td>
<td>21 (0x15)</td>
<td>An attribute value specified on an LDAP client request does not have a valid syntax specified. For example, if an attribute type in the schema has an integer syntax, an integer value must be specified on an add or modify request.</td>
</tr>
<tr>
<td>LDAP_NO_SUCH_OBJECT</td>
<td>32 (0x20)</td>
<td>The LDAP server encountered an error during a client request because the target entry does not exist in the directory.</td>
</tr>
<tr>
<td>LDAP_ALIAS_PROBLEM</td>
<td>33 (0x21)</td>
<td>The LDAP server encountered an error while attempting to process alias entries on a client request. Verify that there are no alias loops in the directory (for example, alias entries pointing at each other) and that the alias entries are properly configured. See <a href="#">Alias</a> for more information about configuring aliases in the LDAP server.</td>
</tr>
<tr>
<td>Define in ldap.h file</td>
<td>LDAP return code decimal (hexadecimal)</td>
<td>LDAP return code description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>LDAP_INVALID_DN_SYNTAX</td>
<td>34 (0x22)</td>
<td>The LDAP client request is not allowed because the DN does not have valid syntax. This error can occur on add and modify requests if the distinguished name (DN) is missing an equal sign (‘=’) between an attribute type and value or the DN does not contain a correct escaping sequence before a multi-byte UTF8 value.</td>
</tr>
<tr>
<td>LDAP_ALIAS_DEREF_PROBLEM</td>
<td>36 (0x24)</td>
<td>The LDAP server encountered an error on a search request while attempting to dereference an alias entry however the dereferenced entry does not exist in the directory. Verify that alias entries in the directory point to valid entries in the DIT.</td>
</tr>
<tr>
<td>LDAP_INAPPROPRIATE_AUTH</td>
<td>48 (0x30)</td>
<td>The LDAP client request is not allowed because the password (credentials) specified is not correct or the distinguished name of the authenticating user is not correct. Verify that the distinguished name and password of the authenticating user are correct.</td>
</tr>
<tr>
<td>LDAP_INVALID_CREDENTIALS</td>
<td>49 (0x31)</td>
<td>The LDAP client request is not allowed because the password (credentials) specified is not correct or the authenticating user’s distinguished name is not correct. Verify that the distinguished name and password of the authenticating user are correct.</td>
</tr>
<tr>
<td>LDAP_INSUFFICIENT_ACCESS</td>
<td>50 (0x32)</td>
<td>The LDAP client request is not allowed because the authenticated user does not have the appropriate authority to perform the requested operation. Verify that ACLs are configured correctly for the authenticated user or the groups that the authenticated user belongs to.</td>
</tr>
<tr>
<td>LDAP_BUSY</td>
<td>51 (0x33)</td>
<td>The LDAP server is currently busy processing another request.</td>
</tr>
<tr>
<td>LDAP_UNAVAILABLE</td>
<td>52 (0x34)</td>
<td>The LDAP server is currently not available to process the client request. This error occurs for variety of reasons including DB2 is not available for configured TDBM or GDBM backends, ICSF is not available for password encryption or decryption, and RACF is not available for the SDBM backend. Verify that products the LDAP server must use to process the request are available.</td>
</tr>
<tr>
<td>LDAP_UNWILLING_TO_PERFORM</td>
<td>53 (0x35)</td>
<td>The LDAP server is unwilling to perform the requested LDAP client request.</td>
</tr>
<tr>
<td>LDAP_LOOP_DETECT</td>
<td>54 (0x36)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
</tbody>
</table>
### Table 1. LDAP server return codes (continued)

<table>
<thead>
<tr>
<th>#define in ldap.h file</th>
<th>LDAP return code decimal (hexadecimal)</th>
<th>LDAP return code description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP_NAMING_VIOLATION</td>
<td>64 (0x40)</td>
<td>The LDAP client request is not allowed because of a distinguished name violation. This error occurs on add requests when the superior entry is a referral or an alias entry. This error also occurs on add and modify requests when the distinguished name (DN) contains an attribute type that has binary syntax, which is not allowed in distinguished names.</td>
</tr>
<tr>
<td>LDAP_OBJECT_CLASS_VIOLATION</td>
<td>65 (0x41)</td>
<td>The LDAP client request is not allowed because it does not adhere to the schema of the LDAP server. This error occurs on add, modify, and modify dn requests when adding or modifying an entry in such a way that it does not have all required attribute values for the object class of the entry.</td>
</tr>
<tr>
<td>LDAP_NOT_ALLOWED_ON_NONLEAF</td>
<td>66 (0x42)</td>
<td>The LDAP client request is not allowed on a non-leaf node in the directory. This error generally occurs while attempting to delete an entry that has child entries underneath it in the DIT. The leaf or child entries must be deleted before removing this entry from the DIT.</td>
</tr>
<tr>
<td>LDAP_NOT_ALLOWED_ON_RDN</td>
<td>67 (0x43)</td>
<td>The LDAP client request is attempting to change a relative distinguished name (RDN) component of a distinguished name (DN) which is not allowed. For example, this can occur when attempting to delete the cn attribute from the DN, cn=yvonne,o=ibm, but the cn attribute value is a required attribute for the object class of the entry.</td>
</tr>
<tr>
<td>LDAP_ALREADY_EXISTS</td>
<td>68 (0x44)</td>
<td>The LDAP client request is attempting to add an entry to the LDAP server that exists or attempting to modify the schema to include an attribute type or object class that is already present in the schema.</td>
</tr>
<tr>
<td>LDAP_NO_OBJECT_CLASS_MODS</td>
<td>69 (0x45)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_AFFECTS_MULTIPLE_DSAS</td>
<td>71 (0x47)</td>
<td>Not currently returned by the z/OS LDAP server.</td>
</tr>
<tr>
<td>LDAP_OTHER</td>
<td>80 (0x50)</td>
<td>An internal error occurred in the LDAP server that does not fall under one of the previously documented return codes. It is commonly used for indicating an out of storage error in the LDAP server.</td>
</tr>
</tbody>
</table>
### Table 1. LDAP server return codes (continued)

<table>
<thead>
<tr>
<th>#define in ldap.h file</th>
<th>LDAP return code decimal (hexadecimal)</th>
<th>LDAP return code description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP_NO_RESULT_MESSAGE</td>
<td>248 (0xF8)</td>
<td>The LDAP client received no result message for this request. The server does not send this return code to the client. However, it might indicate this return code in the activity log or in SMF record type 83 subtype 3 audit records when a result message is not sent. This can occur when the request is abandoned by the client, when the client issues an unbind request before the indicated request completes, or when the connection between the client and server is terminated for other reasons.</td>
</tr>
</tbody>
</table>
LDAP reason codes

The LDAPResult construct is used by the LDAP protocol to return success or failure indications from servers to clients. This construct contains an error message field. Servers can optionally provide “human-readable” diagnostic information in this field. Depending on the location in the LDAP server where errors are detected, error messages that are generated might have the following format:

<prefix><numeric digits> <diagnostic information> <traceback information>

where:

prefix Is one of the following
  ITYXOR - The reason code message is issued by the ICTX plug-in.
  RC - The reason code message is issued by the remote crypto plug-in.
  R - All other reason code messages that are issued by the z/OS LDAP server.

numeric digits Represents a specific reason code.

diagnostic information Provides details about the reason for the failure.

traceback information Is of the form (function_name:line_number) and assists you in diagnosing application or configuration problems.

Note the following regarding this error information:

• It is intended to be “human-readable” to help identify problems that are detected by the server.
• It is not translated (English text only).
• It is not intended to be used as an application programming interface (API).
• Data returned may be changed by service or new releases of the product. (Again, it is not intended to be an API.)
• The reason code that is returned for a particular error can change and the reason code text can change.
LDAP server reason codes

This section lists the reason codes that are issued by the LDAP server and their diagnostic information. These reason codes have a prefix of "R".

R000001  Unable to allocate storage

Explanation: An LDAP operation failed because the LDAP server is unable to allocate the necessary storage to continue processing the request.

System action: Depending on the severity of the storage problem, the LDAP server may continue or may end. The LDAP operation fails.

Operator response: Increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R000004  Internal server error encountered

Explanation: An LDAP operation failed because the LDAP server detects an internal programming error.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locating and correcting the problem. If the problem persists, contact the service representative.

R000005  Unable to translate value for attribute 'name' from source_codepage to target_codepage

Explanation: An LDAP operation failed because the LDAP server cannot translate an attribute name or value between local code page and UTF8.

In the message text:

name
  Attribute name

source_codepage
  Source code page name

target_codepage
  Target code page name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use server ERROR debug trace output to help locating and correcting the problem. If the problem persists, contact the service representative.

R000100  The password has expired

Explanation: An LDAP bind operation to the SDBM backend failed because the password of the z/OS Security Server user associated with the bind distinguished name is expired.

System action: The LDAP server continues to run, but the operation fails.

User response: The expired password must be reset. A new password can be specified during bind using the old_password/new_password format. For RACE, the password can be a password or a password phrase. Also, for RACE, the password or phrase can be changed by another LDAP user using an SDBM modify command of the racfPassword or racfPassPhrase attribute, assuming that the user has the RACF authorization to change a password or phrase.
R000101  The new password is not valid

**Explanation:** An LDAP bind operation to the SDBM backend failed. The bind tries to change the current password of the z/OS Security Server user associated with the bind distinguished name but the new password is not valid to the z/OS Security Server. For RACF, the password can be a password or a password phrase.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Review the password requirements of the z/OS Security Server, including rules on password history and syntax. For RACF, when using the `old_password/new_password` format to change a password or password phrase during bind, the old and new values must both be passwords or both be password phrases. Correct the passwords and then reissue the operation.

---

R000102  The user ID has been revoked

**Explanation:** An LDAP bind operation to the SDBM backend failed because the z/OS Security Server user associated with the bind distinguished name is revoked. This user cannot be used until the user is no longer revoked.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact a z/OS Security Server administrator to unrevoke the user. For RACF, this can also be accomplished by another LDAP user using an SDBM modify operation specifying a value of `resume` for the `racfAttributes` attribute, assuming that the user has the RACF authorization to do this. Then reissue the operation.

---

R000104  The password is not correct or the user ID is not completely defined (missing password or uid)

**Explanation:** An LDAP bind operation to the SDBM backend failed. Either the password specified in the bind does not match the password of the z/OS Security Server user associated with the bind DN or the z/OS Security Server user definition is missing some fields. For RACF, the password can be a password or a password phrase. Also, for RACF, the user profile must be defined, with a password or password phrase, and a UID value in the OMVS segment.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If the password (or password phrase) is not correct, reissue the bind request with the correct value. If the user is not complete in the z/OS Security Server, contact a z/OS Security Server administrator. For RACF, another user can use an SDBM modify operation specifying a value for the `racfOmvsUid` attribute, assuming that the user has the RACF authorization to do this. Then reissue the operation.

---

R000105  A bind argument is not valid

**Explanation:** An LDAP bind operation to the SDBM backend failed because of a problem using the password or parsing the old and new passwords when using the `old_password/new_password` format to change a password. The length of the old password and new password (if specified) must be greater than 0 and less than 101. For RACF, the passwords can be passwords or password phrases.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check that the supplied passwords are not too short or long. When using the `old_password/new_password` format, leaving out the old or new password (by specifying `/new_password` or `old_password/`) produces a zero-length password. Then reissue the operation.

---

R000114  The realm portion of the value of attribute 'name' is not the RACF default realm

**Explanation:** An LDAP add, modify, or search operation to the SDBM backend failed. The operation specifies an attribute value using `principal@realm` format, but the `realm` part of the value does not match the name of the local z/OS Kerberos Security Server (KERBDFLT) realm.

In the message text:

```plaintext
name
```

**Attribute name**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Either contact a z/OS Security Server administrator to determine the correct realm name to use in
the attribute value or remove the @realm part of the value. Then reissue the operation.

R000115  There is no RACF default realm

Explanation:  An LDAP operation to the SDBM backend failed because SDBM is not able to determine the local
z/OS Kerberos Security Server (KERBDFLT) realm. SDBM uses the RACF R_kerbind callable service to retrieve the
realm name. Either there is no realm name or the callable service failed to retrieve it.

System action:  The LDAP server continues to run, but the operation fails.

System programmer response:  Determine why the R_kerbind callable service failed. LDAP server ERROR debug
trace output contains the various return codes from R_kerbind.

User response:  Contact a z/OS Security Server administrator to correct the problem. Then reissue the operation.

R000116  Cannot specify a value when deleting attribute 'name'

Explanation:  An LDAP modify operation to the SDBM backend failed because it tries to delete a specific value from
the attribute indicated in the reason code. SDBM does not support deleting individual values for this attribute.

In the message text:

name
  Attribute name

System action:  The LDAP server continues to run, but the operation fails.

User response:  Change the modify operation input to delete the entire attribute or to replace the attribute values
with the wanted values. Then reissue the operation.

R000117  Cannot delete attribute 'name'

Explanation:  An SDBM modify operation failed because it is trying to delete an attribute that corresponds to a
RACF profile field that cannot be deleted. This reason code can also occur when the LDAP server is processing a
replicated add or modify operation that attempts to delete a value for certain operational attributes that cannot be
deleted.

In the message text:

name
  Attribute name

System action:  The LDAP server continues to run, but the operation fails.

User response:  Change the modify input to delete the entire attribute or to replace the attribute values with the
wanted values. Then reissue the operation.

R000119  Cannot add or replace attribute 'name'

Explanation:  An LDAP add or modify operation to the SDBM backend failed because there is an attribute in the
input that cannot be added or modified in the entry. There are some SDBM attributes that represent fields set by
RACF (for example the racfAuthorizationDate attribute corresponds to the CREATEDAT field in a user profile).
These fields cannot be set by a user in an SDBM add or modify operation. Also, the attributes used in the
distinguished name (DN) of SDBM entries (cn, racfid, racfuserid, racfgroupid, and profilename) can only be
specified in add or modify input if they have the same value as in the DN of the entry being added or modified.

In the message text:

name
  Attribute name

System action:  The LDAP server continues to run, but the operation fails.

User response:  Remove the attribute from the add or modify input or, for a naming attribute, ensure that its value
is the same as in the distinguished name of the entry. Then reissue the operation.
R000120  Cannot specify multiple values for attribute 'name'

Explanation: An LDAP add or modify operation failed because it results in multiple values for an attribute that only allows a single value. Attributes that are defined as SINGLE-VALUE in the LDAP schema cannot be assigned more than one value. Also, in an SDBM entry, the cn attribute must be single-valued although it is not defined that way in the schema. Note that when adding an entry, the LDAP server automatically adds the attributes in the leftmost part of the entry’s distinguished name to the entry. If one of those attributes is defined as SINGLE-VALUE and the add input includes a different value for that attribute, then the add operation fails because the attribute would end up with multiple values.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input so that it does not specify multiple values for single-valued attributes. Then reissue the operation.

R000121  Value for attribute 'name' must be same as value for DN

Explanation: An LDAP add or modify operation to the SDBM backend failed because it specifies an attribute value that is not the same as in the relative distinguished name (RDN) of the entry. The RDN is the leftmost part of the entry's distinguished name. An attribute that is in the RDN cannot be assigned a value other than its value in the RDN. This applies to cn, racfid, racfuserid, racfgroupid, and profilename if they appear in the RDN.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input so that it specifies the same attribute value as in the relative distinguished name. Alternatively, remove the attribute from the input (the LDAP server adds the RDN attributes automatically to the entry). Then reissue the operation.

R000122  The value for attribute 'name' must be the DN of a user

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for name does not have the correct format for an SDBM user DN. The format of an SDBM user DN is racfid=userid,profiletype=user,SDBMsuffix.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify input to specify a valid, complete SDBM user DN. Alternatively, specify just the userid as the attribute value instead of a complete SDBM user DN. Then reissue the operation.

R000123  The value for attribute 'name' must be the DN of a group

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for name does not have the correct format for an SDBM group DN. The format of an SDBM group DN is racfid=groupid,profiletype=group,SDBMsuffix.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation fails.
R000124  •  R000127

User response: Correct each value for this attribute in the modify operation input to specify a valid, complete SDBM group DN. Alternatively, specify just the groupid as the attribute value instead of a complete SDBM group DN. Then reissue the operation.

R000124  The value for attribute 'name' must be the DN of a user or a group

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for name does not have the correct format for an SDBM user DN or group DN. The format of an SDBM user DN is racfid=userid,profiletype=user,SDBMsuffix and the format of an SDBM group DN is racfid=groupid,profiletype=group,SDBMsuffix.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify operation input to specify a valid, complete SDBM user or group DN. Alternatively, specify just the userid or groupid as the attribute value instead of a complete SDBM user or group DN. Then reissue the operation.

R000125  Attribute 'name' is not supported

Explanation: An LDAP add or modify operation to the SDBM backend failed because the operation input includes an attribute that is not supported by SDBM. SDBM only allows using the attributes that map to fields in the corresponding RACF profile.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the add or modify input. Then reissue the operation.

R000126  Filter 'filter' is not supported for this base

Explanation: An LDAP search operation to the SDBM backend failed because the search filter contains an attribute that is not allowed for the base (target entry) of the search. SDBM has limited search support. Only certain filters can be used, depending on the base of the search. The acceptable combinations are documented in SDBM search capabilities.

In the message text:

filter
  Search filter attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to use a combination of filter and base that is supported by SDBM. Then reissue the operation.

R000127  Filter 'filter' contains a type without a value

Explanation: An LDAP search operation to the SDBM backend failed because the search filter contains an attribute without a value. All attributes in the filter must have a non-blank value after leading blanks are removed.

In the message text:

filter
  Search filter attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to specify a non-blank value for the attribute in filter. Then reissue the operation.
R000128 | Filter is not supported

**Explanation:** An LDAP search operation to the SDBM backend failed because the search filter is not one of the few that SDBM accepts. Either the filter syntax or the attributes used in the filter are not supported by SDBM. SDBM has limited search support. Only certain filters can be used. The supported filters are documented in [SDBM search capabilities].

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the search input to specify a filter that is supported by SDBM. Then reissue the operation.

---

R000129 | Value 'value' is not supported for filter 'name'

**Explanation:** An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is not acceptable to SDBM. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented in [SDBM search capabilities]. In particular, the only value that can be specified in an SDBM search filter for the `objectclass` attribute is `*`.

In the message text:

- **value**
  Search filter attribute value

- **name**
  Search filter attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the search input to specify a supported value for the attribute in the search filter. Then reissue the operation.

---

R000131 | 'name' is not a valid RACF DN

**Explanation:** An LDAP operation to the SDBM backend failed because it involved a distinguished name (DN) that is not a valid SDBM DN. The DN might have been used, for example, as the target of the operation.

In the message text:

- **name**
  Distinguished name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a DN value that is a valid SDBM DN. In particular:

- For the DN of a RACF user, group, connection, class, or resource, the `racfid`, `racfuserid`, `racfgroupid`, and `profiletype` value must be from 1 to 8 characters long. The value must not contain a space or a comma, and the value cannot be an asterisk (`*`).
- For the DN of a RACF resource, the `profilename` value must be from 1 to 256 characters long. The value cannot contain a space or a comma. The value can be an asterisk (`*`).

Then reissue the operation.

---

R000132 | Value for attribute 'name' cannot be more than size characters

**Explanation:** An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is too long for that attribute. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented in [SDBM search capabilities].

In the message text:

- **name**
  Search filter attribute name

- **size**
  Maximum length for value

**System action:** The LDAP server continues to run, but the operation fails.
User response: Correct the search input to specify a value that does not exceed the maximum length for the attribute in the search filter. Then reissue the operation.

**R000133**  
**Value for attribute 'name' must be an integer less than size**

Explanation: An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is too large. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented [here](SDBM search capabilities).

In the message text:

- name
  - Search filter attribute name
- size
  - Maximum value for attribute

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search input to specify a value that does not exceed the maximum value for the attribute in the search filter. Then reissue the operation.

---

**R000134**  
The RACF type command created to satisfy this request is too long, probably due to specifying a long filter or attribute value or too many attribute values

Explanation: An LDAP operation to the SDBM backend failed because the RACF command created by SDBM to process the SDBM operation is too long. For example, SDBM parses the attributes and values in an add operation for a user and translates them into the keywords and values of a RACF ADDUSER command. The maximum length of a RACF command is 4093.

In the message text:

- type
  - Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to reduce the number and length of attributes and values specified. This might involve dividing an add operation into a smaller add operation followed by a modify operation, or dividing a modify operation into two smaller modify operations. Then reissue the operations.

---

**R000135**  
Cannot perform this request on a reserved SDBM DN, 'name'

Explanation: An LDAP operation to the SDBM backend failed because it cannot be performed on the entry to which it was targeted. When the LDAP server is started, SDBM automatically creates the following entries to provide a directory hierarchy: suffix entry, user subtree top entry, group subtree top entry, connect subtree top entry, and class entries. These reserved entries cannot be added, modified, or deleted by SDBM operations. SDBM also creates a setropts entry. This entry cannot be added or deleted by SDBM operations, but it can be modified. All reserved entries can be searched and compared.

In the message text:

- name
  - Distinguished name of target entry

System action: The LDAP server continues to run, but the operation fails.

User response: Change the target of the operation so that it is not one of the SDBM reserved entries. Then reissue the operation.

---

**R000137**  
'name' is not a valid RACF DN for bind, check that the syntax is correct for a RACF user DN

Explanation: An LDAP operation to the SDBM backend failed because the distinguished name (DN) of the requester is not valid for an SDBM user. The format of an SDBM user DN is racfid=userid,profiletype=user,catch=catch.

In the message text:
R000139 • R000141

name
Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: When binding to SDBM, check that the distinguished name is valid for an SDBM user. When issuing other SDBM commands, ensure that the requester has bound using an SDBM distinguished name or using some other bind method that is associated to an SDBM user (for example, an LDBM or TDBM native authentication bind). Then reissue the operation.

R000139  RACF 'type' command failed

Explanation: An LDAP operation to the SDBM backend failed. SDBM backend operations are converted to RACF commands and the RACF command invoked by the SDBM backend failed for some unknown reason.

In the message text:

type
Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R000140  Cannot parse RACF 'type' output

Explanation: An LDAP operation to the SDBM backend failed because SDBM cannot process the output from the RACF command or service invoked by SDBM to perform the operation. Either the format of the output is not what SDBM expects or there is not enough storage available to parse the output.

In the message text:

type
Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R000141  Routine 'name' failed, rc=return_code

Explanation: An LDAP operation to the SDBM backend failed because a routine called to process the operation did not succeed for an unknown reason. The reason code can also occur when trying to parse an changeLogAddEntry extended operation.

In the message text:

name
Routine name

return_code
Return code from routine

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code and from server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.
Cannot obtain the password of a RACF user

Explanation: There are several types of bind methods, for example CRAM-MD5 and DIGEST-MD5, that require retrieval of a password for the bound user. These methods are not supported when binding with an SDBM user, because the password cannot be retrieved from the z/OS Security Server. SDBM only supports simple bind when binding with an SDBM user.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to use a bind method supported by SDBM. Then reissue the operation.

Bound user does not have the authority to perform this operation

Explanation: An LDAP operation to the SDBM backend failed because it tries to extract or modify RACF information but the RACF user associated with the bound user does not have the necessary RACF authority. When SDBM issues RACF commands and uses RACF interfaces to process an SDBM request, it does so under the context of the RACF user associated with the bound user.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the RACF user associated with the bound user has the RACF authority to perform the RACF operations required to process the SDBM operation. You might need to contact a z/OS Security Server administrator to obtain the necessary authorization. Then reissue the operation.

Cannot specify a binary attribute in a compare operation

Explanation: An LDAP compare operation to the SDBM backend failed because the attribute to compare has binary syntax. SDBM does not support comparing binary values. For example, SDBM compare operations using the racfPasswordEnvelope and racfPassPhraseEnvelope attributes are not allowed.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the compare input to specify an attribute that does not have binary syntax. Then reissue the operation.

Must specify a value when deleting attribute 'name'

Explanation: An LDAP modify operation to the SDBM backend failed because it tries to delete the attribute indicated in the reason code rather than specifying values to delete from the attribute. SDBM only supports deleting specific values from this attribute.

In the message text:

name

Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input to specify which values to delete for the attribute. Or, use a replace operation to replace all the values of the attribute with the wanted values. Then reissue the operation.

Cannot access entry with DN 'name' because SDBM is not configured to support RACF resources

Explanation: An LDAP operation to the SDBM backend or the changelogAddEntry extended operation failed because operation involves a class entry, resource entry, or the setropts entry, but the SDBM support for these entries is not enabled in the LDAP server. The enableResources on option must be specified in the SDBM section of the LDAP server configuration file when using one of these types of entries.

In the message text:

name

Distinguished name

System action: The LDAP server continues to run, but the operation or extended operation fails.

User response: Contact an LDAP administrator to enable SDBM support for resources. After the problem is resolved, reissue the operation or extended operation.
**Administrator response:** Add the `enableResources` option to the SDBM section of the LDAP server configuration file. Then restart the LDAP server.

---

**R000147  The value for attribute 'name' must be the DN of a class**

**Explanation:** An LDAP modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for `name` does not have the correct format for a class DN. The format of a class DN is `profiletype=classname,SDBMsuffix`.

In the message text:

- **name** Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct each value for this attribute in the modify input to specify a valid, complete class DN. Alternatively, specify just a `classname` as the attribute value instead of a complete class DN. Then reissue the operation.

---

**R000148  DN 'name' is not supported as a target of an SDBM operation**

**Explanation:** An LDAP operation to the SDBM backend failed because SDBM does not allow that operation to be performed on the target of the request. In particular, SDBM does not support any operation on a data set profile, which is represented by a distinguished name (DN) whose format is `profilename=name,profiletype=DATASET,SDBMsuffix` (for example, `profilename=SUSET1.PRIVATE.SQL,profiletype=DATASET,cn=myRACF`).

In the message text:

- **name** Distinguished name of target

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the target of the operation so that it is supported by SDBM. Then reissue the operation.

---

**R000149  Attribute 'attribute' is not supported for entry with DN 'name'**

**Explanation:** An LDAP add or modify operation to the SDBM backend failed because it tries to add an attribute that is not supported for the type of entry being added or modified. In particular, the setropts entry (`cn=setropts,SDBMsuffix`) supports a very limited set of attributes. Also, the `racfAccessControl` attribute can only be used in a resource entry, which is represented by a DN whose format is `profilename=name,profiletype=classname,SDBMsuffix`.

In the message text:

- **attribute** Attribute name

- **name** Distinguished name of the entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the attribute from the add or modify input. Then reissue the operation.

---

**R000150  Unable to generate random data bytes**

**Explanation:** An LDAP operation or utility failed because it uses random data and the routine to generate the random data does not succeed. Random data is used during CRAM-MD5 or DIGEST-MD5 bind operations and any operation that involves passwords that must be hashed using Salted SHA-1 or Salted SHA-2 methods, including when using the `ldif2ds` utility to load entries with passwords.

**System action:** The LDAP server continues to run, but the operation fails. The `ldif2ds` utility ends.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the request or restart the utility.
R000200  R000203

Administrator response: Use server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R000200  Change log not active

Explanation: A changeLogAddEntry extended operation to create a change log entry failed because the LDAP server is not set up to do change logging. The GDBM backend must be configured in the LDAP server configuration file and the changeLogging off option must not be specified.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Add a GDBM section to the LDAP server configuration file. Do not specify the changeLogging off option in the section. Then restart the LDAP server.

R000201  Cannot decode field from request, rc=return_code

Explanation: An LDAP changeLogAddEntry extended operation to create a change log entry failed because it includes a field value that cannot be decoded. The most likely return codes are:

• 6 (LDAP_CHANGELOG_DECODE_FAILED): Some part of the extended operation data is not encoded correctly.

In the message text:

field
  Request field

return_code
  Return code from decode routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: If the problem is in the encoding, check that all the extended operation data is correctly encoded. Then reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R000202  Request did not come over PC interface

Explanation: There are some LDAP extended operations (for example, changeLogAddEntry) that are only supported by the LDAP server when they are received over the Program Call (PC) interface. The request failed because the requester did not use the PC interface.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that your program is using the Program Call interface to communicate with the LDAP server. Then reissue the extended operation.

R000203  Value for name out of range

Explanation: An LDAP extended operation failed because it specifies a value that is not supported for a field. For example, the changeLogAddEntry extended operation requires the version field value to be 2. See Supported extended operations for information about the extended operations supported by the LDAP server.

In the message text:

name
  Field name

System action: The LDAP server continues to run, but the extended operation fails.
User response: Correct the value of the field in the extended operation input so that it is within the supported range. Then reissue the extended operation.

**R000204**  Required value for name is missing

Explanation: An LDAP extended operation failed because it does not include a required field. For example, the changeLogAddEntry extended operation requires at least one of the userid, group, or class and resource fields. See [Supported extended operations](#) for more information about the extended operations that are supported by the LDAP server.

In the message text:

name

Field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input so that it contains all the required fields. Then reissue the extended operation.

**R000205**  Unable to convert userid (user), group (group), class (class), or resource (resource) to DN, rc=return_code

Explanation: An LDAP extended operation failed because it is not able to convert the values that are indicated in the reason code into an SDBM distinguished name (DN). The LDAP return code is also displayed in the reason code. The most likely return codes are:

- 80 (LDAP_OTHER): Either a value contains a character that cannot be a user or the LDAP server ran out of storage. An error message is usually printed to the server output when there is a storage problem.

In the message text:

user

User ID name (if any)

group

Group name (if any)

class

Class name (if any)

resource

Resource name (if any)

return_code

Return code from routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Ensure that all values used in the extended operation input contain valid characters. Then reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

**R000206**  PC caller must be in supervisor state

Explanation: An LDAP extended operation received over the Program Call (PC) interface failed because the requester is not in supervisor state. The LDAP server only processes requests from PC callers who are in supervisor state.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that your program is running in supervisor state when it sends an extended operation.
request by a Program Call to the LDAP server. Then reissue the extended operation.

**R000207 name1 cannot be specified with name2**

**Explanation:** An LDAP extended operation request to create a change log entry (changeLogAddEntry) failed because it specifies two fields that cannot be used together. For example, if the userid or groupid field is specified in the extended operation, then do not specify the class or the resource field. See Supported extended operations for more information about the changeLogAddEntry extended operation.

In the message text:

- name1: First field name
- name2: Second field name

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Remove one of the conflicting fields in the changeLogAddEntry extended operation input. Then reissue the extended operation.

**R000208 Unexpected racroute error safRC=safRC racfRC=racfRC racfReason=racfReason**

**Explanation:** A call to RACROUTE has returned an unexpected combination of return and reason codes. The return and reason codes are returned by RACROUTE. See the description of RACROUTE return and reason codes in z/OS Security Server RACROUTE Macro Reference for more information about the error.

In the message text:

- safRC: SAF return code
- racfRC: RACF return code
- racfReason: RACF reason code

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use the return and reason codes and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

**R000209 Request was terminated early with partial or no results**

**Explanation:** An LDAP operation failed to complete because of a possible LDAP abandon or disconnect.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

**R001001 Generalized Time value 'value' is not valid**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Generalized Time syntax of the attribute. The format of a Generalized Time value is

- yyyyymmddhhmss.ffffff for local time
- yyyyymmddhhmss.fffffffz for Greenwich Mean Time
- yyyyymmddhhmss.fffffff-hhmm for time zone west of GMT
- yyyyymmddhhmss.fffffff+hhmm for time zone east of GMT
where \( yyyy \) is year, \( mm \) is month, \( dd \) is day, \( hh \) is hour, \( mm \) is minutes, \( ss \) is seconds, and \( fffffff \) is microseconds. The seconds \( (ss) \) and microseconds \( (ffffff) \) can be omitted and default to 0.

In the message text:

\[ value \]

**Attribute value**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the Generalized Time syntax. Then reissue the operation.

---

**R001005  Duplicate value encountered: value**

**Explanation:** An LDAP schema modify operation of an attribute or object class definition failed because the definition involves a duplicate value. The object identifier of the attribute or object class cannot be the same as an existing attribute, object class, matching rule, or syntax. It also cannot be the same as another attribute or object class added in this schema modify. Also, for an object class, the same attribute name cannot be specified twice within the **SUP** values, within the **MUST** values, or within the **MAY** values.

In the message text:

\[ value \]

**Name or object identifier**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Review the modify input to ensure that there are no duplicate names or object identifiers involved. Then reissue the operation.

---

**R001011  COLLECTIVE keyword is not supported for attribute type 'name'**

**Explanation:** An LDAP schema modify operation of an attribute failed because the attribute definition includes the **COLLECTIVE** keyword. The LDAP server does not support usage of this keyword.

In the message text:

\[ name \]

**Attribute name**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the **COLLECTIVE** keyword from the modify input. Then reissue the operation.

---

**R001012  Attribute type 'name' is not defined**

**Explanation:** An LDAP operation or utility failed because it involves an attribute that is not defined in the schema. For a schema modify, an attribute or object class definition cannot reference an attribute that does not exist in the schema or that is deleted in a previous modification in the modify operation. For an add or modify DN operation to another backend and for the **ldif2ds** utility, the attributes used in the new relative distinguished name (RDN) of the entry must exist, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

\[ name \]

**Attribute name**

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Either add the missing attribute to the schema or remove the attribute from the operation or utility input. Then reissue the operation or restart the utility.
R001015  Cycle detected in superior hierarchy for 'identifier'

Explanation: An LDAP schema modify operation failed because the SUP value in an attribute or object class definition results in a cycle of references. When following the superior hierarchy for this attribute or object class, the chain leads back to the start.

In the message text:

identifier
  Attribute or object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Change the SUP value of the attribute or object class in the modify input so that it does not form a cycle. Then reissue the operation.

R001017 Syntax/matching rule inconsistency for attribute type 'identifier'

Explanation: An LDAP schema modify operation failed because it results in an attribute with a matching rule that is not valid for the syntax of the attribute. See [LDAP directory schema] for more information about the acceptable combinations of syntax and matching rules. Note that the failing attribute might not be directly modified in the schema modify operation. Instead, the modify may change a syntax or matching rule in an attribute from which the failing attribute inherits its syntax or a matching rule, resulting in the inconsistency.

In the message text:

identifier
  Attribute numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the modify input to ensure that it does not create any inconsistencies between syntax and matching rules for the modified attributes and the attributes that inherit from them. Then reissue the operation.

R001018 Attribute type 'name' is obsolete

Explanation: An LDAP add, modify, or modify DN operation failed because it involves an attribute that is marked as OBSOLETE in the schema. An obsolete attribute cannot be added or replaced in an entry. The attribute can be deleted from the entry. Note that an add or modify DN operation may try to add an obsolete attribute to the entry if the attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not involve adding or replacing an obsolete attribute in the entry. Then reissue the operation.

R001024 Abstract class 'name' may not be a base object class

Explanation: An LDAP add, modify, or modify DN operation failed because it results in specifying an ABSTRACT object class in the entry that is not in the superior hierarchy of some other STRUCTURAL or AUXILIARY object class in the entry. An ABSTRACT object class that is not in the superior hierarchy cannot be included in the entry. Note that an add or modify DN operation may try to add an object class if the objectclass attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
  Object class name

System action: The LDAP server continues to run, but the operation fails.
**User response:** Analyze the operation input to ensure that it does not involve adding an abstract object class that is not in the superior hierarchy of the other object classes in the entry. Then reissue the operation.

---

**R001025  Multiple base structural object classes specified for 'name'**

**Explanation:** An LDAP add, modify, or modify DN operation failed because it results in more than one base structural object class in an entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information kept in the entry. Examples are the **person** and **organization** object classes. There must be a single base structural object class in an entry and the object class cannot be changed. Note that an add or modify DN operation may try to add an object class if the **objectclass** attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

```
name
```

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the operation input to ensure that it does not result in multiple base structural object classes. Then reissue the operation.

---

**R001026  No structural object class specified for 'name'**

**Explanation:** An LDAP add operation failed because it does not include a base structural object class in the entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information that is kept in the entry. Examples are the **person** and **organization** object classes. There must be a single base structural object class in an entry and the object class cannot be changed.

In the message text:

```
name
```

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the add input to ensure that it includes a base structural object class in the entry. Then reissue the operation.

---

**R001027  Base structural object class 'name' may not be changed**

**Explanation:** An LDAP modify or modify DN operation failed because it results in changing the base structural object class of the entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information that is kept in the entry. Examples are the **person** and **organization** object classes. There must be a single base structural object class in an entry and the object class cannot be changed. Note that a modify DN operation may try to change the object class if the **objectclass** attribute is part of the relative distinguished name (RDN) of the entry, the RDN is being changed, and the modify DN operation specifies removing the current RDN. The RDN is the leftmost part of the distinguished name.

In the message text:

```
name
```

Object class name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the operation input to ensure that it does not change the base structural object class for the entry. Then reissue the operation. To change the base structural object class, delete the entry and then add it back using the new base structural object class.
R001029  Entry does not contain MUST attribute 'name'

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry which does not contain all the MUST attributes required by the object classes in the entry (including those in the object class superior hierarchies). Every MUST attribute must appear in the entry. Note that a modify DN operation may try to remove attributes from an entry if they are in the current relative distinguished name (RDN) of the entry but not the new RDN and the modify DN operation specifies removing the current RDN. The RDN is the leftmost part of the distinguished name.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not result in an entry that is missing a required attribute. Then reissue the operation.

R001030  Entry contains attribute 'name' which is not allowed for object class

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry that contains an attribute that is not in the MUST or MAY lists of the object classes in the entry (including those in the object class superior hierarchies). Every non-operational attribute must appear in the MUST or MAY lists of an object class associated with the entry. Note that an add or modify DN operation may try to add an attribute to an entry if it is in the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not result in an entry that contains attributes not allowed by the object classes in the entry. Then reissue the operation.

R001031  Missing left parenthesis in definition: definition

Explanation: An LDAP schema modify operation failed because a left parenthesis is missing in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema. The reason code may also occur on an entry add or modify operation when adding a value that does not begin with a left parenthesis for an attribute that is defined with the integerFirstComponentMatch matching rule. In this case, the value is indicated in the reason code.

In the message text:

definition
  Attribute or object class definition or value

System action: The LDAP server continues to run, but the operation fails.

User response: For a schema modify operation, check the input to ensure that all the schema definitions are complete and correctly formatted. For an entry add or modify operation, put a left parenthesis at the beginning of the value for the attribute defined with the integerFirstComponentMatch matching rule. Then reissue the operation.

R001032  Missing right parenthesis in definition: definition

Explanation: An LDAP schema modify operation failed because a right parenthesis is missing in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:
**R001038**  Numeric object identifier 'value' is not valid

**Explanation:** An LDAP operation or extended operation failed because it includes a value that is supposed to be a numeric object identifier but is not. A numeric object identifier consists of digits separated by periods. It must start with a digit and cannot have two periods in a row. Numeric object identifiers can be used in schema definitions and within entries. They are also contained in controls that are specified with the operation and in identifying extended operations.

In the message text:

`value`

Numeric object identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the operation input to ensure that all numeric object identifiers are correctly formatted. Then reissue the operation.

---

**R001046**  Missing closing quote for value 'value'

**Explanation:** An LDAP schema modify operation failed because a quoted value does not end with a quotation mark in a schema definition. The part of the definition that is in error is indicated in the reason code. See [LDAP directory schema](https://www.example.com) for more information about the format for the definitions of the various elements of the schema.

In the message text:

`value`

Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001047**  Missing opening quote for value 'value'

**Explanation:** An LDAP schema modify operation failed because a quoted value does not begin with a quotation mark in a schema definition. The part of the definition that is in error is indicated in the reason code. See [LDAP directory schema](https://www.example.com) for more information about the format for the definitions of the various elements of the schema.

In the message text:

`value`

Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001048**  Missing closing brace for value 'value'

**Explanation:** An LDAP schema modify operation failed because a value that starts with an open brace does not end with a closing brace in a schema definition. The part of the definition that is in error is indicated in the reason code. See [LDAP directory schema](https://www.example.com) for more information about the format for the definitions of the various elements of the schema.

In the message text:
**R001052 • R001060**

`value`

Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001052 Non-numeric character found in integer value 'value'**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Integer syntax of the attribute. An Integer value consists of one or more digits, optionally starting with a plus sign or minus sign.

In the message text:

`value`

Attribute value

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the Integer syntax. Then reissue the operation.

---

**R001053 Integer value of length size exceeds maximum length of max_size**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation is too long for the Integer syntax of the attribute.

In the message text:

`size`

Integer value length

`max_size`

Maximum integer length

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that the length is valid for the Integer syntax. Then reissue the operation.

---

**R001055 Attribute type 'name' is not valid for the directory schema**

**Explanation:** An LDAP schema modify operation failed because it involves an attribute that is not supported for the schema entry. The schema entry itself contains a fixed set of attributes that can be changed, the most useful of which are: `attributeTypes`, `ibmAttributeTypes`, `objectClasses`, `aclEntry`, and `entryOwner`.

In the message text:

`name`

Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the attribute from the modify input. Then reissue the operation.

---

**R001060 Object class 'name' is obsolete**

**Explanation:** An LDAP add, modify, or modify DN operation failed because it involves an object class that is marked as OBSOLETE in the schema. An obsolete object class cannot be added or replaced in an entry. The object class can be deleted from the entry. Note that an add or modify DN operation may try to add an obsolete object class if the object class is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished entry.

In the message text:
name
Object class name

System action: The LDAP server continues to run, but the operation fails.
User response: Analyze the operation input to ensure that it does not involve adding or replacing an obsolete object class in the entry. Then reissue the operation.

R001069  Reference attribute type not found for IBM attribute type 'name'

Explanation: An LDAP schema modify operation failed because an ibmattributetypes definition specifies an object identifier that does not match the object identifier of an attributetypes definition. The attributetypes definition can already exist in the schema or can be added as part of the schema modify.

In the message text:
name
ibmattributetypes definition object identifier

System action: The LDAP server continues to run, but the operation fails.
User response: Check the modify input to ensure that each ibmattributetypes modification specifies the object identifier of an attributetypes definition. Make sure that this attributetypes definition is not deleted as part of the schema modify. Then reissue the operation.

R001072  More than one object class type keyword found in schema definition: definition

Explanation: An LDAP schema modify operation failed because an object class definition contains more than one of the keywords that indicate the type of object class: ABSTRACT, AUXILIARY, or STRUCTURAL. At most one of these keywords can be specified and the default is STRUCTURAL if none is specified. See LDAP directory schema for more information about the keywords for an object class definition.

In the message text:
definition
Object class definition

System action: The LDAP server continues to run, but the operation fails.
User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001075  Object identifier missing in schema definition: definition

Explanation: An LDAP schema modify operation failed because there is a schema definition that does not include an object identifier. The object identifier is required in all schema definitions. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:
definition
Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.
User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001076  keyword keyword specified multiple times in schema definition: definition

Explanation: An LDAP schema modify operation failed because the same keyword is specified more than once in a schema definition. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:
keyword
Duplicated keyword
R001077 • R001079

**Definition**
Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001077**  **Keyword** keyword not supported in schema definition: definition

**Explanation:** An LDAP schema modify operation failed because it contains a keyword that is not supported in a schema definition. Note that unknown keywords are ignored if they occur in an ibmattributetypes definition, but not in other definitions. See [LDAP directory schema](#) for more information about the format for the definitions of the various elements of the schema.

In the message text:

**Keyword**
Unknown keyword

**Definition**
Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001078**  **Value missing for** keyword keyword in schema definition: definition

**Explanation:** An LDAP schema modify operation failed because it does not specify a value for a keyword in a schema definition. See [LDAP directory schema](#) for more information about the format for the definitions of the various elements of the schema.

In the message text:

**Keyword**
Keyword missing a value

**Definition**
Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

**R001079**  **Unsupported value for** keyword keyword in schema definition: definition

**Explanation:** An LDAP schema modify operation failed because a schema definition contains a keyword value that is not supported for that keyword. Note that the acceptable values for the SYNTAX, EQUALITY, ORDERING, and SUBSTR keywords in an attribute definition depend on the compatibility level at which the server is running. See [LDAP directory schema](#) for more information about the format for the definitions of the various elements of the schema.

In the message text:

**Keyword**
Keyword in definition

**Definition**
Attribute or object class definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation. Contact an LDAP administrator if you must use values that are not supported by the compatibility level at which the LDAP server is running. After the problem is resolved, reissue the operation.
**Administrator response:** If the server is running at a compatibility level that does not support needed values, change the value of the `serverCompatLevel` option in the LDAP server configuration file. Then restart the LDAP server.

---

### R001080  Attribute type 'identifier' is already defined

**Explanation:** An LDAP schema modify operation failed because it tries to add an attribute definition with the same identifier as an attribute that is already in the schema or that is added in a previous modification in the schema modify operation. Two attributes cannot have the same identifier.

In the message text:

*identifier*

Attribute identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that the identifier for each attribute being added is unique. Then reissue the operation.

---

### R001081  Object class 'identifier' is already defined

**Explanation:** An LDAP schema modify operation failed because it tries to add an object class definition with the same identifier as an object class that is already in the schema or that is added in a previous modification in the schema modify operation. Two object classes cannot have the same identifier.

In the message text:

*identifier*

Object class identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that the identifier for each object class being added is unique. Then reissue the operation.

---

### R001082  Inappropriate type matching rule in schema definition: definition

**Explanation:** An LDAP schema modify operation failed because an attribute definition specifies a value for a matching rule that is not appropriate for the matching rule. The matching rule type (EQUALITY, ORDERING, or SUBSTR) and the definition that is in error are indicated in the reason code. See [LDAP directory schema](#) more information about the values that can be specified for each type of matching rule.

In the message text:

*type*

Matching rule type

*definition*

Attribute definition

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

---

### R001083  Object class 'identifier' is not defined

**Explanation:** An LDAP operation or utility failed because it involves an object class that is not defined in the schema. For a schema modify, an object class definition cannot reference an object class that does not exist in the schema or that is deleted in a previous modification in the modify operation. Similarly, an object class being deleted from the schema must exist in the schema, and must not be deleted in a previous modification. For an add operation to another backend and the `ldif2ds` utility, the object class specified in the entry must exist in the schema.

In the message text:

*identifier*

Object class identifier
R001084 • R001087

System action: The LDAP server continues to run, but the operation fails.

User response: Either add the object class to the schema or remove the object class from the operation input. Then reissue the operation.

R001084 IBM attribute type 'identifier' is not defined

Explanation: An LDAP schema modify operation failed because it tries to delete an ibmattributetypes definition that does not exist or is already being deleted or whose corresponding attributetypes definition is being deleted in a previous modification in the modify operation.

In the message text:

  identifier
  ibmattributetypes numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the delete of the ibmattributetypes definition from the modify input. Then reissue the operation.

R001085 IBM attribute type 'identifier' is already defined

Explanation: An LDAP schema modify operation failed because it tries to add an ibmattributetypes definition that already exists or is already being added in a previous modification in the modify operation.

In the message text:

  identifier
  ibmattributetypes numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the add of the ibmattributetypes definition from the modify input. Then reissue the operation.

R001086 No syntax value specified for attribute type 'identifier'

Explanation: An LDAP schema modify operation failed because an attribute definition does not contain the SYNTAX keyword or the SUP keyword. Every attribute must have a syntax, either specified directly using the SYNTAX keyword or derived by inheritance by specifying the SUP keyword. See [LDAP directory schema] for more information about the values that can be specified for an attribute definition.

In the message text:

  identifier
  Attribute numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001087 Attribute type 'identifier' is in use and cannot be replaced or deleted

Explanation: An LDAP schema modify operation failed because it tries to delete or change the definition of an attribute that is in use by some entry in a backend directory. The modification cannot be made because it could make the values in the entry no longer valid. The reason code can also be issued when modifying certain attribute values in a CDBM entry. In particular, the ibm-slapdserverld attribute in the cn=configuration entry and the ibm-slapdLog attribute in the cn=replication,cn=Log Management,cn=configuration entry cannot be changed if these values are in use.

In the message text:

  identifier
  Attribute identifier

System action: The LDAP server continues to run, but the operation fails.
User response: Remove the modification from the modify input. Then reissue the operation. Alternatively, remove usage of the attribute from all the entries that are currently using it. This involves searching the entire LDAP server for entries that contain that attribute and then modifying each of the entries to remove the attribute. This might not be possible if the attribute is required by an object class in an entry. Then reissue the original operation. For the special attributes in CDBM entries, see [Advanced replication](#) for more information.

R001088  Object class 'identifier' is in use and cannot be replaced or deleted

Explanation: An LDAP schema modify operation failed because it tries to delete or change the definition of an object class that is in use by some entry in a backend directory. The modification cannot be made because it could make the values in the entry no longer valid.

In the message text:

Identifier
   Object class identifier

System action: The LDAP server continues to run, but operation fails.

User response: Remove the modification from the modify input. Then reissue the operation. Alternatively, remove usage of the object class from all the entries that are currently using it. This involves searching the entire LDAP server for entries that contain that object class and then modifying each of the entries to remove the object class and any attributes that are included only in that object class in the entry. Then reissue the original operation.

R001089  Attribute type name 'name' is already assigned

Explanation: An LDAP schema modify operation failed because the name used in an attribute definition conflicts with the name used by an existing attribute or by an attribute added by a previous modification in the modify operation.

In the message text:

Name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the names for each attribute being added are unique. Then reissue the operation.

R001090  Object class name 'name' is already assigned

Explanation: An LDAP schema modify operation failed because the name used in an object class definition conflicts with the name used by an existing object class or by an object class added by a previous modification in the modify operation.

In the message text:

Name
   Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the names for each object class being added are unique. Then reissue the operation.

R001091  TOP object class not found in superior hierarchy for 'identifier'

Explanation: An LDAP schema modify operation failed because an object class definition does not include the object class named TOP in its superior hierarchy. Every structural object class definition (one in which the ABSTRACT or AUXILIARY keywords are not specified) must include a SUP keyword and the superior chain must eventually include object class TOP.

In the message text:

Identifier
   Object class numeric identifier
R001092 • R001096

System action: The LDAP server continues to run, but the operation fails.

User response: Change the object class definition in the modify input, either by adding a SUP value that eventually leads to object class TOP or by specifying the ABSTRACT or AUXILIARY keyword (and removing STRUCTURAL if it is specified). Then reissue the operation.

R001092  Unable to save directory schema

Explanation: An LDAP schema modify operation failed because the modified schema cannot be saved to the schema database.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R001094  Attribute type 'identifier1' is referenced by 'identifier2' and cannot be deleted

Explanation: An LDAP schema modify operation failed because it is deleting an attribute definition of an attribute that is used as a SUP value in another attribute or as a MUST or MAY value in an object class.

In the message text:

identifier1
Deleted attribute numeric identifier

identifier2
Referencing attribute or object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the modification that deletes the attribute definition from the modify input. Then reissue the operation. If you must delete the attribute from the schema, then you must first modify any attribute or object class that uses that attribute to remove the reference. This cannot be done if any of these attributes or object classes are in use an entry. If that is the case, you must remove usage of the referencing attributes or object classes from all the entries that are currently using them. Then reissue the operation.

R001095  Object class 'identifier1' is referenced by 'identifier2' and cannot be deleted

Explanation: An LDAP schema modify operation failed because it is deleting an object class that is used as a SUP value in another object class.

In the message text:

identifier1
Deleted object class numeric identifier

identifier2
Referencing object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the modification that deletes the object class from the schema modify input. Then reissue the schema modify operation.

R001096  OID change not allowed because the new definition is not the same as the current definition

Explanation: An LDAP schema modify operation to change the numeric identifier of an attribute or object class failed because it also changes some other part of the attribute or object class definition that cannot be changed. For an attribute numeric identifier change, the values of the NAME, SUP, EQUALITY, ORDERING, SUBSTR, and SYNTAX keywords cannot be changed. Also, the SINGLE-VALUE keyword cannot be specified in the new definition if it is not also in the current definition. For an object class numeric identifier change, the values of the NAME, SUP, MUST, and MAY keywords cannot be changed.

System action: The LDAP server continues to run, but the operation fails.
User response: Change the modify input so that the definition of the new attribute or object class does not change any of the keywords that are listed above. Then reissue the operation.

R001097  Attribute type 'identifier' conflicts with existing type, cannot be replaced for migration

Explanation: A migration of the TDBM schema failed because the current schema contains a different definition for an attribute than is in the TDBM schema to be migrated. As a result, TDBM entries using the attribute may not be valid under the current schema definition of the attribute.

In the message text:

identifier

Attribute numeric identifier

System action: The TDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.

Administrator response: Analyze the difference between the attribute definition in the LDAP schema and in the TDBM schema. Resolve the problem by modifying the definition in one of the two places. Then restart the LDAP server if it stopped or if the TDBM backend is needed.

R001098  Object class 'identifier' conflicts with existing class, cannot be replaced for migration

Explanation: A migration of the TDBM schema failed because the current schema contains a different definition for an object class than is in the TDBM schema to be migrated. As a result, TDBM entries using the object class may not be valid under the current schema definition of the object class.

In the message text:

identifier

Object class numeric identifier

System action: The TDBM backend does not start. If the srvStartUpError option in the LDAP server configuration file is set to ignore, the LDAP server continues to run with those backends that successfully start. If the srvStartUpError option is set to terminate (this is the default if the configuration option is not specified), the LDAP server ends.

Administrator response: Analyze the difference between the object class definition in the LDAP schema and in the TDBM schema. Resolve the problem by modifying the definition in one of the two places. Then restart the LDAP server if it stopped or if the TDBM backend is needed.

R001099  Duplicate values specified for attribute 'name'

Explanation: An LDAP schema modify operation failed because it specifies a duplicate value for a schema attribute, such as aclEntry or entryOwner. Note that two aclEntry values or two entryOwner values are the same if they contain the same distinguished name, even if other parts of the values are different.

In the message text:

name

Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate value from the modify input. Then reissue the operation.

R001100  Syntax specified in attribute 'identifier' is not valid when RACFFIELD is included in IBM attribute type

Explanation: An LDAP schema modify operation failed because one of the following:

- An ibmattributetypes definition contains the RACFFIELD keyword but the syntax of the corresponding attribute is not IA5 String.
- An attribute definition sets the attribute syntax to something other than IA5 String, but the corresponding ibmattributetypes definition contains the RACFFIELD keyword.
When the RACFIELD keyword is specified in an ibmattributetypes definition, the syntax of the associated attribute definition (the one with the same numeric identifier) must be IA5 String, as specified directly in the SYNTAX keyword or as derived from the superior hierarchy created by the SUP keyword.

In the message text:

```plaintext
identifier
Attribute numeric identifier
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Depending on which definition is in error, either remove the RACFIELD keyword from the ibmattributetypes definition or change the attribute definition to use the IA5 String syntax. Then reissue the operation.

---

**R001101**  Duplicate value for name in RACFIELD in IBM attribute types 'identifier1' and 'identifier2'

**Explanation:** An LDAP schema modify operation failed because it tries to add an ibmattributetypes definition with the same RACFIELD name value as is already in an existing ibmattributetypes definition or in a previous ibmattributetypes definition in the modify operation. The name part of the RACFIELD value must be unique within the schema.

In the message text:

```plaintext
identifier1
First ibmattributetypes numeric identifier
```

```plaintext
identifier2
Second ibmattributetypes numeric identifier
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the duplicate ibmattributetypes definition from the modify input or change its RACFIELD value to be unique. Then reissue the operation.

---

**R001102**  Value 'value' specified for attribute 'name' is not valid.

**Schema Description: description**

**Explanation:** An LDAP operation failed because it uses an attribute value that is not acceptable for that attribute. The syntax and equality matching rule of the attribute determine what values are valid for the attribute.

In the message text:

```plaintext
value
Attribute value
```

```plaintext
name
Attribute name
```

```plaintext
description
Attribute description from the schema
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Use the attribute description to correct the value used in the operation input so that it is valid for the attribute. Then reissue the operation.

---

**R001103**  Syntax or matching rule specified in attribute 'name' is not supported at compatibility level level

**Explanation:** The LDAP server or utility cannot load the schema because the schema contains an attribute that uses a syntax or matching rule that is not valid when the LDAP server or utility is running at the current compatibility level. Some syntaxes and matching rules are not supported when the LDAP server is running at lower compatibility levels. See [LDAP directory schema][1] for more information about syntaxes and matching rules. Also, see the serverCompatLevel option in [Customizing the LDAP server configuration][2] for more information about setting the server compatibility level.

In the message text:
name
  Attribute name or numeric identifier

level
  Server compatibility level

System action: The LDAP server or utility ends.

Administrator response: Set the serverCompatLevel option in the LDAP server configuration file to a value that supports all the syntaxes and matching rules used in the schema. Then restart the LDAP server.

R001104  Numeric String value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Numeric String syntax of the attribute. A complete Numeric String value must be a list of space-separated numbers, and must contain at least one number. An example is 1 524 44. A substring value used in a substring filter can be any part of the complete value, and can be just spaces. An example is 24 4.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Numeric String syntax. Then reissue the operation.

R001105  Facsimile Telephone Number value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Facsimile Telephone Number syntax of the attribute. The characters that can be used in a Facsimile Telephone Number value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, space, and dollar sign.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Facsimile Telephone Number syntax. Then reissue the operation.

R001106  Telex Number value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Telex Number syntax of the attribute. The characters that can be used in a Telex Number value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, space, and dollar sign.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Telex Number syntax. Then reissue the operation.

R001107  Printable String value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Printable String syntax of the attribute. The characters that can be used in a Printable String value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space.
R001108 • R002001

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Printable String syntax. Then reissue the operation.

R001108  ibm-slapdSAFSecurityDomain value 'value' is too long

Explanation: An LDAP operation failed because the value specified for the ibm-slapdSAFSecurityDomain attribute is more than 228 characters long. This is determined by the maximum length of a RACF general resource class (246 characters) and the length of the fixed fields (.ADMINROLE.) (11 characters) and the length of the longest administrative role (DIRDATA) (7 characters).

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the ibm-slapdSAFSecurityDomain attribute. Then reissue the operation.

R001109  'name' value 'value' contains a character 'character' that is not valid.

Explanation: An LDAP operation failed because the value for the specified attribute type contains a character that is not valid. If the attribute type is ibm-slapdSAFSecurityDomain, the value cannot contain blanks, semicolons, parentheses, commas, asterisks, percent signs, or ampersands.

In the message text:

name
  Attribute name

value
  Attribute value

character
  Character that is not valid

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the ibm-slapdSAFSecurityDomain attribute. Then reissue the operation.

R002001  Missing equal sign in DN component 'component'

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute without a value. The equal sign (=) which indicates the end of the attribute name and the beginning of the value is missing. For example, in the DN cn=fred,ou=test,o=ibm, the ou=test,o=ibm component contains an attribute (oudeptG1) without a value, because the equal sign after ou is missing.

In the message text:

component
  Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.
R002004  Incomplete escape sequence in DN component 'component'

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has started an escape sequence with a double quotation mark (" ) but there is no corresponding double quotation mark to end the sequence. For example, in the DN cn=fred,ou="test,o=ibm", the ou="test,o=ibm" component contains an incomplete escape sequence ('test,o=ibm').

In the message text:

component
  Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.

R002006  Empty DN component is not supported

Explanation: An LDAP operation failed because it involves a distinguished name (DN) which is entirely empty or in which one of the components is empty. For example, in the DN cn=fred,ou=test,,o=ibm, the two successive commas result in an empty component.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.

R002007  Incorrect syntax in 'name' attribute value 'value'

Explanation: An LDAP operation or utility failed because it involves an attribute value that is zero-length or is not valid. See Using access control for more information about the syntax of values for aclEntry and entryOwner attributes.

In the message text:

name
  Attribute name

value
  Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the attribute are valid. Then reissue the operation or restart the utility.

R002008  Permissions missing in aclEntry attribute value 'value'

Explanation: An LDAP operation or utility failed because it involves an aclEntry attribute value that specified an access class without permissions. For example, cn=fred,o=ldbm:normal::rws contains an access class (normal) without permissions. See Using access control for more information about the syntax of values for this attribute.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the aclEntry attribute are valid. Then reissue the operation or restart the utility.
R002018 • R002021

R002018  An extraneous colon was found in aclEntry attribute value "value"

Explanation: An LDAP operation or utility failed because it involves an aclEntry attribute value that contains an extra colon. For example, cn=fred,o=ldbm:normal:: contains an extra colon, where the normal access permissions should be. See Using access control for more information about the syntax of values for this attribute.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the aclEntry attribute are valid. Then reissue the operation or restart the utility.

R002019  An unsupported extensible filter was specified

Explanation: An LDAP operation or utility failed because an extensible search filter was specified in an attribute value or on a search request. Extensible search filters are not supported in the z/OS LDAP server. Search filters can be specified in aclEntry, entryOwner, and memberURL attribute values.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that LDAP search operation or attribute value does not specify an extensible search filter. Then reissue the operation or restart the utility.

R002020  An error occurred while base64-decoding attribute "name"

Explanation: An LDAP operation or utility failed because a value for the attribute type could not be base64 decoded. The attribute value may already exist in the directory (for example Salted SHA, SHA-2, or Salted SHA-2 userPassword values) or was specified in an LDAP operation or utility input.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that attribute value specifies a value that is base64 encoded properly. If the attribute value exists in the directory, the value may need to be replaced with a valid value. Then reissue the operation or restart the utility.

R002021  An incorrectly formatted "name" attribute value has been encountered

Explanation: An LDAP operation or utility failed because a value for the attribute type is not correctly formatted. If the attribute type is userPassword or ibm-slapdAdminPw and the value is hashed or encrypted, verify the following:

• If the value has an {MD5} encryption tag, the length of data after the tag must be 16 bytes or 24 bytes long.
• If the value has an {SHA} encryption tag, the length of data after the tag must be 20 bytes or 28 bytes long.
• If the value has an {SSHA} encryption tag, the length of data after the tag must be at least 20 bytes long.
• If the value has an {SHA224}, {SHA256}, {SHA384}, or {SHA512} encryption tag, the length of data after the tag must be 40, 44, 64, 88 bytes long respectively.
• If the value has an {SSHA224}, {SSHA256}, {SSHA384}, or {SSHA512} encryption tag, the length of data after the tag must be at least 40, 44, 64, 88 bytes long respectively.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.
User response: Correct the operation or utility input so that all values for the attribute are valid. Then reissue the operation or restart the utility.

R002023 Filter does not contain a filter component: 'value'

Explanation: An LDAP operation or utility failed because a filter is not specified or is not completely specified in an attribute value. A complete filter component consists of an attribute type and an attribute value, such as (attrType=attrValue). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute values. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter respectively.

In the message text:

value Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (attrType=attrValue). Then reissue the operation or restart the utility.

R002024 Filter is missing an AND, OR, or NOT filter: 'value'

Explanation: An LDAP operation or utility failed because a filter is missing an AND, OR, or NOT filter. An AND ('&'), OR ('|'), or NOT ('!') filter component must be immediately followed by a left parenthesis ('(') and closed by a right parenthesis (')'). A valid AND filter example is: (&(attrType1=attrValue1)(attrType2=attrValue2)). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.

In the message text:

value Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid AND, OR, or NOT filter component such as (&(attrType1=attrValue1)(attrType2=attrValue2)). Then reissue the operation or restart the utility.

R002025 An item type is not specified in the filter: 'value'

Explanation: An LDAP operation or utility failed because a filter component is missing an attribute type and value pair. A complete filter component consists of an attribute type and an attribute value, such as (attrType=attrValue). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.

In the message text:

value Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (attrType=attrValue). Then reissue the operation or restart the utility.

R002026 An attribute description is not specified in the filter: 'value'

Explanation: An LDAP operation or utility failed because a filter component is missing an attribute type or description. A complete filter component consists of an attribute type and an attribute value, such as (attrType=attrValue). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.
In the message text:

\textit{value}

Filter value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that it specifies a complete and valid filter component such as \((\textit{attrType}=\textit{attrValue})\). Then reissue the operation or restart the utility.

---

**R002027**  
**Filter contains an embedded left parenthesis: \textit{value}**

**Explanation:** An LDAP operation or utility failed because a filter component contains an embedded left parenthesis \('\) which is not allowed in a filter component. A complete filter component consists of an attribute type and an attribute value, such as \((\textit{attrType}=\textit{attrValue})\). Search filters can be specified in \texttt{aclEntry}, \texttt{entryOwner}, and \texttt{memberURL} attribute types. If using ACL filters in \texttt{aclEntry} or \texttt{entryOwner} attribute values, a complete filter component must be specified in the \texttt{aclFilter} or \texttt{ownerFilter} components respectively.

In the message text:

\textit{value}

Filter value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that the embedded left parenthesis is removed from the filter component so that a complete and valid filter component is specified such as \((\textit{attrType}=\textit{attrValue})\). Then reissue the operation or restart the utility.

---

**R002028**  
**Filter contains incorrect extensible item syntax: \textit{value}**

**Explanation:** An LDAP operation or utility failed because a filter component contains an extensible filter which is not supported by the z/OS LDAP server. Search filters can be specified in \texttt{aclEntry}, \texttt{entryOwner}, and \texttt{memberURL} attribute types. If using ACL filters in \texttt{aclEntry} or \texttt{entryOwner} attribute values, an extensible filter cannot be specified in the \texttt{aclFilter} or \texttt{ownerFilter} components respectively.

In the message text:

\textit{value}

Filter value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that it specifies a filter that does not use an extensible syntax. Then reissue the operation or restart the utility.

---

**R002029**  
**An attribute description and matching rule were not found for the filter: \textit{value}**

**Explanation:** An LDAP operation or utility failed because a filter component contains an attribute type or description that does not have a matching rule in the schema. Search filters can be specified in \texttt{aclEntry}, \texttt{entryOwner}, and \texttt{memberURL} attribute types. If using ACL filters in \texttt{aclEntry} or \texttt{entryOwner} attribute values, a complete filter component must be specified in the \texttt{aclFilter} or \texttt{ownerFilter} components respectively.

In the message text:

\textit{value}

Filter value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that it specifies an attribute type or description that has a corresponding matching rule in the schema. If the filter is correct, the schema may need to be updated to add the attribute type and appropriate matching rule. Then reissue the operation or restart the utility.
R002030  Filter contains consecutive asterisks in a substring filter: 'value'

**Explanation:** An LDAP operation or utility failed because a filter component contains consecutive asterisks in a substring filter. The z/OS LDAP server does not support substring filters that contain consecutive asterisks. Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.

In the message text:

```
value
   Filter value
```

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that it specifies a substring filter that no longer specifies consecutive asterisks. If an asterisk must be looked for in the value, it must be escaped with a backslash (\) in the value. Then reissue the operation or restart the utility.

R002031  Filter is missing a right parenthesis: 'value'

**Explanation:** An LDAP operation or utility failed because a filter component is missing a matching right parenthesis ('). A complete filter component consists of an attribute type and an attribute value, such as (attrType=attrValue). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.

In the message text:

```
value
   Filter value
```

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that each filter component contains a matching right parenthesis (') such as (attrType=attrValue). Then reissue the operation or restart the utility.

R002032  Filter contains an attribute without a value: 'value'

**Explanation:** An LDAP operation or utility failed because a filter component contains an attribute type without an attribute value. A complete filter component consists of an attribute type and an attribute value, such as (attrType=attrValue). Search filters can be specified in aclEntry, entryOwner, and memberURL attribute types. If using ACL filters in aclEntry or entryOwner attribute values, a complete filter component must be specified in the aclFilter or ownerFilter components respectively.

In the message text:

```
value
   Filter value
```

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation input so that it specifies a complete and valid filter component such as (attrType=attrValue). Then reissue the operation or restart the utility.

R002033  IP address 'value' is not valid

**Explanation:** An LDAP operation or utility failed because an IP address specified in a search filter in an aclEntry or entryOwner attribute is not valid. The IP address is specified in an ACL filter when using the ibm-filterIP attribute. See [Using access control](https://www.ibm.com/support/knowledgecenter/SS5QRG_6.3.0/com.ibm.zos.v6r3.search.doc/welcome.html) for more information about the syntax of values for this attribute.

In the message text:

```
value
   IP address
```

**System action:** The LDAP server continues to run, but the operation or utility fails.
R002034 • R003030

User response: Correct the operation or utility input so that all values for the aclEntry or entryOwner attribute are valid. Then reissue the operation or restart the utility.

R002034  Attribute type 'name' only supports a trailing wildcard

Explanation: An LDAP operation or utility failed because an IP address in the specified attribute type only supports a trailing wildcard character (*). If using the ibm-filterIP attribute type in an ACL filter, see [Using access control](#) for more information about the syntax of values for this attribute.

In the message text:

- name
  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the attribute type are valid. Then reissue the operation or restart the utility.

R002035  Unable to convert timestamp 'value' to time_t

Explanation: An LDAP operation or utility failed because an error occurred when attempting to convert the time stamp to a time_t structure. The time stamp value may be a password policy time stamp attribute type, createTimestamp, or modifyTimestamp attribute values.

In the message text:

- value
  Timestamp value

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R003029  The aclPropagate attribute requires the aclEntry attribute

Explanation: An LDAP add or modify operation failed because it sets the aclPropagate attribute but the entry does not contain any aclEntry attribute values. The attribute to control propagation of the acl entry values cannot be specified if there are no acl entry values in the entry. See [Using access control](#) for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the aclPropagate attribute from the operation input. Then reissue the operation.

R003030  The 'name' attribute cannot be used in the entry distinguished name

Explanation: An LDAP add operation failed because the distinguished name (DN) of the entry contains an attribute that is not allowed in a DN. In particular, the aclEntry, aclPropagate, entryOwner, and ownerPropagate attributes are not supported in a DN. Note that a modify DN operation may cause this error if it specifies an attribute that is not supported in the new relative distinguished name for the renamed entry.

In the message text:

- name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the entry DN in the add input or from the new relative distinguished name in the modify DN input. Then reissue the operation.
The ownerPropagate attribute requires the entryOwner attribute

Explanation: An LDAP add or modify operation failed because it sets the ownerPropagate attribute but the entry does not contain any entryOwner attribute values. The attribute to control propagation of the entry owner values cannot be specified if there are no entry owner values in the entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the ownerPropagate attribute from the operation input. Then reissue the operation.

Access denied because user does not have 'add' permission for the parent entry

Explanation: An LDAP add operation failed because the requester does not have add permission in the parent entry for the entry being added. Add permission is required to create an entry under the parent entry. The requester's authority is determined using the aclEntry and entryOwner attribute values associated with the parent of the new entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant add permission to the parent entry. Then reissue the operation.

Administrator response: Modify the aclEntry values for the parent entry to give the requester add permission. To determine the authority that a bound user has in the directory, use the GetEffectiveACL extended operation in the ldapexop utility.

Access denied because user does not have 'write' permission for all attributes in the new entry

Explanation: An LDAP add operation failed because the requester does not have write permission for all the attributes being added. Note that this includes the attributes in the relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name. The requester's authority is determined using the aclEntry and entryOwner attribute values associated with the parent of the new entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the parent entry. Then reissue the operation.

Administrator response: Modify the aclEntry values for the parent entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the GetEffectiveACL extended operation in the ldapexop utility.

Access denied because user does not have 'write' permission for all modified attributes

Explanation: An LDAP modify operation failed because the requester does not have write permission for all the attributes being modified. The requester's authority is determined using the aclEntry and entryOwner attribute values associated with the entry being modified. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the entry. Then reissue the operation.

Administrator response: Modify the aclEntry values for the entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the GetEffectiveACL extended operation in the ldapexop utility.

Access denied because user does not have 'delete' permission for the entry

Explanation: An LDAP delete operation or a modify DN operation which is moving an entry to another subtree failed because the requester does not have delete permission for the parent of the entry being deleted or moved. Moving an entry involves deleting the entry from its current parent and adding the entry under its new parent. When deleting or moving an entry, the requester must have delete permission in the parent entry. The requester's...
authority is determined using the `aclEntry` and `entryOwner` attribute values associated with the parent entry. See [Using access control](#) for more information about LDAP access control.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant delete permission to the entry. Then reissue the operation.

**Administrator response:** Modify the `aclEntry` values for the entry to give the requester delete permission. To determine the authority that a bound user has in the directory, use the `GetEffectiveACL` extended operation in the `ldapexop` utility.

---

**R003082**

**Access denied because user does not have 'write' permission for all attributes in the old name**

**Explanation:** An LDAP modify DN operation that specifies that the old relative distinguished name (RDN) attribute values should be removed from the renamed entry failed because the requester does not have the necessary access control permissions to do this. The requester must have write permission to all the attributes in the old RDN. The requester's authority is determined using the `aclEntry` and `entryOwner` attribute values associated with the entry before it is renamed.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant the necessary permissions to the entry or change the modify DN input to not delete the old RDN attribute value. Then reissue the operation.

**Administrator response:** Modify the `aclEntry` values for the entry to give the requester write permission to these values. To determine the authority that a bound user has in the directory, use the `GetEffectiveACL` extended operation in the `ldapexop` utility.

---

**R003095**

**Access denied because user does not have 'compare' permission for the attribute**

**Explanation:** An LDAP compare operation failed because the requester does not have compare permission for the attribute being compared. The requester's authority is determined using the `aclEntry` and `entryOwner` attribute values associated with the entry that is the target of the compare operation. See [Using access control](#) for more information about LDAP access control.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant compare permission to the entry. Then reissue the operation.

**Administrator response:** Modify the `aclEntry` values for the entry to give the requester compare permission. To determine the authority that a bound user has in the directory, use the `GetEffectiveACL` extended operation in the `ldapexop` utility.

---

**R003119**

**Access denied because user does not have 'write' permission for all attributes in the new name**

**Explanation:** An LDAP modify DN operation failed because it does not have write permission to add the attributes in the new relative distinguished name (the RDN is the leftmost part of the distinguished name) of the entry being renamed. The attribute values in the RDN must always be part of the entry and are automatically added by the LDAP server to the entry. The requester must have write permission for each of these attributes in the entry being renamed. The requester's authority is determined using the `aclEntry` and `entryOwner` attribute values associated with the entry. See [Using access control](#) for more information about LDAP access control.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant write permission to the entry. Then reissue the operation.

**Administrator response:** Modify the `aclEntry` values for the entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the `GetEffectiveACL` extended operation in the `ldapexop` utility.
R003125  Access denied because user does not have 'add' permission for the new superior entry

**Explanation:** An LDAP modify DN operation which is moving an entry to another subtree failed because the requester does not have add permission in the new parent of the entry being moved. Moving an entry involves deleting the entry from its current parent and adding the entry under its new parent. The requester must have delete permission in the current parent and add permission in the new parent. The requester’s authority is determined using the aclEntry and entryOwner attribute values associated with the current and new parent entries. See [Using access control](#) for more information about LDAP access control.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant add permission to the new parent entry. Then reissue the operation.

**Administrator response:** Modify the aclEntry values for the new parent entry to give the requester add permission. To determine the authority that a bound user has in the directory, use the GetEffectiveACL extended operation in the ldapexop utility.

R003128  Unable to realign DN attributes because user does not have 'write' permission for attributes in 'name'

**Explanation:** An LDAP modify DN operation which includes the control to realign other distinguished name (DN) attributes failed because the requester does not have write permission for an attribute that is being realigned. Realignment results in changing the original DN of the entry being renamed to the new DN of the entry in all the entries where the original DN occurs in a value of an aclEntry attribute, entryOwner attribute, or attribute with Distinguished Name syntax. The requester must have write permission for each attribute being changed in those entries. The requester’s authority is determined using the aclEntry and entryOwner attribute values associated with each of those entries. See [Using access control](#) for more information about LDAP access control.

In the message text:

```
name
```

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to grant write permission to the entries affected by realignment. Then reissue the operation.

**Administrator response:** Modify the aclEntry values for each of the entries affected by realignment to give the requester write permission. To determine the authority that a bound user has in the directory, use the GetEffectiveACL extended operation in the ldapexop utility.

R003129  Realigning DN attributes would result in duplicate values for attribute 'name' in 'entry'

**Explanation:** An LDAP modify DN operation which includes the control to realign other distinguished name (DN) attributes failed because realigning an attribute value creates a duplicate value in some entry. Realignment results in changing the original DN of the entry being renamed to the new DN of the entry in all the entries where the original DN occurs in a value of an aclEntry attribute, entryOwner attribute, or attribute with Distinguished Name syntax. The new value must not already exist in the attribute.

In the message text:

```
name
```

Attribute name

```
entry
```

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the duplicate attribute value from the entry. Then reissue the operation.
R003130  Filter included with an aclEntry or entryOwner attribute is not valid: 'filter'

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value is not valid. See [Using access control] for more information about the supported ACL search filters.

In the message text:

filter
  Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that the value is valid. Then reissue the operation or restart the utility.

---

R003131  Access control filter attribute type 'name' is not defined

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value contains attribute types that are not in the schema. See [Using access control] for more information about the supported ACL search filters.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

---

R003132  Normalization failed for access control filter attribute type 'name'

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value cannot be normalized. See [Using access control] for more information about the supported ACL search filters.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

---

R003133  Normalization failed for access control filter substring type 'type'

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value cannot be substring normalized. See [Using access control] for more information about the supported ACL search filters.

In the message text:

type
  Substring type

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.
R003134  Access control filter attribute type 'name' does not have an equality matching rule

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value does not have an equality matching rule specified in the schema. See [Using access control] for more information about the supported ACL search filters.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003136  Value specified for access control filter attribute type 'name' is not valid

Explanation: An LDAP operation or utility failed because an attribute type in an ACL filter specified in an aclEntry or entryOwner attribute value is not valid. See [Using access control] for more information about the supported ACL search filters.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003137  Attribute type 'name' cannot be specified within an access control filter

Explanation: An LDAP operation or utility failed because an attribute type in an ACL filter specified in an aclEntry or entryOwner attribute value is not valid. See [Using access control] for more information about the supported ACL search filters.

In the message text:

name  Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003138  Operation not specified or not valid in aclFilter 'filter'

Explanation: An LDAP operation or utility failed because the aclFilter component of an aclEntry value does not specify an operation or the operation specified is not valid. See [Using access control] for more information about the supported ACL search filters and operation types.

In the message text:

filter  aclFilter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid operation is specified for the aclFilter component. Then, reissue the operation or restart the utility.
R003139  Mode not specified or not valid in ownerFilter 'filter'

Explanation: An LDAP operation or utility failed because the ownerFilter component of an entryOwner value does not specify a mode or the mode specified is not valid. See [Using access control] for more information about the supported ACL search filters and operation types.

In the message text:

filter
ownerFilter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid operation is specified for the ownerFilter component. Then, reissue the operation or restart the utility.

R003141  Entry 'name' is a referral entry. Effective ACL information cannot be retrieved for a referral

Explanation: The GetEffectiveAcl extended operation failed because a referral entry is encountered and effective ACL information cannot be obtained for a referral entry.

In the message text:

name
Distinguished name of entry

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the GetEffectiveAcl extended operation so that the effective ACL information is not retrieved for the referral entry. The GetEffectiveAcl extended operation must be run against the referral server to obtain the effective ACL information. Then, reissue the operation.

R003142  Unable to build a filter string from a filtered value

Explanation: An LDAP operation or utility failed because an ACL filter specified in an aclEntry or entryOwner attribute value cannot be normalized. See [Using access control] for more information about the supported ACL search filters.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then, reissue the operation or restart the utility. If the problem persists, contact an LDAP administrator.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R003143  Only an LDAP administrator can execute Get Effective ACL extended operation

Explanation: A GetEffectiveAcl extended operation failed because it is only allowed to be ran by an LDAP root, schema, or server configuration administrator.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Authenticate as an LDAP root, schema, or server configuration administrator. Then reissue the operation or restart the utility.

R003144  Bind DN not specified for SimpleCramDigestBind sequence

Explanation: A GetEffectiveAcl extended operation failed because a bind distinguished name (DN) must be specified in the SimpleCramDigestBind sequence when simulating a CRAM-MD5 or DIGEST-MD5 bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the GetEffectiveAcl extended operation is properly encoded by the ldapexop utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.
R003145  Kerberos principal@realm not specified for gssApiBind sequence

Explanation: A GetEffectiveAcl extended operation failed because a Kerberos principal must be specified in the gssApiBind sequence when simulating a GSSAPI (Kerberos) bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the GetEffectiveAcl extended operation is properly encoded by the ldapexop utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003146  Certificate subject DN not specified for externalBind sequence

Explanation: A GetEffectiveAcl extended operation failed because a certificate subject distinguished name (DN) must be specified in the externalBind sequence when simulating a SASL EXTERNAL bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the GetEffectiveAcl extended operation is properly encoded by the ldapexop utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003147  The value 'value' passed to the Get Effective ACL extended operation is not valid

Explanation: A GetEffectiveAcl extended operation failed because a value specified in the request is not valid. See the GetEffectiveAcl description for the ldapexop utility in Running and using the LDAP server utilities for more information about the options and their values.

In the message text:

value
   Extended operation value

System action: The LDAP server continues to run, but the utility ends.

User response: Correct the utility input. Then restart the utility.

R003148  Decode of Get Effective ACL extended operation request failed. reason

Explanation: A GetEffectiveAcl extended operation failed because the extended operation cannot be decoded. The format or contents of the extended operation are not valid.

In the message text:

reason
   Reason for decode failure

System action: The LDAP server continues to run, but the extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the GetEffectiveAcl extended operation is properly encoded by the ldapexop utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003149  Encode of Get Effective ACL extended operation response failed. reason

Explanation: A GetEffectiveAcl extended operation failed because the extended operation response cannot be encoded.

In the message text:

reason
   Reason for encode failure
**R003150 • R004017**

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Contact the service representative. Verify that the GetEffectiveAcl extended operation is properly encoded by the ldapexop utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

---

**R003150**  A filtered 'name1' value cannot be added or modified. Filtered 'name2' values require minimum serverCompatLevel level

**Explanation:** An LDAP operation or utility failed because a filtered attribute value was specified in an attribute type that requires a minimum server compatibility level.

In the message text:

- **name1**
  - Attribute name
- **name2**
  - Attribute name
- **level**
  - Minimum compatibility level

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Either correct the operation or utility input so that a filter is not specified in the attribute type or contact an LDAP administrator to update the server compatibility to the minimum level specified. Then reissue the operation or restart the utility.

**Administrator response:** If filtered attribute values are to be supported, update the serverCompatLevel option in the LDAP server configuration file to the minimum level specified in the message. Then restart the server or utility.

---

**R003151**  Unknown access class found in aclEntry attribute value 'value'

**Explanation:** An LDAP operation or utility failed because an unknown access class was specified in an aclEntry attribute value. The supported access classes are: normal, sensitive, critical, system, and restricted. See Using access control for more information about aclEntry attribute values.

In the message text:

- **value**
  - Attribute value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the operation or utility input so that a valid aclEntry attribute value is specified. Then reissue the operation or restart the utility.

---

**R004017**  No attributes specified for entry 'name'

**Explanation:** An LDAP add operation failed because it does not contain any attributes to include in the entry. All entries must have at least the objectClass attribute.

In the message text:

- **name**
  - Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Add the appropriate attributes to the add input. Then reissue the operation.
**R004019  Entry data is missing required RDN components**

**Explanation:** An LDAP modify operation failed because it changes or deletes attribute values that are in the relative distinguished name (RDN) of the entry. The RDN is the leftmost part of the distinguished name. Every attribute and value in the RDN must also be in the entry and cannot be removed unless the entry is renamed.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the modify input so that it does not remove the attribute values that are in the RDN. Then, reissue the operation.

---

**R004020  RDN contains duplicate values for attribute 'name'**

**Explanation:** An LDAP operation failed because it involves a distinguished name (DN) that contains the same attribute value twice in the relative distinguished name (RDN). The RDN is the leftmost part of the DN.

In the message text:

name

Attribute name

**System action:** The LDAP server continues to run, but the search operation ends.

**User response:** Remove the duplicate attribute value from the distinguished name in the operation input. Then, reissue the operation.

---

**R004022  Parent not found for entry 'name'**

**Explanation:** An LDAP operation failed because the parent entry could not be found in the backend. The parent entry must exist for the LDAP operation to succeed.

In the message text:

name

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation ends.

**User response:** If the distinguished name (DN) of the entry is correct, add a parent entry. If the parent entry already exists, contact an LDAP administrator. Then, reissue the operation.

**Administrator response:** If the problem persists, contact the service representative with LDAP debug trace output.

---

**R004026  Entry 'name' not found in database**

**Explanation:** An LDAP operation or utility failed because the entry could not be found in the backend.

In the message text:

name

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation or utility ends.

**User response:** Verify that the distinguished name of the entry specified in the LDAP operation or the utility is correct. Then, reissue the operation or restart the utility.

---

**R004028  Search size limit exceeded**

**Explanation:** An LDAP search operation ended because it has returned the maximum number of entries allowed for the search. The search size limit restricts the number of entries that a search can return. For each search, it is determined using a combination of the size limit the requester can specify for the search, the size limit specified for the targeted backend in the LDAP server configuration file, and the size limits specified in LDAP groups to which the requester belongs. See the description of the sizeLimit server configuration option in Customizing the LDAP server configuration for more information.

**System action:** The LDAP server continues to run, but the operation ends.
R004031 • R004038

User response: If additional search output is needed, increase the size limit specified on the search operation. Then, reissue the operation. If the search output is still limited, contact an LDAP administrator. After the problem is resolved, rebind to the server and reissue the operation.

Administrator response: Use either the sizeLimit option in the LDAP server configuration file or search limit groups to increase the search size limit for this requester. If the configuration option is changed, restart the server. If search limit groups are changed, then the requester must rebind to use the changed limits.

R004031  Search time limit exceeded

Explanation: An LDAP search operation ended because it has exceeded the maximum amount of time allowed for the search. The search time limit restricts the amount of time that a search can take. For each search, it is determined using a combination of the time limit the requester can specify for the search, the time limit specified for the targeted backend in the LDAP server configuration file, and the time limits specified in LDAP groups to which the requester belongs. See the description of the timeLimit server configuration option in Customizing the LDAP server configuration for more information.

System action: The LDAP server continues to run, but the search operation ends.

User response: If additional search output is needed, increase the time limit specified on the search operation. Then, reissue the operation. If the search output is still limited, contact an LDAP administrator. After the problem is resolved, rebind to the server and reissue the operation.

Administrator response: Use either the timeLimit option in the LDAP server configuration file or search limit groups to increase the search time limit for this requester. If the configuration option is changed, restart the server. If search limit groups are changed, then the requester must rebind to use the changed limits.

R004035  Attribute type ’name’ may not be added or modified by users

Explanation: An LDAP add, modify, or modify DN operation failed because it attempts to specify a value for an attribute that cannot be set by a user. This attribute is only set by the LDAP server. In general, an attribute which includes NO-USER-MODIFICATION in its schema definition falls into this category. Note that an add or modify DN operation may cause this error if the attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the operation input. Then, reissue the operation.

R004038  Operation not allowed because backend is in read-only mode

Explanation: An LDAP add, modify, delete, or modify DN operation failed because the backend which is the target of the operation is running in read-only mode. In general, the backend cannot be updated when running in this mode. A backend can be configured to run in read-only mode using the readOnly on option in the LDAP server configuration file. While the server is running, the BACKEND LDAP operator modify command can be used to switch the backend between read-only mode and read/write mode. Also, some backends can be switched to read-only mode automatically by the LDAP server if it detects problems with updating entries in the backend.

System action: The LDAP server continues to run, but the operation fails.

User response: If update operations on the backend are required, contact an LDAP administrator. After the problem is resolved, reissue the operation. Otherwise, do not issue update operations to the backend.

Administrator response: If requested, use the BACKEND LDAP operator modify command to change the backend to read/write mode.
R004041 Entry 'name' is not a leaf and may not be deleted

Explanation: An LDAP delete operation failed because it tries to delete an entry that has child entries. Only leaf entries (those with no entries below them) can be deleted.

In the message text:

name 
   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: First delete all the entries below the target entry, starting with those on the lowest level of the subtree hierarchy. Then reissue the operation.

R004051 Entry 'name1' does not contain attribute 'name2'

Explanation: An LDAP operation failed because the entry does not contain the attribute type.

In the message text:

name1 
   Distinguished name of entry

name2 
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the operation input or correct the distinguished name of entry in the operation input. Then reissue the operation.

R004054 Invalid UTF-8 character found in string value 'value'

Explanation: An LDAP operation failed because a non-UTF8 character was detected in an attribute that is a string value.

In the message text:

value 
   Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Remove or update the value so that it is a valid string value in the operation input. Then reissue the operation.

R004060 Entry does not contain a password

Explanation: A CRAM-MD5 or DIGEST-MD5 bind operation failed because there are no values for the userPassword attribute in the entry that contains the user ID specified in the bind information. The entry must have userPassword values and the values must be either in the clear or encrypted using a two-way encryption algorithm.

System action: The LDAP server continues to run, but the operation fails.

User response: If a bind or authorization distinguished name (DN) is specified on the bind request, add the appropriate userPassword value to the entry. If a user ID is only specified in the CRAM-MD5 or DIGEST-MD5 bind request, do an LDAP search operation with the filter uid=name to determine which entry contains the user ID specified in the bind request. Add the appropriate userPassword value to the entry. Then, reissue the operation.

R004062 Credentials are not valid

Explanation: An LDAP bind operation failed because the credentials specified on the request are not correct. The password specified on a simple, CRAM-MD5, or DIGEST-MD5 bind must match a userPassword value on the bind distinguished name entry. If SSL certificate mapping is activated and an EXTERNAL bind is performed, the certificate could not be mapped to an SAF user. See Support of certificate bind for more information.

System action: The LDAP server continues to run, but the operation fails.
User response: If performing a simple, CRAM-MD5, or DIGEST-MD5 bind, update the bind distinguished name (DN), user ID, or password value specified on the bind request. If performing an EXTERNAL bind and SSL certificate mapping is active, verify that the correct certificate is being used, otherwise contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the user is performing an EXTERNAL bind, determine whether the user's certificate should be mapped to a RACF (SAF) user ID by doing an RACDCERT MAP command. Also, verify that the sslMapCertificate option settings are correct when SSL certificates cannot be mapped to a RACF or SAF user ID.

---

R004071 DN 'name' does not exist

Explanation: An LDAP compare or search operation failed because the distinguished name (DN) in the request does not exist in the directory.

In the message text:

name

Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the distinguished name in the request is correct. Then, reissue the operation.

---

R004073 Entry is not a leaf and cannot be modified to be a referral entry

Explanation: An LDAP modify or modify DN operation failed because it results in a referral entry that has child entries. A referral entry is one that contains the referral object class and the ref attribute. A referral entry must be a leaf entry. Thus, a modify operation that adds this object class to an entry must not be targeted to a non-leaf entry. Similarly, a modify DN operation cannot result in changing an entry to a referral entry if that entry has entries under it. This can occur if the object class and attribute are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not change a non-leaf entry to a referral entry. Then, reissue the operation.

---

R004077 DN 'name' already exists

Explanation: An LDAP add or modify DN operation failed because there is already an entry with the distinguished name (DN) of the new entry. Every entry must have a unique DN.

In the message text:

name

Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Either change the operation input so that the distinguished name of the new entry is unique or delete the existing duplicate entry. Then, reissue the operation.

---

R004083 New superior is not allowed for an LDAP V2 request

Explanation: An LDAP modify DN operation failed because it specifies a value for new superior, but that parameter is not supported when the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support using the modify DN operation to move an entry to another subtree by specifying a new superior for the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the new superior value in the modify DN input or rebind using protocol version 3. Then, reissue the operation.
R004086 Entry 'name1' already contains attribute 'name2' with value 'value'

Explanation: An LDAP modify operation failed because it attempts to add an attribute value that already exists in the entry. Each attribute value must be different. Note that the server 'normalizes' values before comparing them. This normalization depends on the syntax and equality matching rule specified in the attribute definition in the schema. For example, normalization using the \texttt{caseIgnoreMatch} matching rule removes extraneous spaces and changes all alphabetic characters to uppercase. See \texttt{[LDAP directory schema]} for more information. In particular, only the distinguished name or filter part of an \texttt{aclEntry} or \texttt{entryOwner} attribute value is used when comparing values for these attributes.

In the message text:

\begin{itemize}
  \item \texttt{name1} Distinguished name of entry
  \item \texttt{name2} Attribute name
  \item \texttt{value} Attribute value
\end{itemize}

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate attribute value from the modify input. Then, reissue the operation.

R004091 Non-I\texttt{A}5 data received for an LDAP V2 request

Explanation: An LDAP operation failed because the client request is using LDAP Version 2 protocol and contains characters that are not valid I\texttt{A}5. The LDAP server checks that the client request contains only I\texttt{A}5 characters when the client is using LDAP Version 2 protocol, the \texttt{sendV3StringsOverV2As ISO8859-1} and \texttt{validateIncomingV2Strings on} configuration options are specified in the LDAP server configuration file. Note that \texttt{validateIncomingV2Strings on} is the default if the option is not specified in the configuration file. The requester established the protocol version to use during bind. I\texttt{A}5 characters are the 7-bit ASCII characters, from x'00' to x'7F'. Note that the null character (x'00') is a valid I\texttt{A}5 character.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the input to the operation so that it only contains characters that translate to the I\texttt{A}5 characters. Alternatively, rebind using LDAP Version 3 protocol. Then, reissue the operation. If LDAP Version 2 protocol is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, specify \texttt{validateincomingV2strings off} in the LDAP server configuration file. However, this setting should not be used because it can result in the LDAP server accepting data that is not valid. Then, restart the LDAP server.

R004096 Entry 'name1' does not contain attribute 'name2' with value 'value'

Explanation: An LDAP modify operation failed because it attempts to delete an attribute value that does not exist in the entry. Note that the server 'normalizes' values before comparing them. This normalization depends on the syntax and equality matching rule specified in the attribute definition in the schema. For example, normalization of a value using the \texttt{caseIgnoreMatch} matching rule removes extraneous spaces and changes all alphabetic characters to uppercase. See \texttt{[LDAP directory schema]} for more information. In particular, only the distinguished name or filter part of an \texttt{aclEntry} or \texttt{entryOwner} attribute value is used when comparing values for these attributes.

In the message text:

\begin{itemize}
  \item \texttt{name1} Distinguished name of entry
  \item \texttt{name2} Attribute name
  \item \texttt{value} Attribute value
\end{itemize}

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute value from the modify input. Then, reissue the operation.
R004098 • R004109

R004098 Filtering on non-textual attribute 'name' is not allowed

Explanation: An LDAP search operation failed because the search filter contains an attribute type that is non-textual. The z/OS LDAP server does not support search filters that contain attributes that are non-textual. For example, a search filter of (userpassword=secret) is not supported in z/OS LDAP because the userPassword attribute has an octet string syntax.

In the message text:

name

Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not contain a search filter that contains a non-textual attribute. Then, reissue the operation.

R004099 Parent of new entry 'name' is a referral entry

Explanation: An LDAP add or modify DN operation failed because it results in creating an entry under a referral entry. A referral entry is one that contains the referral object class and the ref attribute. A referral entry must be a leaf entry. Thus, an LDAP add operation cannot add an entry whose parent is a referral entry. Similarly, a modify DN operation cannot move an entry under a referral entry.

In the message text:

name

Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not add or move an entry under a referral entry. Then, reissue the operation.

R004108 Native user ID 'name' is either not defined or no UID is present in the OMVS segment

Explanation: An LDAP operation involving a native authentication entry failed because the native user associated with the entry either does not exist in the z/OS Security Server or is not completely defined there. The operation can be a native authentication bind or a native password modify. When using RACF as the security server, the RACF user must have an OMVS segment containing a UID value.

In the message text:

name

User ID

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to use a native authentication entry for which the associated native user is completely defined or modify the native user value within the native authentication entry to a native user that is completely defined. Then reissue the operation. If the native user is supposed to exist in the z/OS Security Server, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Ensure that the required native users are completely defined in the z/OS Security Server.

R004109 The password has expired

Explanation: An LDAP operation involving a native authentication entry failed because the password or password phrase of the native user associated with the entry is expired in the z/OS Security Server. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved,

Administrator response: Reset the native user password or password phrase in the z/OS Security Server.
R004110  The user ID has been revoked

Explanation: An LDAP operation involving a native authentication entry failed because the native user associated with the entry is revoked in the z/OS Security Server. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Reset the native user in the z/OS Security Server.

R004111  The password is not correct

Explanation: An LDAP operation involving a native authentication entry failed because the existing password or password phrase specified in the operation is not correct for the native user associated with the entry. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the password in the operation input. Then reissue the operation.

R004112  A bind argument is not valid

Explanation: An LDAP bind operation failed because one of the values used during the bind is missing or is not valid. This error can also be caused by a modify of a native authentication password. When performing a native authentication bind or modify, the password lengths must be between within 1 to 100. If a new password is specified during native authentication bind using the oldpassword/oldpassword format, there can be only one unescaped forward slash. See [Native authentication] for more information about changing native authentication passwords.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input. Then reissue the operation.

R004113  Native authentication cannot be performed when multiple uid values exist

Explanation: An LDAP bind or modify operation involving a native authentication entry failed because the entry contains more than one value for the uid attribute. The LDAP server cannot determine which of the values to use to associate the native authentication entry with a native user in the z/OS Security Server.

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the native authentication entry so that the uid attribute has a single value, representing the z/OS Security Server user to be used. Then, reissue the operation.

R004114  The modify-delete of the old password must occur before the modify-add of the new password

Explanation: An LDAP native password modify operation failed because the input does not contain a userPassword attribute modification to delete the existing password or password phrase value before the userPassword modification to add the new password or password phrase value. Both modifications are needed and the delete must precede the add to change a native password or password phrase.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, add a delete modification for the existing userPassword value before the add modification of the new value. Then, reissue the operation.

R004115  More than one password cannot be specified for a native authentication password update

Explanation: An LDAP native password modify operation failed because the input either contains an add or delete userPassword attribute modification which specifies multiple values or contains multiple add modifications or multiple delete modifications. There must be a single delete modification with one value (the existing password or password phrase value) and a single add modification with one value (the new value), and the delete modification must precede the add modification.

System action: The LDAP server continues to run, but the operation fails.
User response: In the modify input, remove extraneous add and delete modifications for userPassword and ensure that there is one value in the add modification and one in the delete modification. Then, reissue the operation.

R004116  Password change not allowed because native updates are not enabled

Explanation: An LDAP native password modify operation failed because the targeted backend is not configured to support this. Native password modify is enabled by setting the nativeUpdateAllowed option to on or reset in the section for this backend in the LDAP server configuration file. If the option is not specified in the backend section or if the value is set to off, then native password modify is not permitted within the backend. See Customizing the LDAP server configuration for more information about the nativeUpdateAllowed configuration option.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Add the nativeUpdateAllowed option with a value of on or reset to the backend section of the LDAP server configuration file. Then, restart the server.

R004117  Native authentication replace is not allowed

Explanation: An LDAP native password modify operation failed because the input contained a replace modification for the userPassword value. This is not supported by native password modify. Instead, the input must contain a modification to delete the existing userPassword value followed by a modification to add the new userPassword value.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, remove the replace modification for the userPassword attribute and put in a delete of the existing value followed by an add of the new value. Then reissue the operation.

R004118  Native user ID 'name' is either not defined or no UID is present in the OMVS segment

Explanation: An LDAP native password modify operation failed because the native user associated with the native entry either does not exist in the z/OS Security Server or is not completely defined there. When using RACF as the security server, the RACF user must have an OMVS segment containing a UID value.

In the message text:

    name
    User ID

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input to use a native authentication entry for which the associated native user is completely defined or modify the native user value within the native authentication entry to a native user that is completely defined. Then reissue the operation. If the native user is supposed to exist in the z/OS Security Server, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Ensure that the required native users are completely defined in the z/OS Security Server.

R004119  A modify-add of the new password must follow the modify-delete of the old password

Explanation: An LDAP native password modify operation failed because the input does not contain a userPassword attribute modification to add the new password or password phrase value. This modification must follow the userPassword modification to delete the existing value. Both modifications are needed and the delete must precede the add to change a native password or password phrase.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, add an add modification for the new userPassword password or password phrase value after the delete modification of the existing value. Then reissue the operation.
R004120  The userPassword attribute cannot be added because the entry uses native authentication

Explanation: An LDAP add operation failed because the new entry is set up to use native authentication but a value for the userPassword attribute is specified. A native authentication entry cannot contain that attribute. See Native authentication for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the userPassword attribute from the add input. Then, reissue the operation.

R004121  Entry is using native authentication but without a native userid

Explanation: An LDAP modify operation failed because the modified entry is subject to native authentication but does not contain a uid or ibm-nativeld attribute value. Depending on how native authentication is configured, one of these values is required. See Native authentication for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input to add the appropriate uid or ibm-nativeld attribute value to the entry. Then, reissue the operation.

R004128  Native authentication password change failed: The new password is not valid, or does not meet requirements

Explanation: An LDAP native password modify operation failed because the new password is not specified (has zero length) or is not acceptable. The new native password is checked by the z/OS Security Server, not the LDAP server. The password must meet any password requirements of the z/OS Security Server, such as length, format, and change history.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the new password in the modify input is acceptable to the z/OS Security Server. Then, reissue the operation.

R004129  New superior 'name' does not exist

Explanation: An LDAP modify DN operation failed because it attempts to move an entry under an entry that does not exist. When specifying a new superior entry to move the target entry under, the new superior entry must already exist unless the target entry is becoming a new suffix entry.

In the message text:

name  
Distinguished name of new superior

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the new superior is an existing entry. Then, reissue the operation.

R004130  Time limit exceeded for Modify DN operation

Explanation: An LDAP modify DN operation that includes the IBMModifyDNTimelimitControl control failed because the processing time exceeds the limit specified in the control. This can occur when the modify DN operation also specifies the IBMModifyDNRealignDNAttributesControl control, which results in the LDAP server searching the backend for attribute values that specify the renamed entry and updating each such value to the new name for the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Specify a larger time limit in the IBMModifyDNTimelimitControl control. Then, reissue the operation.
**R004132 • R004154**

**R004132**  The new superior DN must exist in the same backend

**Explanation:** An LDAP modify DN operation failed because it tries to move an entry under an entry that is in a different backend. When specifying a new superior entry to move the target entry under, the new superior entry must be within the same backend (but not necessarily the same suffix) as the target entry. A modify DN operation cannot move an entry between backends.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the modify DN input so that the new superior is an entry in the same backend as the target entry. Then, reissue the operation.

**R004133**  The new superior DN is located in the subtree to be moved

**Explanation:** An LDAP modify DN operation failed because it tries to move an entry under itself. When specifying a new superior entry to move the target entry under, the new superior entry must not a lower entry in the target entry's subtree.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the modify DN input so that the new superior is not within the target entry's subtree. Then, reissue the operation.

**R004141**  New RDN 'name' is not valid

**Explanation:** An LDAP modify DN operation failed because the new relative distinguished name (RDN) is not acceptable. The RDN must have a single component. For example, cn=abc,ou=dept83 has two components, cn=abc and ou=dept83, thus is not a valid RDN.

In the message text:

```
name
```

New relative distinguished name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the modify DN input so that the new relative distinguished name is valid. Then, reissue the operation.

**R004153**  Parent of new entry 'name' is an alias entry

**Explanation:** An LDAP add or modify DN operation failed because it results in creating an entry under an alias entry. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute. An alias entry must be a leaf entry. Thus, an LDAP add operation cannot add an entry whose parent is an alias entry. Similarly, a modify DN operation cannot move an entry under an alias entry.

In the message text:

```
name
```

Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that an add does not try to add an entry under an alias entry and a modify DN does not try to move an entry under an alias entry. Then, reissue the operation.

**R004154**  Entry is not a leaf and cannot be modified to be an alias entry

**Explanation:** An LDAP modify or modify DN operation failed because it results in an alias entry that has child entries. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute. An alias entry must be a leaf entry. Thus, an LDAP modify operation that adds one of these object classes must not be targeted to a non-leaf entry. Similarly, a modify DN operation cannot result in changing an entry to an alias entry if that entry has entries under it. This can occur if the object class and attribute are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

**System action:** The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that a modify does not try to add an alias to a non-leaf entry and a modify DN does not try to change a non-leaf entry to an alias entry. Then, reissue the operation.

R004155  Alias entry 'name' points to itself

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an alias entry that specifies itself as its alias. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute. The aliasedObjectName value must be the distinguished name (DN) of some other entry. Note that a modify DN operation cannot rename an alias entry such that the entry DN becomes the same as the alias DN within the entry.

In the message text:

name  Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not result in an alias entry that points to itself. Then, reissue the operation.

R004158  Cycle detected while dereferencing alias 'name'

Explanation: An LDAP search operation that is dereferencing aliases failed because it finds a chain of aliases that leads back to the first alias in the chain. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute.

In the message text:

name  Initial alias value

System action: The LDAP server continues to run, but the operation fails.

User response: Starting from the initial alias value, analyze the alias chain and end the chain by removing or modifying the appropriate aliasedObjectName value. Then, reissue the operation.

R004159  Dereferencing 'name' failed because the resulting DN does not exist in this backend

Explanation: An LDAP search operation that is dereferencing aliases failed because an alias points to an entry that is not in the same backend as the initial alias entry. Aliasing between backends is not supported. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute.

In the message text:

name  Distinguished name of initial alias entry

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the entry so that the aliasedObjectName attribute value points to an entry within the same backend. Then, reissue the operation.

R004160  Entry 'name' cannot be both an alias and a referral

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry that is both an alias entry and a referral entry. An alias entry is one that contains the alias or aliasObject object class and the aliasedObjectName attribute. A referral entry is one that contains the referral object class and the ref attribute. An entry cannot be both an alias and a referral because during a search there is no way to decide whether search should dereference the entry or use it as a referral. Note that a modify DN operation may cause this error if the alias and referral object classes and attributes are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

In the message text:

name  Distinguished name of entry
R004161 • R004165

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that it does not result in an entry that is both an alias entry and a referral entry. Then, reissue the operation.

R004161  Persistent search terminated because search base entry has been deleted

Explanation: An LDAP persistent search operation ends because an LDAP delete or modify DN operation is deleting or renaming the search base entry.
System action: The LDAP server continues to run. The delete or modify DN operation continues but the persistent search operation ends.
User response: You might want to start a new persistent search using the renamed base when the modify DN operation completes.

R004162  Operation not allowed because backend is not the sysplex owner

Explanation: An LDAP operation failed because the LDAP server is not the sysplex owner of the backend or schema. The operation is only allowed when the LDAP server is the sysplex owner of the backend or schema.
System action: The LDAP server continues to run, but the operation fails.
User response: Retry the LDAP operation against the sysplex owner. If the problem persists, contact the service representative.

R004163  Dynamic group URL 'url' is not valid

Explanation: An LDAP operation failed because the dynamic group URL in the memberURL attribute is not valid. The format of a dynamic group URL is: ldap:///baseDN[?searchScope][?searchFilter]. See Dynamic groups for more information.
In the message text:
url
  Dynamic group URL
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that the value is valid for the memberURL attribute. Then, reissue the operation.

R004164  An unsupported value 'value' is specified for attribute 'name'

Explanation: An LDAP operation failed because it specifies a value that is not supported for an attribute.
In the message text:
value
  Unsupported value
name
  Attribute name
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that the value is valid for the attribute. Then, reissue the operation.

R004165  request is not supported by plugin

Explanation: An LDAP operation failed because it is not supported by the plug-in.
In the message text:
request
  Unsupported operation
System action: The LDAP server continues to run, but the operation fails.
**User response:** Do not issue this request to the plugin.

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**R004166**  
**The LDAP server is shutting down**

**Explanation:** An LDAP operation failed because the LDAP server sysplex owner is in the process of ending and this LDAP server is unable to communicate with the sysplex owner. Another server in the sysplex group becomes the sysplex group owner.

**System action:** The LDAP server shutdown processing continues. The operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Check the other servers in the sysplex group and verify that another server becomes the sysplex owner.

---

**R004177**  
**Parent entry must have an objectclass attribute value of 'value'**

**Explanation:** An LDAP operation or utility failed because the parent entry does not have the appropriate objectclass value for advanced replication configuration. See [Advanced replication](#) for more information.

In the message text:

- **value**  
  Attribute value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Update the objectclass value of the parent entry or the objectclass value of entry being added or modified while configuring advanced replication. Then reissue the operation.

---

**R004178**  
**Entry of objectclass 'name' not permitted with this level of replication**

**Explanation:** An LDAP operation or utility failed because an objectclass value in an entry is not supported by basic or advanced replication. If useAdvancedReplication on is specified in the CDBM backend section of the configuration file, basic replication entries with an objectclass value of replicaObject are not supported in the z/OS LDAP server. If useAdvancedReplication off is specified in the CDBM backend section of the configuration file, advanced replication entries with an objectclass value such as ibm-replicationContext, ibm-replicaGroup, ibm-replicaSubEntry, and ibm-replicationAgreement are not supported in the z/OS LDAP server. See [Advanced replication](#) and [Basic replication](#) for more information.

In the message text:

- **name**  
  Object class name

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Contact an LDAP administrator to verify whether basic or advanced replication entries are to be added to the LDAP server. Then, reissue or update the operation.

**Administrator response:** Verify the useAdvancedReplication option in the CDBM backend section of the LDAP server configuration file is correct. If it must be updated, restart the LDAP server.

---

**R004179**  
**Refusing request, subtree 'name' is quiesced**

**Explanation:** An LDAP add, modify, or modify DN operation failed because the subtree is quiesced. When a replication context is quiesced, only the master server distinguished name (DN) or LDAP root administrator with the Server administration control can update entries under a quiesced subtree; other users are only allowed to perform search or compare operations. See [Advanced replication](#) for more information.

In the message text:

- **name**  
  Distinguished name of subtree

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to unquiesce the subtree. Then, reissue the operation.
R004180  •  R004185

Administrator response: Verify that the subtree should be quiesced. Issue a Quiesce or unquiesce context extended operation to unquiesce the replication context.

R004180  Refusing request, access to replication topology is restricted

Explanation: An LDAP compare or search operation failed because access to advanced replication topology entries is restricted to an LDAP administrator. The ibm-slapdReplRestrictedAccess attribute value in the cn=Replication,cn=configuration entry indicates whether other users are allowed to update advanced replication topology entries. See [CDBM backend configuration and policy entries] for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: If update access to advanced replication topology entries is needed, contact an LDAP administrator to allow this access. Then, reissue the operation.

Administrator response: If necessary, update the ibm-slapdRestrictedAccess attribute value in the cn=Replication,cn=configuration entry.

R004181  An entry can not be moved into replication topology subtree 'name'

Explanation: An LDAP modify DN operation failed because an entry cannot be moved under an advanced replication topology subtree.

In the message text:

name
  Distinguished name of subtree

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN operation to specify a different parent entry. Then, reissue the operation.

R004182  Timestamps indicate a modify conflict, requesting refresh of entry 'name'

Explanation: An LDAP modify operation resulted in a modify conflict on this server. A refresh of the entry from the advanced replication supplier server is requested to synchronize the entry on both servers.

In the message text:

name
  Distinguished name of entry

System action: The LDAP server continues to run and a refresh of the entry from the supplier server is requested to synchronize the entry on both servers.

R004183  Advanced replication is configured but not available

Explanation: An LDAP operation failed because advanced replication is configuring but not currently available. The advanced replication engine is loaded when the useAdvancedReplication on option is specified in the CDBM section of the LDAP server configuration file.

System action: The LDAP server continues, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use server ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R004185  Entry 'name' contains attribute values currently in use and cannot be deleted or renamed

Explanation: An LDAP delete or modify DN operation failed because the entry contains attribute values that are currently in use by the LDAP server for features such as advanced replication and password policy.

In the message text:

name
  Distinguished name of entry
R004186 • R004189

**System action:** The LDAP server continues, but the operation fails.

**User response:** Update the request to no longer modify the attribute values in the distinguished entry. Then, reissue the operation.

---

R004186  Unable to find specified password policy entry 'name'

**Explanation:** An LDAP add or modify operation failed because the individual or group password policy entry does not exist in the cn=ibmpolicies suffix of the CDBM backend.

In the message text:

```
name
   Distinguished name of entry
```

**System action:** The LDAP server continues, but the operation fails.

**User response:** Update the request to specify a valid value for the `ibm-pwdGroupPolicyDN` or `ibm-pwdIndividualPolicyDN` attribute value. Then, reissue the operation.

---

R004187  The 'name' attribute value requires a minimum of `number` alphabetical characters

**Explanation:** An LDAP add or modify operation of an attribute subject to password policy failed because the new value does not contain enough alphabetic characters.

In the message text:

```
name
   Attribute name
number
   Minimum number of alphabetic characters
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

---

R004188  The 'name' attribute value requires a minimum of `number` non-alphabetical characters

**Explanation:** An LDAP add or modify operation of an attribute subject to password policy failed because the new value does not contain enough non-alphabetic characters (numbers and special characters).

In the message text:

```
name
   Attribute name
number
   Minimum number of non-alphabetic characters
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

---

R004189  The 'name' attribute value requires a minimum of `number` different characters

**Explanation:** An LDAP modify operation of an attribute subject to password policy failed because the new value does not contain enough characters that are different from the current attribute value.

In the message text:

```
name
   Attribute name
number
   Minimum number of different characters
```
R004190 • R004193

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004190  The 'name' attribute value allows a maximum of number repeated characters
Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value specifies the same character too many times.
In the message text:

name  Attribute name
number  Maximum number of times a character can be used

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004191  The 'name' attribute value allows a maximum of number consecutive repeated characters
Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value specifies the same character too many times in a row (consecutively).
In the message text:

name  Attribute name
number  Maximum number of times a character can be used consecutively

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004192  Password policy does not allow more than one password per entry
Explanation: An LDAP add or modify operation failed because it results in more than one value for the userPassword attribute when password policy is enabled. An entry subject to password policy can have at most one value for the userPassword attribute.

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the add or modify input so that it does not specify multiple values for the userPassword attribute. Then, reissue the operation.

R004193  Operation not allowed because backend (name) is unable to perform I/O at this time
Explanation: An LDAP add, modify, modify DN, or delete operation failed because the targeted backend cannot write to the file system to save the update information. The file-based backend can perform search and compare operations, but operations that update the directory are rejected until the file system problem is resolved and the backend is restored to read/write mode. The backend name is specified on the database option in the LDAP server configuration file, or, if no name is specified, the name generated for that backend by the LDAP server when the server is started.
In the message text:

name  Backend name

System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the file system problem. Then, use the BACKEND LDAP operator modify command to change the backend to read/write mode. The LDAP server does not have to be restarted.

R004194  The 'name' attribute value requires a minimum of number characters

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value is too short.

In the message text:

  name
  Attribute name
  number
  Minimum length of value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004195  The account is locked

Explanation: An LDAP operation failed because the user’s account is locked because of excessive incorrect authentications or has been administratively locked by an LDAP administrator. The user is unable to successfully authenticate to the LDAP server.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See Overriding password policy and unlocking accounts for information about unlocking accounts.

R004196  The 'name' attribute value has passed its maximum age of number seconds

Explanation: An LDAP bind operation specifying an attribute value subject to password policy failed because the value has expired.

In the message text:

  name
  Attribute name
  number
  Maximum age of a value

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Reset the attribute value for the user.

R004197  The encrypted 'name' attribute value cannot be validated

Explanation: An LDAP operation specifying an attribute value subject to password policy failed because the syntax of the value cannot be checked. See Password policy for more information.

In the message text:

  name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
R004198 • R004201

Administrator response: Either change the password policy to allow one-way hashed password values to bypass syntax checking (pwdCheckSyntax) or update the encryption method used to allow password syntax checking to work.

R004198  User modification of the 'name' attribute is not allowed

Explanation: An LDAP modify operation of an attribute subject to password policy failed because password policy is configured to reject update of this attribute from this user.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to update the attribute value. After the problem is resolved, reissue the operation.

Administrator response: Either update the attribute value or change the password policy to allow the user to do it

R004199  Current value for the 'name' attribute must be supplied

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the modify operation does not contain a delete modification of the current attribute value. A delete modification of the current value is required when password policy is configured to perform safe modifications of this attribute's values.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Add a delete modification for the current attribute value to the modify input. Then reissue the operation.

R004200  The 'name' attribute value must be number seconds old before it can be changed

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the current value is not yet old enough to be changed. Password policy tracks the last time that the attribute subject to the policy was changed in the pwdChangedTime attribute.

In the message text:

name
   Attribute name

number
   Minimum age of value

System action: The LDAP server continues to run, but the operation fails.

User response: Wait until the value is older than the minimum required age. Then, reissue the operation.

R004201  The 'name' attribute value exists in the history and may not be reused

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the value is a repeat of a value used in the past. Password policy tracks the past values in the pwdHistory attribute and requires that a value can only be reused after the attribute is changed a certain number of times.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.
User response: Change the modify input so that the attribute value is not a repeat of a value used in the past. Then, reissue the operation.

R004202  The password must be modified before any other operation can be performed

Explanation: An LDAP operation failed because the bound user has a password that must be reset. The requester is allowed to bind using the password, but all operations other than a modify operation to update the userPassword value in the bound user's entry are rejected. When binding with native authentication, this can occur if the native password is expired. In this case, use the special native password delete-add modify operation to reset the native password.

System action: The LDAP server continues to run, but the operation fails.

User response: Issue the appropriate modify operation to reset the password. Then, reissue the operation.

R004203  The DN 'name' cannot be added to the admin group

Explanation: An LDAP add or modify operation has failed because a duplicate was detected while attempting to add the distinguished name (DN) to an administrative group member entry. A duplicate is detected when:

- Multiple administrative group member entries (ibm-slapdAdminMember objectclass) have the same ibm-slapdAdminDN value.
- An ibm-slapdAdminDN value matches the masterServerDN, peerServerDN, or the adminDN options in the LDAP server configuration file.
- An ibm-slapdAdminDN value matches the ibm-slapdMasterDN value in an advanced replication supplier server credentials entry (ibm-slapdSupplier or ibm-replicationConfiguration objectclasses).
- An ibm-slapdAdminDN value matches the member value in the cn=safadmingroup,cn=configuration entry.

In the message text:

name  Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the value is a different distinguished name. Then, reissue the operation.

R004204  The value 'value' for the 'name' attribute is not a valid admin role

Explanation: An LDAP add or modify operation to assign an administrator role value to an attribute failed because the value is not one of the supported administrative roles. See Administration groups and roles for more information about the supported administrative roles.

In the message text:

value  Attribute value

name  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the value is a valid administrative role. Then, reissue the operation.

R004205  The DN 'name' cannot be added to the master server DN list

Explanation: An LDAP add or modify operation has failed because a duplicate was detected while attempting to add the distinguished name (DN) to the ibm-slapdMasterDN in a consumer server credentials entry. A duplicate is detected when:

- An administrative group member entry (ibm-slapdAdminMember objectclass) has an ibm-slapdAdminDN with the same value.
R004206 • R004209

• An \texttt{ibm-slapdMasterDN} value matches the \texttt{masterServerDN}, \texttt{peerServerDN}, or the \texttt{adminDN} options in the LDAP server configuration file.

• An \texttt{ibm-slapdMasterDN} value matches the \texttt{member} value in the \texttt{cn=safadmingroup, cn=configuration} entry.

In the message text:

\texttt{name} \\
Distinguished name

\textbf{System action:} The LDAP server continues to run, but the operation fails.

\textbf{User response:} Change the operation input so that the value is a different distinguished name. Then, reissue the operation.

---

\textbf{R004206}  **Access denied because user does not have permission to lock an account**

\textbf{Explanation:} An LDAP modify operation has failed because the user does not have the authority to lock a user's account. An LDAP password administrator does not have the authority to lock a user's account.

\textbf{System action:} The LDAP server continues to run, but the operation fails.

\textbf{User response:} Contact an LDAP root administrator to lock the user's account.

\textbf{Administrator response:} See \texttt{Password policy} for information about locking accounts.

---

\textbf{R004207}  **Access denied because user does not have permission to update attributes that may result in a locked account**

\textbf{Explanation:} An LDAP modify operation has failed because the user does not have the authority to update password policy operational attributes that may result in locking a user's account. An LDAP password administrator only has the authority to unlock a user's account and therefore does not have the authority to add \texttt{pwdFailureTime}, \texttt{pwdAccountLockedTime}, \texttt{pwdExpirationWarned}, or \texttt{pwdGraceUseTime} attributes.

\textbf{System action:} The LDAP server continues to run, but the operation fails.

\textbf{User response:} Contact an LDAP root administrator to lock the user's account.

\textbf{Administrator response:} See \texttt{Password policy} for information about locking accounts.

---

\textbf{R004208}  **Objectclass \texttt{value} is not valid for entry \texttt{name}**

\textbf{Explanation:} An LDAP add or modify operation has failed because the \texttt{objectclass} value is not valid for the entry. When adding or modifying entries under the \texttt{cn=SAFAdminGroup, cn=configuration} and \texttt{cn=AdminGroup, cn=configuration} entries, the only supported objectclass values are \texttt{top, ibm-slapdSAFAdminGroup, ibm-slapdConfigEntry, and ibm-slapdConfigEntry}.

In the message text:

\texttt{value} \\
Object class name

\texttt{name} \\
Distinguished name of entry

\textbf{System action:} The LDAP server continues to run, but the operation fails.

\textbf{User response:} Correct the operation input to specify an objectclass value that is valid for the entry. Then, reissue the operation.

---

\textbf{R004209}  **New superior \texttt{value} is not valid for entry \texttt{name}**

\textbf{Explanation:} An LDAP modify DN operation has failed because the new superior is not valid for the entry. An administrative group member entry is not allowed to be a parent or a superior entry.

In the message text:

\texttt{value} \\
New superior value
name
   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input to no longer specify a new superior entry. Then, reissue the operation.

R004210  Objectclass 'value' is required for entry 'name'

Explanation: An LDAP add or modify operation has failed because a required objectclass value is missing for the entry.

In the message text:

value
   Object class name

name
   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input to specify the objectclass value. Then, reissue the operation.

R004211  Credentials are not valid for DN 'name'

Explanation: An LDAP bind operation failed because the credentials specified on the request are not correct. The password specified on a simple, CRAM-MD5, or DIGEST-MD5 bind must match a userPassword value on the bind distinguished name entry. If SSL certificate mapping is activated and an EXTERNAL bind is performed, the certificate could not be mapped to an SAF user. See Support of certificate bind for more information.

In the message text:

name
   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.
User response: If performing a simple, CRAM-MD5, or DIGEST-MD5 bind, update the bind distinguished name (DN), user ID, or password value specified on the bind request. If performing an EXTERNAL bind and SSL certificate mapping is active, verify that the correct certificate is being used, otherwise contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the user is performing an EXTERNAL bind, determine whether the user's certificate should be mapped to a RACF (SAF) user ID by doing an RACDCERT MAP command. Also, verify that the sslMapCertificate option settings are correct when SSL certificates cannot be mapped to a RACF or SAF user ID.

R004212  Incorrect SAF ID length for the bind operation

Explanation: An LDAP bind operation using native authentication failed because the mapped SAF ID is too long. The SAF ID must be from 1 to 8 characters long.

System action: The LDAP server continues to run, but the operation fails.
User response: Contact the LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Correct the ibm-nativeID or uid attribute value for the user entry.

R005001  Requested operation is not supported by the GDBM backend

Explanation: An LDAP operation to the GDBM backend failed because it is not allowed for this backend. GDBM only supports modify, delete, search, and compare operations. In particular, add operations are not allowed.

System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input so that it is not targeted to a GDBM entry. Then, reissue the operation.
R005002 Only the base change log entry can be modified

Explanation: An LDAP modify operation to the GDBM backend failed because it tries to modify an entry other than the GDBM suffix entry (cn=changelog). The only GDBM entry that can be modified is the suffix entry and only the aclEntry and entryOwner attribute values can be changed.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it is targeted to the GDBM suffix entry, cn=changelog, and only includes the aclEntry and entryOwner attributes. Then, reissue the operation.

R006003 The base change log entry cannot be deleted

Explanation: An LDAP delete operation to the GDBM backend failed because it tries to delete the GDBM suffix entry (cn=changelog). The GDBM suffix entry is created by the LDAP server and cannot be deleted. GDBM changelog entries can be deleted.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the delete input so that it is targeted to a GDBM changelog entry. Then reissue the operation.

R005004 Only the aclEntry and entryOwner attributes can be modified

Explanation: An LDAP modify operation to the GDBM backend failed because it includes changes for attributes that cannot be modified. GDBM only supports modifying the aclEntry and entryOwner attributes in the GDBM suffix (cn=changelog).

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it is targeted to the GDBM suffix entry, cn=changelog, and only includes the aclEntry and entryOwner attributes. Then, reissue the operation.

R006001 LDAP Client API api_name has returned an error code=error_code with an error message=error_text

Explanation: An LDAP extended operation or utility failed because during its processing it invokes an LDAP client application programming interface (API) that does not succeed. See the description of the API in z/OS IBM Tivoli Directory Server Client Programming for z/OS for more information about the error.

In the message text:

api_name
  Name of the client interface

error_code
  Error code from the interface

error_text
  Error text corresponding to the error code

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Use the information in the reason code to resolve the problem. Then, reissue the extended operation or restart the utility.

R006003 A decoding error has been encountered while decoding attribute(s): field, rc=return_code

Explanation: An LDAP extended operation failed because it includes a field value that cannot be decoded. The most likely return codes are:

- 84 (LDAP_DECODING_ERROR): Some part of the extended operation data is not encoded correctly.
- 90 (LDAP_NO_MEMORY): The LDAP server ran out of storage.

In the message text:

field
  Field name
return_code
Return code from decode routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: If the problem is in the encoding, check that all the extended operation data is correctly encoded. Then, reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

---

R006004 An encoding error return_code has been encountered while encoding response

Explanation: An LDAP operation failed because the response message could not be encoded by the LDAP server.

In the message text:

return_code
Return code from encoding routine

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. Then reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

---

R006006 Unsupported or inappropriate critical control 'identifier'

Explanation: An LDAP operation failed because it includes a critical control that the LDAP does not support. Possible reasons for this are:

- The control is not supported at all.
- The control is specified for an operation that does not allow that control.
- The control is only supported for certain users.

See Supported server controls for more information about the supported controls.

In the message text:

identifier
Control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the control from the operation. Then, reissue the operation.

---

R006009 The extended operation request with OID=oid1 requires the critical control with OID=oid2

Explanation: An LDAP extended operation failed because it does not include a control that must be sent with the operation. The extended operation cannot be processed without the control. See Supported extended operations for more information about the extended operation.

In the message text:

oid1
Extended operation identifier

oid2
Control identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Add the required control to the extended operation. Then, reissue the operation.
Unsupported extended operation 'identifier'

Explanation: An LDAP extended operation failed because it is not supported by the LDAP server. See Supported extended operations for more information about the supported extended operations.

In the message text:

identifier
  Extended operation identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Do not issue the extended operation.

The extended operation request with OID=oid1 does not support the critical control with OID=oid2

Explanation: An LDAP extended operation failed because it includes a critical control that is not supported by the extended operation. See Supported extended operations for more information about the extended operation.

In the message text:

oid1
  Extended operation identifier

oid2
  Control identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Remove the control from the extended operation. Then, reissue the operation.

Required field (name) missing

Explanation: An LDAP extended operation failed because it is missing a required field or the field value is a zero-length string. See Supported extended operations for more information about the extended operation.

In the message text:

name
  Field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Specify an acceptable value for the field in the extended operation input. Then, reissue the extended operation.

Connection to server (url) failed

Explanation: An LDAP extended operation failed because it involves connecting to a remote server but cannot establish the connection.

In the message text:

url
  URL of a remote server

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that the remote server is active and accessible. Then, reissue the extended operation.

Incorrect ldapURL specified (url)

Explanation: An LDAP extended operation failed because it involves connecting to a remote server but the format of the URL identifying the remote server is not valid.

In the message text:

url
  URL of a remote server
**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Correct the format of the URL. Then, reissue the extended operation.

---

**R006026 ldap_search failed rc=return_code**

**Explanation:** An LDAP `getDnForUserId` extended operation failed because there are no entries on the remote server that match the user ID that is specified in the extended operation. The most likely return code indicated in the reason code is 32 (LDAP_NO_SUCH_OBJECT).

In the message text:

*return_code*

Return code from remote search

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Ensure that the remote server contains the appropriate entries for the user ID specified in the extended operation. Then, reissue the extended operation.

---

**R006027 Unsupported authorization type=type**

**Explanation:** An LDAP extended operation failed because it involves connecting to a remote server but the authorization type specified for the bind is not supported by the extended operation. The most likely bind types indicated in the reason code are 128 (simple) and 163 (SASL). See [Supported extended operations](#) for more information about the extended operation.

In the message text:

*type*

Type of authorization

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Ensure that a supported bind type is specified for the extended operation. Then, reissue the extended operation.

---

**R006028 Expected attribute name missing from entry**

**Explanation:** A `GetPrivileges` extended operation failed because the information returned from the remote server does not include all of the required attributes.

In the message text:

*name*

Attribute name

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Ensure that the appropriate entries in the remote server contain all the required attributes. Then, reissue the extended operation.

---

**R006029 Empty sequence in extended operation request name**

**Explanation:** An extended operation failed because it includes an empty sequence, and thus it cannot be decoded.

In the message text:

*name*

Extended operation name

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Check that all the sequences in the extended operation input are correctly encoded. Contact an LDAP administrator to determine if there are any server messages or ERROR debug trace output generated during the extended operation process that might assist in locating and correcting the problem. Then, reissue the extended operation.
R006050  R006053

Administrator response: If requested, gather any server message and ERROR debug output created by the extended operation processing.

R006050  Extended operation request does not have an object identifier
Explanation: An LDAP extended operation failed because it does not contain an identifier indicating the type of extended operation.
System action: The LDAP server continues to run, but the extended operation fails.
User response: Ensure that the appropriate extended operation identifier is included in the extended operation. Then, reissue the extended operation.

R006051  The type backend is not defined
Explanation: An LDAP extended operation or utility failed because it requires a backend that is not running. The backend can be the target of the operation or utility. Alternatively, it can be another backend needed to complete processing of the request. For example:
- The GetDnForUserid and GetPrivileges extended operations require that the EXOP backend be running.
- The changeLogAddEntry extended operation requires that the SDBM backend be running. This extended operation is used to log changes to RACF profiles.
- The unloadRequest extended operation requires the CDBM backend be running if a distinguished name of a filter entry (the filterDN field) is specified in the extended operation. This extended operation is used by the ds2ldif utility.

In the message text:

**type**
Type of backend

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: For the unloadRequest, remove the filterDN field from the extended operation or do not specify the -q option for the ds2ldif utility. Then, reissue the extended operation or restart the utility. Alternatively, contact an LDAP administrator to configure the needed backend. After the problem is resolved, reissue the extended operation or restart the utility.

Administrator response: If requested, add the needed backend to the LDAP server configuration file. Then, restart the LDAP server.

R006052  Persistent search is allowed only when bound as an LDAP administrator with sufficient authority
Explanation: An LDAP search operation including the PersistentSearch control failed because the requester is not authorized to perform a persistent search. The requester must be an LDAP root or operational administrator.
System action: The LDAP server continues to run, but the operation fails.
User response: Either remove the PersistentSearch control from the search operation or rebind as an LDAP root or operational administrator. Then, reissue the operation.

R006053  Persistent search must specify LDAP_DEREF_NEVER or LDAP_DEREF_FINDING
Explanation: An LDAP search operation including the PersistentSearch control failed because the search involves dereferencing aliases. Alias dereferencing of any entry other than the base of the search is not supported for a persistent search.
System action: The LDAP server continues to run, but the operation fails.
User response: Either change the search input to specify LDAP_DEREF_NEVER or LDAP_DEREF_FINDING rather than LDAP_DEREF_SEARCHING or LDAP_DEREF_ALWAYS, or remove the PersistentSearch control. Then, reissue the operation.
R006054 Persistent search is not allowed using the Program Call interface

Explanation: An LDAP search operation including the PersistentSearch control failed because it is received over the local Program Call (PC) interface rather than over the network. Persistent searches are not supported using the PC interface.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a persistent search over the Program Call interface. The operation can be issued using network communications.

R006055 Persistent search is not allowed with paged or sorted results

Explanation: An LDAP search operation including the PersistentSearch control failed because it also includes either the PageResults or SortKeyRequest control. Paging and sorting are not supported for a persistent search.

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the PersistentSearch control or remove the PageResults and SortKeyRequest controls. Then, reissue the operation.

R006056 Persistent search is not supported by the backend

Explanation: An LDAP search operation including the PersistentSearch control failed because the backend containing the target of the search does not support persistent search. Only LDBM, TDBM, GDBM, and CDBM backends can process a persistent search. To enable the support in these backends, the persistentSearch on option must be specified in the backend section of the LDAP server configuration file.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the PersistentSearch control from the search if it is not needed. If it is needed, target the persistent search to an LDBM, TDBM, GDBM, or CDBM backend that has persistent search enabled. Then, reissue the operation. If the backend does not have persistent search enabled, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the persistentSearch on option to the appropriate backend section of the LDAP server configuration file. Then, restart the LDAP server.

R006057 Persistent search is not allowed for an internal request

Explanation: An LDAP search operation including the PersistentSearch control failed because it is received over an internal plugin request rather than over the network. Persistent searches are not supported using an internal plugin request.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a persistent search over an internal plugin request. The operation can be issued using network communications directly to the plugin.

R006058 Paged search results not allowed for an internal request

Explanation: An LDAP search operation including the PagedResults control failed because it is received over an internal plugin request rather than over the network. Paged searches are not supported using an internal plugin request.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a paged search over an internal plugin request. The operation can be issued using network communications directly to the plugin.

R006060 Unload extended operation is allowed only when bound as administrator group member with the appropriate roles assigned

Explanation: An LDAP unloadRequest extended operation failed because the requester is not an LDAP administrator. This extended operation can only be performed by an LDAP root, directory, or schema (only if unloading the schema entry) administrator.
**R006061 • R006064**

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Rebind as an LDAP administrator. Then, reissue the extended operation.

---

**R006061 Unload extended operation found multiple LDBM, TDBM, or CDBM backends to unload**

**Explanation:** An LDAP `unloadRequest` extended operation failed because there is more than one backend to unload. When the extended operation does not include the `backendName` or `subtreeDN` fields, it looks in the LDAP server configuration file for an LDBM, TDBM, or CDBM backend to unload. If the configuration file does not contain any backend of these types or contains more than one, then processing ends.

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Add either the `backendName` or the `subtreeDN` field (but not both) to the extended operation to indicate what entries to unload. Then, reissue the extended operation.

---

**R006062 Unload extended operation cannot find subtree DN 'name' to unload**

**Explanation:** An LDAP `unloadRequest` extended operation failed because it specifies a distinguished name (DN) of a subtree to unload but either there is no backend that contains the DN or the backend containing the DN is not an LDBM, TDBM, or CDBM backend and the DN is not `cn=schema`. The subtree DN is specified in the `subtreeDN` field in the extended operation.

In the message text:

```
name
```

Distinguished name of the subtree

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Correct the `subtreeDN` value in the extended operation input by specifying an existing DN in an LDBM, TDBM, or CDBM backend or by specifying `cn=schema` (to unload the schema). Then, reissue the extended operation.

---

**R006063 Unload extended operation cannot find backend name 'name' to unload**

**Explanation:** An LDAP `unloadRequest` extended operation failed because it specifies the name of a backend to unload but either there is no backend with that name or the backend with that name is not an LDBM, TDBM, GDBM, or CDBM backend. The backend name is specified in the `backendName` field in the extended operation. The name of each backend is established when the LDAP server is started and is either the name specified for the backend on its `database` option in the LDAP server configuration file, or, if no name is specified, a name generated for that backend by the LDAP server.

In the message text:

```
name
```

Name of backend to unload

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Correct the extended operation input by specifying the name of an existing LDBM, TDBM, GDBM, or CDBM backend in the `backendName` field. Then, reissue the extended operation.

---

**R006064 Unload extended operation unable to open file 'filename', errno=error_code, errstring=error_text**

**Explanation:** An LDAP `unloadRequest` extended operation failed because it cannot open the output file for write access. The file name is specified in the `outputFileName` field in the extended operation. See the description of `fopen()` in the [z/OS XL C/C++ Runtime Library Reference](https://publib.boulder.ibm.com/infocenter/zos/v2r3/index.jsp?topic=/com.ibm.zos.v2r3.devref.doc/ct_fopen.htm) for more information about the error. Note that the `unloadRequest` extended operation request can result from usage of the `ds2lDif` unload utility. The `-o` option of the utility corresponds to setting the `outputFileName` field.

In the message text:

```
filename
```

Output file name
R006065 Unload extended operation has both backend name and subtree DN specified

Explanation: An LDAP `unloadRequest` extended operation failed because it specifies both the name of a backend to unload and the DN of a subtree to unload. The extended operation does not support specifying both of these values. The backend name is specified in the `backendName` field in the extended operation. The subtree DN is specified in the `subtreeDN` field.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input by removing either the `backendName` value or the `subtreeDN` value. Then, reissue the extended operation.

R006066 Unload extended operation cannot find any LDBM, TDBM, or CDBM backend in the LDAP server configuration file to unload

Explanation: An LDAP `unloadRequest` extended operation failed because there is no backend to unload. When the extended operation does not include the `backendName` or `subtreeDN` fields, it looks in the LDAP server configuration file for an LDBM, TDBM, or CDBM backend to unload. If the configuration file does not contain any backend of these types or contains more than one, then processing ends.

System action: The LDAP server continues to run, but the extended operation fails.

User response: If there are multiple LDBM, TDBM, or CDBM backends in the LDAP server configuration file, add a `backendName` or `subtreeDN` value (but not both) to the extended operation input to indicate what to unload. Then, reissue the extended operation. If there are no eligible backends in the configuration file, do not issue the extended operation.

R006067 Unload extended operation with a filter DN is only supported when advanced replication is activated in the CDBM backend

Explanation: An LDAP `unloadRequest` extended operation failed because it tries to use filtering but advanced replication is not configured. Filtering is requested by including the `filterDN` field in the extended operation. Filtering requires that the CDBM backend be configured and the `useAdvancedReplication on` option be included in the CDBM section of the LDAP server configuration file. Note that the `unloadRequest` extended operation request can result from usage of the `ds2ldif` unload utility. The `-q` option of the utility corresponds to setting the `filterDN` field.

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Correct the extended operation input by removing the `filterDN` value. For the `ds2ldif` utility, remove the `-q` option. Then reissue the extended operation or restart the utility. If filtering is needed, contact an LDAP administrator. After the problem is resolved, reissue the extended operation or restart the utility.

Administrator response: If filtering is requested, ensure that CDBM is configured with the `useAdvancedReplication on` option in the LDAP server configuration file. Then, restart the server.

R006068 Unload extended operation is not able to find valid filters in filter DN 'name'

Explanation: An LDAP `unloadRequest` extended operation failed because it tries to use filtering but there are no acceptable filter values in the specified filter entry. The distinguished name (DN) of the filter entry is specified in the `filterDN` field. Note that the `unloadRequest` extended operation request can result from usage of the `ds2ldif` unload utility. The `-q` option of the utility corresponds to setting the `filterDN` field. See [Partial replication] for more information about filters.
R006069 • R006072

In the message text:

name

Distinguished name of filter entry

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Correct the extended operation input by removing the filterDN value or by specifying the DN of an entry that contains acceptable filter values. For the ds2ldif utility, remove the -q option or change the value. Then, reissue the extended operation or restart the utility.

---

R006069  Unload extended operation does not support filtering of the schema entry

Explanation: An LDAP unloadRequest extended operation failed because it tries to use filtering when unloading the schema entry. This combination is not supported. If the subtreeDN field is set to cn=schema, then the filterDN field cannot be set. Note that the unloadRequest extended operation request can result from usage of the ds2ldif unload utility. The -s option of the utility corresponds to setting the subtreeDN field and the -q option corresponds to setting the filterDN field.

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Remove the filterDN value from the extended operation input. For the ds2ldif utility, remove the -q option. Then, reissue the extended operation or restart the utility.

---

R006070  Unload extended operation does not support subtreeDN with unload localhost set to TRUE

Explanation: An LDAP unloadRequest extended operation failed because it tries to unload both a specific subtree and the localhost subtree. This combination is not supported. If the unloadLocalhost field is set to TRUE, then a value cannot be specified for the subtreeDN field.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input either by removing the subtreeDN value or by setting the unloadLocalhost field to FALSE. Then, reissue the extended operation.

---

R006071  Only an LDAP administrator or account owner can execute 'name' extended operation

Explanation: An LDAP extended operation failed because the requester is not authorized to use the extended operation. Only an LDAP administrator or the user whose entry is the target of the extended operation are authorized.

In the message text:

name

Extended operation name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Either target the extended operation to your own entry or rebind as an LDAP administrator. Then, reissue the extended operation.

---

R006072  Password policy is not available with native authentication

Explanation: An LDAP effectPasswordPolicy or acctStatus extended operation failed because the target entry of the extended operation uses native authentication. Entries that use native authentication do not contain the userPassword attribute and are not subject to LDAP password policy.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Change the extended operation input to specify the distinguished name of an entry that does not use native authentication. Then, reissue the extended operation.
R007001  SASL authentication requires the LDAP Version 3 protocol

Explanation: An LDAP bind operation failed because it uses SASL authentication, but the requester is not using LDAP Version 3 protocol. Protocol levels below 3 do not support SASL authentication.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use SASL authentication or use LDAP Version 3 protocol. Then, reissue the operation.

R007002  Unsupported SASL authentication method 'name'

Explanation: An LDAP bind operation failed because it specifies a SASL authentication method that is not allowed.

In the message text:

name  Authentication method

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to use one of the supported authentication methods. Then, reissue the operation.

R007005  Server is not configured for client authentication

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because the LDAP server is not configured to do the client authentication used by this bind. EXTERNAL bind requires that the sslAuth serverClientAuth option appear in the global section of the LDAP server configuration file.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use the EXTERNAL authentication method. Then, reissue the operation. If EXTERNAL bind is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the sslAuth serverClientAuth option to the global section of the LDAP server configuration file. Then, restart the LDAP server.

R007006  Client certificate is not available

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because the LDAP server cannot obtain the client certificate or the certificate did not contain the CERT_DN_PRINTABLE field needed for authentication.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the client certificate is complete and available, or change the bind input to not use the EXTERNAL authentication method. Then, reissue the operation.

R007020  User password is not available with native authentication

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because the target entry is using native authentication, thus does not contain a password. The password for the target entry is in the z/OS Security Server. There is no userPassword attribute in the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use the CRAM-MD5 or DIGEST-MD5 authentication method. Then, reissue the operation.

R007027  TLS is not supported on the connection

Explanation: An LDAP Start TLS extended operation failed because the LDAP server is not set up for SSL. Either the LDAP server is not configured to use SSL or SSL initialization failed. The sslKeyRingFile option must be specified in the global section of the LDAP server configuration file.

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### System action: The LDAP server continues to run, but the extended operation fails.

### User response: Do not issue the extended operation. Alternatively, contact an LDAP administrator to restart the LDAP server using SSL. After the problem is resolved, reissue the extended operation.

### Administrator response: If requested, add the `sslKeyRingFile` option to the global section of the LDAP server configuration file. Then, restart the LDAP server.

---

**Explanation:** An LDAP Start TLS extended operation failed because the LDAP server is already using SSL on this connection. The extended operation cannot switch the connection to use SSL.

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Do not issue the extended operation.

---

**Explanation:** An LDAP Start TLS extended operation failed because the connection is in use by other operations. A connection cannot be switched to use SSL while it is in use.

**System action:** The LDAP server continues to run, but the extended operation fails.

**User response:** Wait until all activity on the connection is complete. Then, reissue the extended operation.

---

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server finds multiple values for an attribute in the bind response from the client. The server does not know which value to use.

In the message text:

```
name
```

**Attribute name**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the encoded DIGEST-MD5 bind response does not contain multiple values for the attribute. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](https://www.rfc-editor.org/rfc/rfc2831) for more information about DIGEST-MD5. Then, reissue the operation.

---

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server does not find a needed value in the bind response from the client.

In the message text:

```
name
```

**Attribute name**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the encoded DIGEST-MD5 bind response contains a required value for the attribute. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](https://www.rfc-editor.org/rfc/rfc2831) for more information about DIGEST-MD5. Then, reissue the operation.

---

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server cannot parse the bind response from the client. The syntax of the bind response is not correct.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the DIGEST-MD5 bind response is encoded properly. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](https://www.rfc-editor.org/rfc/rfc2831) for more information about DIGEST-MD5. Then, reissue the operation.
R007033  Authorization DN in DIGEST-MD5 response does not match DN associated with user name

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because there is a mismatch in the bind information. The LDAP server uses the authorization distinguished name (DN) in the bind request to locate the target entry in the directory. If the user name does not exist as a **uid** attribute value in the authorization DN entry, the bind response is not successful.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Update the bind input to specify the correct authorization DN or user name in the request. Then, reissue the operation.

R007034  BIND DN 'name1' is not the same as authentication DN 'name2'

**Explanation:** An LDAP bind operation using EXTERNAL (certificate), CRAM-MD5, DIGEST-MD5, or GSSAPI (Kerberos) failed because there is a mismatch between the distinguished name (DN) in the bind request and the resulting authentication DN. When a DN is specified in the bind request, it must match the resulting authentication DN.

In the message text:

- name1  Distinguished name from bind request
- name2  Distinguished name from resulting authentication

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Either correct the DN in the bind request to match the resulting authentication DN or remove it from the bind input. Then, reissue the operation.

R007035  The value of DIGEST-MD5 response attribute 'name' is not valid

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because an attribute value in the bind response from the client is not acceptable.

In the message text:

- name  Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the DIGEST-MD5 bind response attribute is valid. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](https://tools.ietf.org/html/rfc2831) for more information about DIGEST-MD5. Then, reissue the operation.

R007036  The DIGEST-MD5 authorization identifier is not a distinguished name

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the **authzid** value in the bind response from the client is not acceptable. The value must begin with **dn:** followed by a distinguished name of nonzero length.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the **authzid** attribute starts with **dn:**. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](https://tools.ietf.org/html/rfc2831) for more information about DIGEST-MD5. Then, reissue the operation.

R007037  DIGEST-MD5 response attribute 'name' is not the same as the challenge value

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because a value in the bind response from the client is not the same as the value sent to the client in the server challenge. Certain values, such as for the **nonce** and the **realm**, must not be changed in the bind response.

In the message text:

- name  Attribute name

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R007038  R007052

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the response attribute value is not changed. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](#) for more information about DIGEST-MD5. Then, reissue the operation.

---

**R007038  Maximum DIGEST-MD5 buffer size must be at least 256 bytes**

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the `maxbuf` value in the bind response from the client is too small. The buffer size must be at least 256.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the client so that the response `maxbuf` value is at least 256. See [RFC 2831: Using Digest Authentication as a SASL Mechanism](#) for more information about DIGEST-MD5. Then, reissue the operation.

---

**R007047  SASL EXTERNAL bind using the system identity requires the SDBM backend**

**Explanation:** An LDAP bind operation using EXTERNAL (certificate) authentication failed because it is received over the local Program Call interface but the SDBM backend is not running in the LDAP server. The SDBM backend is required when performing EXTERNAL binds over the Program Call interface. The bind can be issued using network communications when SDBM is not configured.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Add an SDBM backend section to the LDAP configuration file. Then, restart the LDAP server.

---

**R007051  DIGEST-MD5 response URL 'value' is incorrect or cannot be verified**

**Explanation:** An LDAP bind operation using DIGEST-MD5 authentication failed because the format of the `digest-uri` value in the bind response from the client is not valid or the value cannot be checked. The value format must be `ldap/hostname` where `hostname` is the local host name or the realm name specified in the `digestRealm` configuration option.

In the message text:

```
value
```

  URL value

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. Then reissue the operation.

**Administrator response:** If the LDAP server is not able to determine the local host name from the Domain Name Server (DNS), update the `digestRealm` option to specify the `hostname` from the `digest-uri` value. Then, restart the LDAP server.

---

**R007052  LDAP server in maintenance mode; operations restricted to an LDAP administrator, masterServerDN and peerServerDN**

**Explanation:** An LDAP operation or extended operation failed because it is not allowed from this requester when the LDAP server is running in maintenance mode. Only requests from an LDAP administrator or from a peer or master server for this backend are allowed.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Either rebind as a user authorized to perform operations while the server is in maintenance mode or contact an LDAP administrator to take the server out of maintenance mode. Then, reissue the operation.

**Administrator response:** If requested, use the `MAINTMODE OFF` operator modify command to change the server to normal operating mode.
R007060  SASL bind is in progress
Explanation:  An LDAP operation or extended operation failed because a bind using a SASL authentication method is already in progress on the connection. The bind must complete before other operations can be performed.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Wait until the bind has completed. Then, reissue the operation.

R007061  No SASL mechanism specified
Explanation:  An LDAP bind operation failed because it indicates it is using a SASL authentication method but does not specify the method.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Correct the bind input to specify the SASL authentication method. Then, reissue the operation.

R007062  The EXTERNAL SASL mechanism is not available for the connection
Explanation:  An LDAP bind operation using EXTERNAL (certificate) authentication failed because the connection is not set up to use SSL. SSL is required when performing an EXTERNAL bind.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Correct the client to use SSL when performing an EXTERNAL bind. Then, reissue the operation.

R007063  Client credentials may not be specified for the EXTERNAL SASL mechanism
Explanation:  An LDAP bind operation using EXTERNAL (certificate) authentication failed because it included the client credentials. This is not supported when using EXTERNAL authentication.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Remove the credentials from the bind input. Then, reissue the operation.

R007064  Concurrent BIND requests are not supported
Explanation:  An LDAP bind operation failed because there is already a bind operation outstanding on the same connection. The previous bind operation must complete before a new one can be processed.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Wait for the previous bind operation to complete. Then, reissue the operation.

R007065  No SASL BIND credentials
Explanation:  An LDAP bind operation using a SASL authentication method failed because the bind data is missing in the initial bind request or in follow-up client bind responses.
System action:  The LDAP server continues to run, but the operation fails.
User response:  Correct the client to send the credentials information during the initial bind request or follow-up client bind responses. Then, reissue the operation.

R007066  Unable to accept GSSAPI security context: Major 0xmajor_error, Minor 0xminor_error - error_text
Explanation:  An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot accept the Kerberos security context. The call to gss_accept_sec_context() does not succeed. See the description of this routine in z/OS Integrated Security Services Network Authentication Service Programming for more information about the error.
In the message text:
major_error
    Major error code from gss_accept_sec_context()
R007067  R007070

**minor_error**

Minor error code from `gss_accept_sec_context()`

**error_text**

Error text corresponding to the error codes

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use the information in the reason code to help locate and correct the problem.

---

**R007076  Unexpected security token received for GSSAPI continuation**

**Explanation:** An LDAP bind operation using GSSAPI (Kerberos) authentication failed because a follow-up bind response contained additional data that the LDAP server cannot process.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Verify that the client is not creating an additional GSSAPI security token. Then, reissue the operation. If the problem persists, contact the service representative.

---

**R007068  Unable to wrap GSSAPI response: Major 0xmajor_error, Minor 0xminor_error - error_text**

**Explanation:** An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot encrypt (wrap) a server negotiation. The call to `gss_wrap()` does not succeed. See the description of this routine in [z/OS Integrated Security Services Network Authentication Service Programming](https://www.ibm.com/support/knowledgecenter/en/ssw_ibm_sasa/zos 5.2.0/com.ibm.zos.zicppr/zicppr0700a.html) for more information about the error.

In the message text:

**major_error**

Major error code from `gss_wrap()`

**minor_error**

Minor error code from `gss_wrap()`

**error_text**

Error text corresponding to the error codes

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use the information in the reason code to assist in locating and correcting the problem.

---

**R007069  A GSSAPI authorization identity may not be specified**

**Explanation:** An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation includes an authorization identity field. The authorization identity must not be included in the client negotiation.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the authorization identity from the client negotiation. Then, reissue the operation. If the problem persists, contact the service representative.

---

**R007070  Unable to unwrap GSSAPI response: Major 0xmajor_error, Minor 0xminor_error - error_text**

**Explanation:** An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot decrypt (unwrap) a client negotiation. The call to `gss_unwrap()` does not succeed. See the description of this routine in [z/OS Integrated Security Services Network Authentication Service Programming](https://www.ibm.com/support/knowledgecenter/en/ssw_ibm_sasa/zos 5.2.0/com.ibm.zos.zicppr/zicppr0700a.html) for more information about the error.

In the message text:

**major_error**

Major error code from `gss_unwrap()`

---
R007071 Requested GSSAPI security layer number is not supported

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation specifies a security layer service that is not supported by the LDAP server. The supported security layer values are: 1 (no security layer), 2 (integrity protection), and 4 (confidentiality protection).

In the message text:

- **number**
  - Security layer service

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the security layer service in the client negotiation. Then, reissue the operation.

R007072 Maximum GSSAPI receive length size is too small

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation specifies a maximum protocol message length that is too small. The message length must be at least 256.

In the message text:

- **size**
  - Maximum message length

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the maximum message length in the client negotiation. Then, reissue the operation.

R007073 Unable to get GSSAPI wrap size limit: Major 0xmajor_error, Minor 0xminor_error - error_text

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot use the maximum protocol message length specified in the client negotiation. The call to gss_wrap_size_limit() does not succeed. See the description of this routine in z/OS Integrated Security Services Network Authentication Service Programming for more information about the error.

In the message text:

- **major_error**
  - Major error code from gss_wrap_size_limit()
- **minor_error**
  - Minor error code from gss_wrap_size_limit()
- **error_text**
  - Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code to help locate and correct the problem.

R007074 Unable to obtain GSSAPI source name: Major 0xmajor_error, Minor 0xminor_error - error_text

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot retrieve the bind identity. The call to gss_display_name() does not succeed. See the description of this routine in z/OS Integrated Security Services Network Authentication Service Programming for more information about the error.
R007075  •  R007078

In the message text:

- **major_error**
  - Major error code from `gss_display_name()`

- **minor_error**
  - Minor error code from `gss_display_name()`

- **error_text**
  - Error text corresponding to the error codes

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use the information in the reason code to help locate and correct the problem.

---

R007075  Unexpected SASL BIND credentials

**Explanation:** An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because one of the client bind interactions contains unexpected data. There must be no credentials contained in the initial CRAM-MD5 bind request or the third DIGEST-MD5 bind response from the client.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the bind requests so that they do not contain any credentials. Then, reissue the operation.

---

R007076  No digest realm name is available

**Explanation:** An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication because the LDAP server cannot determine the name of the digest realm. The digest realm name can be specified in the `digestRealm` option in the LDAP server configuration file. If the option is not set in the configuration file, then the fully qualified host name of the LDAP server is used if a Domain Name Server (DNS) is active on the system. Otherwise, the name of the host processor is used. See the description of the `digestRealm` option in the [Customizing the LDAP server configuration](../Customizing_the_LDAP_server_configuration/) for more information about setting the digest realm.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR debug trace output to help locate and correct the DNS problem. The `digestRealm` option can be updated to specify a realm name if DNS is not active on the system. Then, restart the LDAP server.

---

R007077  No user name specified for SASL BIND request

**Explanation:** An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication because the client challenge response does not contain a user name and there is no bind distinguished name (DN) specified in the initial bind request. A name must be supplied in either the initial bind request or in the client challenge response.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the bind request processing so that it supplies either the bind DN, authorization DN, or the user name. Then, reissue the operation.

---

R007078  HMAC digest in SASL BIND request is not valid

**Explanation:** An LDAP bind operation using CRAM-MD5 authentication failed because the digest contained in the client challenge response cannot be converted. The value is not valid.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the digest in the client challenge response. Then, reissue the operation.
The local Program Call interface supports just the EXTERNAL SASL mechanism.

**Explanation:** An LDAP bind operation received over the local Program Control (PC) interface failed because it does not use EXTERNAL authentication. Only EXTERNAL binds can be performed when using the local PC interface.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the bind input to use EXTERNAL authentication. Then, reissue the operation.

Anonymous binds are not allowed and no bind distinguished name exists.

**Explanation:** An LDAP bind operation failed because the requester has not bound with a distinguished name and the LDAP server is configured to reject anonymous binds. The reason code can also occur when other operations and extended operations are requested from an unauthenticated client. The `allowAnonymousBinds` option in the LDAP server configuration file controls if anonymous binds are allowed and if operations can be performed from an unauthenticated client. See [Customizing the LDAP server configuration](#) for more information about this option.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If binding, change the bind input to specify a distinguished name. Then, reissue the operation. If anonymous binds are needed, contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** If requested, configure the LDAP server to allow anonymous binds by changing the value of the `allowAnonymousBinds` option to `on` in the LDAP server configuration file. Then, restart the LDAP server.

An internal SSL error has been encountered.

**Explanation:** An LDAP operation failed because the LDAP server detects a problem when using SSL. This can occur when trying to map a certificate used in an EXTERNAL (certificate) bind operation to a RACF user.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any messages and ERROR debug trace output to help locate and correct the problem. If certificate mapping is not needed, set the `sslMapCertificate` option to `off` in the LDAP server configuration file. Then, restart the LDAP server. If the problem persists, contact the service representative.

Authentication with a reserved bind DN is not allowed.

**Explanation:** An LDAP bind operation failed because the requester tries to bind using a DN that is reserved for usage by the LDAP server. In particular, a bind using EXTERNAL (certificate) authentication cannot specify a bind DN such as `cn=this`.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the bind input to not use a reserved DN. Then, reissue the operation.

LDBM backend database is disabled.

**Explanation:** An LDAP operation failed because the LDBM backend is in disabled state. This state can occur when the LDBM backend cannot recover from a problem.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR debug trace output to help locate and correct the problem. Then, restart the LDAP server. If the problem persists, contact the service representative.

Multiple entries contain uid 'userid'.

**Explanation:** An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because there is more than one entry in an LDBM backend that contains the user ID specified in the bind information. The LDAP server does not know which entry to use for bind processing.

In the message text:
**R008004**  \* R008008

*userid*

User ID used in the bind operation

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Use an LDAP search operation with the filter `uid=userid` to determine which entries in the LDBM backend contain the indicated user ID. Modify the `uid` attribute in the entries so that only the entry you want to bind with has the indicated value. Then, reissue the operation.

---

**R008004**  Clear password is not available

**Explanation:** An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because it cannot decrypt a value for the `userPassword` attribute in the entry that contains the bind distinguished name (DN) or user ID specified in the bind information. The `userPassword` values in the entry must be either in the clear or encrypted using a two-way encryption algorithm.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If a user ID is only specified in the bind information, use an LDAP search operation with the filter `uid=userid` to determine which entry contains the indicated user ID. Modify the entry to remove all the `userPassword` values that are not in the clear or encrypted using a two-way algorithm. Then, reissue the operation.

---

**R008005**  Nested group recursion detected for group 'name'

**Explanation:** An LDAP operation or utility failed because a nested group loop has been detected in the backend. For example, a nested group loop is detected when group A includes group B as an `ibm-memberGroup` value while group B also includes group A as an `ibm-memberGroup` value. See [Nested groups](#) for more information.

In the message text:

- **name**
  - Distinguished name of group

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Either remove or update the `ibm-memberGroup` attribute value to avoid introducing a nested group loop in the operation or utility input. Then, reissue the operation.

---

**R008006**  Dynamic group search filter 'value' is not valid

**Explanation:** An LDAP operation or utility failed because it involves a dynamic group whose filter value is not acceptable. See [Dynamic groups](#) for more information.

In the message text:

- **value**
  - Filter value

**System action:** The LDAP server continues to run, but the operation or utility fails.

**User response:** Correct the filter value in the operation or utility input. Then, reissue the operation.

---

**R008008**  No base entry specified in dynamic group URL 'url'

**Explanation:** An LDAP operation or utility failed because the `memberURL` attribute value specifying the dynamic group search expression does not contain a base entry. A base entry is required in a dynamic group URL. The format of a dynamic group URL is: `ldap://baseDN[?][searchScope][?searchFilter]` See [Dynamic groups](#) for more information.

In the message text:

- **url**
  - Dynamic group URL

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Update the `memberURL` attribute value to specify a baseDN in the operation or utility input. Then, reissue the operation.
An internal LDBM backend error has occurred

Explanation: An LDAP operation failed because the LDAP server has detected an internal programming error in the LDBM backend.

System action: The LDAP server continues, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

Subtree move is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a subtree to another subtree but a replica of the LDAP server does not support this type of rename. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move subtrees. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree move, restart the replica with that capability enabled. The replica server must return 1.3.18.0.2.32.33 as one of the values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

Subtree rename is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to rename a subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not rename a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that rename subtree entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree rename, restart the replica with that capability enabled. The replica server must return 1.3.18.0.2.32.34 as one of the values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

New superior is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a leaf entry to another subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for the leaf entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move leaf entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with leaf or subtree move, restart the replica with either or both of those capabilities enabled. The replica server must return 1.3.18.0.2.32.35 or 1.3.18.0.2.32.33 (or both) as values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

DN attribute realignment is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because the IBMModifyDNRealignDNAttributesControl control to realign other DN attributes is included in the operation but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.
User response: Change the modify DN input so that it does not include the control. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support realignment. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support realignment of other DN attributes, restart the replica with this capability enabled. The replica server must return 1.3.18.0.2.10.11 as a value of the supportedControl attribute when searching the root DSE entry.

R008014  Value value for attribute name is not valid

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies an attribute value that is not valid. A basic replica entry is one that contains the replicaObject object class. See Basic replication for more information.

In the message text:

  value    Attribute value
  name     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input to specify a value that is valid for the attribute. Then, reissue the operation.

R008015  Value value for attribute name is out of range

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies an attribute value that is not valid. A basic replica entry is one that contains the replicaObject object class. In particular, the replicaPort attribute value must be within 0 to 65535. See Basic replication for more information.

In the message text:

  value    Attribute value
  name     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input to specify a value that is valid for the attribute. Then, reissue the operation.

R008016  SSL support is not configured

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies replicaUseSSL true for the entry but the LDAP server is not configured to use SSL. A basic replica entry is one that contains the replicaObject object class. The sslKeyRingFile option in the LDAP server configuration file is used to configure the LDAP server to use SSL.

System action: The LDAP server continues to run, but the operation fails.

User response: If using SSL with the replica server is not required, change the add or modify input to specify replicaUseSSL false. Then, reissue the operation. If SSL is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the sslKeyRingFile option with an appropriate value to the LDAP server configuration file. Then restart the LDAP server.
R008017  Password policy entry 'name' is in use and cannot be deleted

**Explanation:** An LDAP delete operation failed because the entry is a password policy entry that is in use by a user or a group. A password policy entry can only be deleted when it is no longer referenced from another entry.

In the message text:

*name*  
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Determine which entries are referencing the password policy entry by searching the server using the filter `(|(ibm-pwdIndividualPolicyDN=name)(ibm-pwdGroupPolicyDN=name))`. Remove or change these values in these attributes in the entries. Then, reissue the operation.

---

R008018  Value for attribute 'name' must be positive

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute. The value must be a number greater than or equal to 0.

In the message text:

*name*  
Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the attribute value in the operation input. Then, reissue the operation.

---

R008019  Value for attribute 'name' must be less than value

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute. The attribute value must be a number less than the maximum value.

In the message text:

*name*  
Attribute name

*value*  
Maximum value

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the attribute value in the operation input. Then, reissue the operation.

---

R008020  Value for attribute 'name1' must be less than value for attribute 'name2'

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The value of *name1* must be less than the value of *name2*.

In the message text:

*name1*  
First attribute name

*name2*  
Second attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the first attribute value is smaller than the second one. Then, reissue the operation.
R008021  Value for attribute 'name1' cannot be greater than value for attribute 'name2'

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The value of name1 must be less than or equal to the value of name2.

In the message text:

name1  
First attribute name

name2  
Second attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the first attribute value is not larger than the second one. Then, reissue the operation.

R008022  passwordMinAlphaChars plus passwordMinOtherChars must be less than pwdMinlength

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with other attributes in the entry. The values must be set so that the sum of the passwordMinAlphaChars and passwordMinOtherChars values is less than the pwdMinLength value.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the values are appropriate. Then, reissue the operation.

R008023  Must allow a user to change their password if they are required to change their password

**Explanation:** An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The(pwdAllowUserChange attribute value cannot be FALSE when the pwdMustChange attribute value is TRUE.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that the values are appropriate. Then, reissue the operation.

R008024  Password policy entry 'name' is in use and cannot be renamed

**Explanation:** An LDAP modify DN operation failed because the entry is a password policy entry that is in use by a user or a group. A password policy entry can only be renamed when it is no longer referenced from another entry.

In the message text:

name  
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Determine which entries are referencing the password policy entry by searching using the filter 
(\(\{ibm-pwdIndividualPolicyDN=\{name\}\}\{ibm-pwdGroupPolicyDN=\{name\}\}\)). Remove or change these values in these attributes in the entries. Then reissue the operation.

R008025  Password policy entry 'name' is in use and cannot have objectclass pwdpolicy removed

**Explanation:** An LDAP modify operation failed because it changes the entry from a password policy entry to a non-password policy entry, but the entry is in use by a user or a group. A password policy entry can only be changed to a non-password policy entry when it is no longer referenced from another entry.

In the message text:

name  
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.
User response: Determine which entries are referencing the password policy entry by searching using the filter \((ibm-pwdIndividualPolicyDN=\text{name})(ibm-pwdGroupPolicyDN=\text{name})\). Remove or change these values in these attributes in the entries. Then, reissue the operation.

R008101  TDBM backend database is disabled
Explanation: An LDAP operation involving a TDBM backend failed or partially failed because the TDBM backend is not enabled. TDBM cannot process the operation.

System action: The LDAP server continues to run. If the operation is targeted to the TDBM backend, the operation fails. For a bind to a different backend, the bind succeeds but the disabled TDBM backend is skipped when determining the groups to which the bound user belongs. Also, for a Kerberos bind, the disabled TDBM backend is not used to map the Kerberos identity to a TDBM distinguished name.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help determine why the TDBM backend is not active. If necessary, restart the LDAP server.

R008103  Multiple entries contain uid 'userid'
Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because there is more than one entry in a TDBM backend that contains the user ID specified in the bind information. The LDAP server does not know which entry to use for bind processing.

In the message text:

\begin{itemize}
  \item \textit{userid}  \\
  User ID used in the bind operation
\end{itemize}

System action: The LDAP server continues to run, but the operation fails.

User response: Use an LDAP search operation with the filter \textit{uid=userid} to determine which entries in the TDBM backend contain the indicated user ID. Modify the \textit{uid} attribute in the entries so that only the entry you want to bind with has the indicated value. Then, reissue the operation.

R008104  Clear password is not available
Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because it cannot decrypt a value for the \textit{userPassword} attribute in the entry that contains the bind distinguished name (DN) or user ID specified in the bind information. The \textit{userPassword} values in the entry must be either in the clear or encrypted using a two-way encryption algorithm.

System action: The LDAP server continues to run, but the operation fails.

User response: If a user ID is only specified in the bind information, use an LDAP search operation with the filter \textit{uid=userid} to determine which entry contains the indicated user ID. Modify the entry to remove all the \textit{userPassword} values that are not in the clear or encrypted using a two-way algorithm. Then, reissue the operation.

R008106  Dynamic group search filter 'value' is not valid
Explanation: An LDAP operation or utility failed because it involves a dynamic group whose filter value is not acceptable. See \textit{Dynamic groups} for more information.

In the message text:

\begin{itemize}
  \item \textit{value}  \\
  Filter value
\end{itemize}

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the filter value in the operation or utility input. Then, reissue the operation.
R008107  Non-numeric object identifier 'identifier' is not allowed when using a TDBM database with DB_VERSION less than 4.0

Explanation: An LDAP schema modify operation failed because a non-numeric object identifier is used in an object class or attribute modification but a TDBM backend is running at a level that only supports usage of numeric identifiers. The value of the DB_VERSION column in the DIR_MISC table in the TDBM DB2 database must be 4.0 or higher to allow usage of non-numeric identifiers.

In the message text:

- identifier
  - Non-numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Specify a value of at least 4 for the srvCompatLevel option in the LDAP server configuration file. Then, restart the LDAP server. Alternatively, update DB_VERSION value directly in DB2 after the LDAP server has been stopped. Then, restart the LDAP server.

R008108  No base entry specified in dynamic group URL 'url'

Explanation: An LDAP operation or utility failed because the memberURL attribute value specifying the dynamic group search expression does not contain a base entry. A base entry is required in a dynamic group URL. The format of a dynamic group URL is: ldap://baseDN[?searchScope][?searchFilter]. See Dynamic groups for more information.

In the message text:

- url
  - Dynamic group URL

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Update the memberURL attribute value to specify a baseDN in the operation or utility input. Then, reissue the operation.

R008109  Unable to connect to DB2 subsystem 'name'

Explanation: An LDAP operation failed because a connection could not be established with the DB2 subsystem. This may occur because the DB2 subsystem is down or the DB2 connections have been exhausted. The DB2 subsystem is required when communicating with the TDBM or DB2-based GDBM backend while the LDAP server is running.

In the message text:

- name
  - DB2 subsystem name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the DB2 subsystem is down, the subsystem must be brought back up. If the DB2 subsystem is running, verify that there are enough DB2 connections. See Installing and setting up DB2 for TDBM and GDBM (DB2-based) for more information. If there are enough DB2 connections, use any server messages and server debug ERROR+PERF+TDBM trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008110  Unable to read an entry from the DB2 database

Explanation: An LDAP operation failed because the entry could not be read from the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and
correct the problem. If the problem persists, contact the service representative.

R008111  Unable to update an entry in the DB2 database
Explanation: An LDAP operation failed because the entry could not be updated in the TDBM or DB2-based GDBM backend.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008112  Unable to add an entry to the DB2 database
Explanation: An LDAP operation failed because the entry could not be added to the TDBM or DB2-based GDBM backend.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008113  Unable to delete an entry from the DB2 database
Explanation: An LDAP operation failed because the entry could not be deleted from the TDBM or DB2-based GDBM backend.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008114  Unable to commit the changes to the DB2 database
Explanation: An LDAP operation failed because the changes could not be committed to the TDBM or DB2-based GDBM backend.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008115  An internal TDBM backend error has occurred
Explanation: An LDAP operation failed because the LDAP server has detected an internal programming error in the TDBM backend.
System action: The LDAP server continues, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.
R008116 • R008119

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**R008116  DB2 subsystem 'name' is not available**

**Explanation:** An LDAP operation failed because the DB2 subsystem is down or a connection cannot be established. The DB2 subsystem is required when communicating with the TDBM or DB2-based GDBM backend when the LDAP server is running.

In the message text:

```
name
```

DB2 subsystem name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** If the DB2 subsystem is down, the subsystem must be brought back up. If the DB2 subsystem is running, use any server messages and ERROR+PERF+TDBM debug trace output to assist in locating and correcting the problem. If the problem persists, contact the service representative.

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**R008117  Attribute object identifier 'identifier' is longer than 200 characters**

**Explanation:** An LDAP schema modify operation failed because an attribute object identifier that is too long for usage in TDBM appears in a modification. The maximum length of an object identifier in TDBM is 200.

In the message text:

```
identifier
```

Attribute identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the identifier in the modify input to have an acceptable length. Then, reissue the operation.

---

**R008118  Object class name 'name' is longer than 200 characters**

**Explanation:** An LDAP schema modify operation failed because an object class name that is too long for usage in TDBM appears in a modification. The maximum length of an object class name in TDBM is 200.

In the message text:

```
name
```

Object class name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the object class name in the modify input to have an acceptable length. Then, reissue the operation.

---

**R008119  DN 'name' exceeds the maximum length of size**

**Explanation:** An LDAP add or modify DN operation failed because a distinguished name (DN) involved in the operation is too long for usage in TDBM. This DN can be the target of the operation or, for a modify DN, another DN affected by renaming the target DN. The maximum DN length in TDBM is the size set for the DN column in the DIR_ENTRY table when TDBM DB2 database is created.

In the message text:

```
name
```

Distinguished name

```
size
```

Maximum length of a distinguished name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** For an add operation, change the DN in the input so that the length is acceptable. For a modify DN operation, ensure that the rename does not create distinguished names that are too long for TDBM. Note that a subtree rename affects the DN of each entry within the subtree. Then, reissue the operation. If the maximum DN length is too small, contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: If requested, the size of the DN column in the DIR_ENTRY table can be changed to increase the maximum size of a DN in TDBM. See the instructions in the DSTDBMDB member of the GLD.SGLDSAMP data set for more information. The LDAP server must be stopped when changes are made to the TDBM DB2 database. Then, restart the LDAP server.

---

R008120 Subtree move is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a subtree to another subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move subtrees. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree move, restart the replica with that capability enabled. The replica server must return 1.3.18.0.2.32.33 as one of the values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

---

R008121 Subtree rename is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to rename a subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not rename a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that rename subtree entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree rename, restart that capability enabled. The replica server must return 1.3.18.0.2.32.34 as one of the values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

---

R008122 New superior is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a leaf entry to another subtree, but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for a leaf entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move leaf entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with leaf or subtree move, restart the replica with either or both of those capabilities enabled. The replica server must return 1.3.18.0.2.32.35 or 1.3.18.0.2.32.33 (or both) as values of the ibm-enabledCapabilities attribute when searching the root DSE entry.

---

R008123 DN attribute realignment is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because the IBMModifyDNRealignDNAttributesControl control to realign other DN attributes is included in the operation but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not include the control. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support realignment. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support realignment of other DN attributes, restart the replica with
R008124 • R008127

this capability enabled. The replica server must return 1.3.18.0.2.10.11 as a value of the supportedControl attribute when searching the root DSE entry.

R008124  Changelog root must have an explicit and propagating ACL

Explanation: An LDAP modify operation to a DB2-based GDBM failed because it deletes the aclEntry or entryOwner attribute in the change log suffix entry (cn=changeLog). The change log suffix entry must always have explicit values for these attributes when GDBM is DB2-based. These values are always propagated to the entries in the change log to provide access control for these entries.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it does not remove all the values for the aclEntry or entryOwner attribute. Then, reissue the operation.

R008125  Matching rule 'rule' is not supported for syntax 'syntax (description)' when using a TDBM database with DB_VERSION less than 4.0

Explanation: An LDAP schema modify operation failed because a modified attribute includes a matching rule and syntax combination that is not supported in a TDBM backend. The TDBM backend is running at an older level that does not allow the combination. The combinations that are not supported by a TDBM backend running at an older level are:

- integerFirstComponentMatch equality rule with Integer syntax
- objectIdentifierFirstComponentMatch equality rule with Object Identifier syntax
- generalizedTimeMatch equality rule with UTC Time syntax

In the message text:

rule  Matching rule name
syntax  Syntax numeric identifier
description  Syntax description

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input so that the matching rule and syntax combination is acceptable to the TDBM backend. Then, reissue the operation.

R008126  Exhausted all unique keys

Explanation: An LDAP operation failed because the TDBM or DB2-based GDBM backend is unable to assign a unique entry identifier (EID) because all unique keys have been exhausted in the partition.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See message GLD3344E for information about recovering from the error.

R008127  DB2 database is no longer in a consistent state

Explanation: An LDAP operation failed because the TDBM or DB2-based GDBM backend is no longer in a consistent state. The DIR_EID table has been modified while the LDAP server is running.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See message GLD3343E for information about recovering from the error.
**R010001  Invalid character in descriptor 'descriptor'**

**Explanation:** An LDAP operation failed because it involves a descriptor value that contains a character that is not allowed in a descriptor. A text descriptor consists of letters, numbers, dash, underscore, and semicolon, while an object identifier descriptor consists of digits separated by periods. An object identifier can optionally be prefixed with oid. When used within a schema definition, a text descriptor cannot contain a semicolon and must start with a letter.

In the message text:

.descriptor
    Descriptor that is not valid

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that all the descriptors are valid. Then, reissue the operation.

---

**R010002  Missing attribute type in DN component 'component'**

**Explanation:** An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value without an attribute. For example, in the DN cn=fred,=test,o=ibm, the =test,o=ibm component contains a value (test) without an attribute.

In the message text:

.component
    Component of the DN

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that all the distinguished names that it uses are complete. Then, reissue the operation.

---

**R010003  Missing attribute value in DN component 'component'**

**Explanation:** An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute without a value. For example, in the DN cn=fred,ou=,o=ibm, the ou=,o=ibm component contains an attribute (ou) without a value.

In the message text:

.component
    Component of the DN

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that all the distinguished names that it uses are complete. Then, reissue the operation.

---

**R010004  No equality matching rule for DN attribute 'name'**

**Explanation:** An LDAP operation failed because it involves a distinguished name (DN) which contains an attribute whose schema definition does not include an equality matching rule.

In the message text:

.name
    Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input so that every DN uses attributes that have an equality matching rule. Then, reissue the operation.
R010005 • R010008

R010005  No matching rule defined for string value 'value'

Explanation: An LDAP operation such as a compare or search failed because it involves a comparison using a value for an attribute whose schema definition does not include a matching rule that allows comparing the value. In particular, some matching rules, such as booleanMatch, do not support using a value in a substring filter.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it uses attribute values that are supported for the type of usage. Then, reissue the operation.

R010006  UTC Time value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the UTC Time syntax of the attribute. The format of a UTC Time value is

- \( yyymmddhhmmss \).fffff for local time
- \( yyymmddhhmmss \).fffffZ for Greenwich Mean Time
- \( yyymmddhhmmss \).fffff-hhmm for time zone west of GMT
- \( yyymmddhhmmss \).fffff+hhmm for time zone east of GMT

where \( yy \) is year, \( mm \) is month, \( dd \) is day, \( hh \) is hour, \( mm \) is minutes, \( ss \) is seconds, and \( fffff \) is microseconds. The seconds (\( ss \)) and microseconds (fffff) can be omitted and default to 0.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the UTC Time syntax. Then, reissue the operation.

R010007  Invalid IA5 character found in string value 'value'

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the IA5 String syntax of the attribute. The characters that can be used in an IA5 String are those that translate to the 7-bit ASCII characters. Note that the null character (\( \text{x'00'} \)) is a valid IA5 String character.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the IA5 String syntax. Then, reissue the operation.

R010008  Bit string value 'value' is not valid

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the bit string syntax of the attribute. A complete bit string value must be a series of 0 and 1 characters enclosed in single quotation marks and suffixed with b or B. The value must contain at least one 0 or 1. An example is ‘01011’8. A substring value used in a substring filter can be any part of the complete value, and does not have to contain a 0 or 1. An example is 1’.

In the message text:

value
  Attribute value
**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the bit string syntax. Then, reissue the operation.

---

**R010009**  **Boolean value 'value' is not valid**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a value that is not allowed by the Boolean syntax of the attribute. A Boolean value must be TRUE or FALSE, with case ignored.

In the message text:

```
value
  Attribute value
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the Boolean syntax. Then, reissue the operation.

---

**R010011**  **Telephone number value 'value' is not valid**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Telephone Number syntax of the attribute. The characters that can be used in a Telephone Number value are: letters, numbers, double quotation mark, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space. Note that the quotation mark character is not allowed for a Telephone Number value.

In the message text:

```
value
  Attribute value
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the Telephone Number syntax. Then, reissue the operation.

---

**R010012**  **UUID value 'value' is not valid**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the IBM Entry UUID syntax of the attribute. A complete IBM Entry UUID value is a 36-character string composed of groups of hexadecimal digits separated by hyphens in the following format: 8_digits-4_digits-4_digits-4_digits_12_digits. An example is 55A4C000-B93F-1A5C-86B3-402084027431. A substring value used in a substring filter can be any part of the complete value. An example is 4C000-893F-1A.

In the message text:

```
value
  Attribute value
```

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the IBM Entry UUID syntax. Then, reissue the operation.

---

**R010014**  **Country string value 'value' is not valid**

**Explanation:** An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Country String syntax of the attribute. A complete Country String value must consist of exactly two of the following characters: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space. A substring value used in a substring filter can be one or two of those characters.

In the message text:

```
value
  Attribute value
```
R010015  •  R010017

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the value used in the operation input so that it is valid for the Country String syntax. Then, reissue the operation.

---

**R010015  No backend for DN 'name'**

**Explanation:** An LDAP operation (or extended operation) failed because the distinguished name (DN) of the target of the operation either does not fall under any backend in the LDAP server or falls under a backend which does not support that operation. The backend is determined using the suffix part of the DN of the target of the operation. In particular, the `GetEffectiveAcl` extended operation is only supported by LDBM, TDBM, GDBM, CDBM, and schema backends. Similarly, the **Effective password policy** and **Account status** extended operations are not supported by the SDBM backend.

In the message text:

name

Distinguished name of target

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the target of the operation to be in an existing backend that supports the operation. Then, reissue the operation.

---

**R010016  Backend initialization failed for DN 'name'**

**Explanation:** An LDAP operation or utility failed because the backend to which it is directed did not complete initialization, thus cannot process the operation. The backend is determined using the suffix part of the distinguished name (DN) of the target of the operation. For a change log request, the target is the GDBM backend (suffix is `cn=change1og`).

In the message text:

name

Distinguished name of target

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Change the target of the operation to be in a backend that is active. Then, reissue the operation or restart the utility. If the unavailable backend is needed, contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

**Administrator response:** Use any server messages and ERROR debug trace output to help determine why the backend did not complete initialization. Then, restart the LDAP server.

---

**R010017  operation is not supported by the type backend**

**Explanation:** An LDAP operation failed because the backend to which it is targeted does not support that type of operation. In particular, the schema (suffix is `cn=schema`), root DSE (suffix is zero-length string, `''`), and monitor (suffix is `cn=monitor`) backends are limited in the operations they allow. The schema backend is restricted to modify and search operations. The root DSE and `cn=monitor` backends are restricted to search operations.

In the message text:

operation

Operation name

type

Backend type

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Do not issue the unsupported operation for this type of backend.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>R010018</td>
<td>Search with null base DN requires either scope=base (for root DSE search) or scope=subtree (for null based subtree search)</td>
</tr>
<tr>
<td></td>
<td><strong>Explanation:</strong> An LDAP search operation using the null based distinguished name (search target is the zero-length string, or &quot;&quot;) failed because the search scope is not base or subtree. The scope of a null based search must be either base or sub. A base scope search retrieves the attributes in the root DSE entry. This search requires that the filter is objectclass=* or objectclass=ibmsubschema, subentry, subschema, or top. A subtree scope search retrieves all the entries in the LDBM, TDBM, and CDBM backends of the LDAP server. Any search filter can be used with this scope.</td>
</tr>
<tr>
<td></td>
<td><strong>System action:</strong> The LDAP server continues to run, but the operation fails.</td>
</tr>
<tr>
<td></td>
<td><strong>User response:</strong> Correct the null based search input. Then reissue the operation.</td>
</tr>
</tbody>
</table>

| R010019 | Search with null base DN requires filter (objectclass=*)                                                                                         |
|        | **Explanation:** An LDAP search operation using the null based distinguished name (search target is the zero-length string, or "") and scope base failed because the search filter is not objectclass=*. This is the only filter supported when using a null based search to retrieve the attributes of the root DSE entry. |
|        | **System action:** The LDAP server continues to run, but the operation fails.                                                                    |
|        | **User response:** Correct the null based search input. Then, reissue the operation.                                                             |

| R010020 | Schema search requires scope=base                                                                                                               |
|        | **Explanation:** An LDAP search operation for the schema entry failed because the search scope specified in the operation is not base. To search the schema entry, specify a target of cn=schema, a scope of base, and a filter of objectclass=* or objectclass=ibmsubschema, subentry, subschema, or top. |
|        | **System action:** The LDAP server continues to run, but the operation fails.                                                                    |
|        | **User response:** Correct the schema search input. Then, reissue the operation.                                                                |

| R010021 | Schema search requires an object class presence or equality filter                                                                              |
|        | **Explanation:** An LDAP search operation for the schema entry failed because the search filter is not supported when searching the schema. To search the schema entry, specify a target of cn=schema, a scope of base, and a filter of objectclass=* or objectclass=ibmsubschema, subentry, subschema, or top. |
|        | **System action:** The LDAP server continues to run, but the operation fails.                                                                    |
|        | **User response:** Correct the schema search input. Then, reissue the operation.                                                                |

| R010022 | Binary option is not supported by the type backend                                                                                                |
|        | **Explanation:** An LDAP search operation failed because the search specifies attributes to be returned with the binary option but the backend to which the search is targeted does not support the binary option. The binary option is specified by appending binary to the attribute to be returned, for example cn;binary. In particular, the schema (suffix is cn=schema), root DSE (suffix is zero-length string, ""), and monitor (suffix is cn=monitor) backends do not support using the binary option. |
|        | **In the message text:** type                                                                                                                   |
|        | **Backend type**                                                                                                                             |
|        | **System action:** The LDAP server continues to run, but the operation fails.                                                                    |
|        | **User response:** Remove the binary option from the attributes to be returned in the search input. Then, reissue the operation.                  |
R010023  LDAP protocol version 3 is required for server controls

Explanation: An LDAP operation failed because it contains server controls that cannot be processed when the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support server controls.

System action: The LDAP server continues to run, but the operation fails.

User response: Either do not specify controls on operations or rebind using protocol version 3. Then, reissue the operation.

R010024  Unable to decode value for control 'identifier'

Explanation: An LDAP operation failed because the operation contains a server control whose contents cannot be decoded. The format or contents of the control are not correct for the type of control. The reason code can also be received when running the ldif2ds utility with input that contains controls that cannot be decoded.

In the message text:

identifier  Server control identifier

System action: The LDAP server continues to run, but the operation fails. For the ldif2ds utility, the utility skips the rest of this entry in the input and continues the check phase with the next complete entry. No entries are prepared or loaded.

User response: Either remove the control from the operation or utility input or ensure that the control is properly encoded. Contact an LDAP administrator for assistance with the problem. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and resolve the control encoding problems.

R010025  No value provided for control 'identifier'

Explanation: An LDAP operation failed because the operation contains a server control that must contain a value but did not.

In the message text:

identifier  Server control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the control from the operation input or ensure that there is a properly encoded control value. Then, reissue the operation.

R010027  Control 'identifier' is specified multiple times

Explanation: An LDAP operation failed because the operation contains the same server control more than once. Some controls cannot be specified multiple times.

In the message text:

identifier  Server control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the extra server controls from the operation input. Then, reissue the operation.

R010028  Critical control 'identifier' cannot be processed

Explanation: An LDAP operation failed because the operation contains a server control sent as critical but an error occurs when the server tries to process the control. An operation is rejected if the server cannot use a critical control. For example, a search containing the SortedResults control (identifier is 1.2.840.113556.1.4.473) fails if there is a problem decoding the sort keys and the control is critical.
In the message text:

**identifier**

Server control identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If sorting is needed, ensure that the control contents are valid. If sorting is not needed, remove the control or send it as non-critical. Then, reissue the operation.

---

**R010029**  
**Maximum of size paged result sets has been exceeded**

**Explanation:** An LDAP search operation failed because it requests paged results, but the requester already has the maximum number of concurrent paged search requests allowed by the server. When a search contains the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`) sent as critical and the server limit is already reached for the requester, the search is rejected. Note that the `-q` option of the z/OS `ldapsearch` client utility always sends the `PagedResults` control as critical. The limit on paged search requests is specified in the `ibm-slapdPagedResLmt` attribute in the `cn=configuration` entry in the CDBM backend. If the attribute value is set to 0, then no paging of search output is performed. Critical requests are rejected and non-critical requests are processed as non-paged searches.

In the message text:

**size**

Maximum number of paged search requests

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Finish outstanding paged search requests. Then reissue the operation. If the maximum number of concurrent paged search requests allowed is too low, contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** If requested, increase the limit on the number of concurrent paged search requests for each requester by modifying the value of the `ibm-slapdPagedResLmt` attribute in the `cn=configuration` entry. The server does not need to be restarted.

---

**R010030**  
**Unable to compute search message digest**

**Explanation:** An LDAP search operation failed because the server cannot create a digest representing the search parameters (base, scope, filter, controls, and so on). This is used to ensure that each successive search operation for the next page of results matches the original search criteria.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR debug trace output to help locate and solve the problem. If the problem persists, contact the service representative.

---

**R010031**  
**Page size of zero is not valid for initial request**

**Explanation:** An LDAP search operation failed because it requests paged results with an initial page size of 0 in the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`). The initial page size must be greater than 0. The last continuation search can specify a page size of 0 to end the paged search. Note that specifying 0 as the first value for the `-q` option on the z/OS `ldapsearch` client utility results in a paged search request with an initial page size of 0.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the paged search input so that the initial page size in the `PagedResults` control is not 0. Then, reissue the operation.

---

**R010032**  
**Paged search results not found**

**Explanation:** An LDAP search operation to obtain the next page of results for a search failed because the server cannot find the search results identified in the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`) in the continuation search request.
**R010033 • R010037**

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Specify a valid cookie on the paged search request. To obtain the next page of search results, the cookie specified on the paged search request must be the cookie returned by the previous paged search response. Then reissue the operation.

---

**R010033 Continuation search request not same as initial request**

**Explanation:** An LDAP search operation to obtain the next page of results for a search failed because the search criteria (base, scope, filter, controls, and so on) are not the same as for the initial search. The continuation search request must match the initial search request.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Specify a paged search request with all values identical to the initial request, except for the message ID, the cookie, and optionally a modified pageSize. Then, reissue the operation.

---

**R010034 Unknown LDAP message type type**

**Explanation:** An LDAP operation failed because the type of operation is not supported by the LDAP server.

In the message text:

- **type**
  - Message or operation type

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Do not issue this type of operation to the LDAP server.

---

**R010035 Binary attribute type 'name' not allowed in DN**

**Explanation:** An LDAP operation failed because a distinguished name (DN) involved in the operation contains a binary attribute. Binary attributes cannot be used within a DN. A binary attribute has one of the following syntaxes: Binary, Certificate, Certificate List, Certificate Pair, Fax, JPEG, or Octet String.

In the message text:

- **name**
  - Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Remove the binary attribute from the distinguished name. Then, reissue the operation.

---

**R010036 No value provided for attribute 'name'**

**Explanation:** An LDAP operation failed because an attribute without a value is included in the operation. This can occur, for example, if an add or modify operation does not specify any value for an attribute being added or replaced (note that a value does not need to be specified for an attribute being deleted - this deletes the entire attribute).

In the message text:

- **name**
  - Attribute name

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a value where appropriate for all attributes. Then, reissue the operation.

---

**R010037 Binary transfer is not supported for non-binary attribute type 'name'**

**Explanation:** An LDAP operation failed because an attribute involved in the operation specifies binary transfer but the attribute is not a binary attribute. The server can only use binary transfer when processing a binary attribute. Binary transfer is specified by appending ;binary to the attribute, for example cn;binary. An attribute is binary if it has one of the following syntaxes: Binary, Certificate, Certificate List, Certificate Pair, Fax, JPEG, or Octet String. This
error can occur when specifying the attribute in the operation input, including in the filter of a search operation.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the binary transfer option from the attribute in the operation input. Then, reissue the operation.

R010039 Incorrect ASN.1 encoding in DN component 'component'

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value which begins with a number sign (#) but is not a valid ASN.1 encoded value. A number sign is used at the beginning of an attribute value in a DN to indicate that the value is an ASN.1-encoded value. The number sign must be followed by an even number of hexadecimal digits representing the encoding of each of the octets of the BER encoding of the value.

In the message text:

component
   Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are acceptable. Then, reissue the operation.

R010040 Unsupported ASN.1 type in DN component 'component'

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value which is not supported. This can occur if the value is ASN.1 encoded (it begins with a number sign (#)) but the underlying value syntax is not supported by the server. It can also result from using an attribute which has generalizedTimeMatch or utcTimeMatch as its equality matching rule. The server does not allow using attributes with these matching rules in a DN.

In the message text:

component
   Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are acceptable. Then, reissue the operation.

R010041 Server control does not have an object identifier

Explanation: An LDAP operation failed because the operation contained a server control that does not contain an identifier. The server does not know how to decode the control.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that all controls are correctly specified in the operation input. Then, reissue the operation.

R010042 Definition has no components: definition

Explanation: An LDAP schema modify operation failed because there is no value after a left parenthesis in the definition of an attribute, object class, or ibmattributetypes. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema. The reason code may also occur on an entry add or modify operation when adding a value that has no characters after the beginning left parenthesis for an attribute that is defined with the integerFirstComponentMatch matching rule. In this case, the value is indicated in the reason code.

In the message text:
**R010043 • R010047**

*definition*

Attribute or object class definition or value

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** For a schema modify operation, check the input to ensure that all the definitions are correctly formatted. For an entry add or modify operation, add characters after the left parenthesis at the beginning of the value for the attribute defined with the `integerFirstComponentMatch` matching rule. Then, reissue the operation.

---

<table>
<thead>
<tr>
<th>R010043</th>
<th>Substring filter for attribute 'name' has no value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong> An LDAP search operation failed because it uses a substring filter in which one of the substring parts has no value. Every part of a substring filter must contain a nonzero length string.</td>
<td></td>
</tr>
<tr>
<td>In the message text:</td>
<td></td>
</tr>
<tr>
<td><em>name</em></td>
<td></td>
</tr>
<tr>
<td>Attribute name</td>
<td></td>
</tr>
<tr>
<td><strong>System action:</strong> The LDAP server continues to run, but the operation fails.</td>
<td></td>
</tr>
<tr>
<td><strong>User response:</strong> Correct the search input so that every part of the substring filter has a value. Then, reissue the operation.</td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>R010044</th>
<th>Substring filter type type is used incorrectly</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong> An LDAP operation failed because part of a substring filter involved in the operation is out of order. Each part of a substring filter is tagged as initial (type 0), any (type 1), or final (type 2) and the substring parts must be sequenced in that order. In this substring filter, either a substring part typed as initial is not the first part or a substring part typed as final is not the last part.</td>
<td></td>
</tr>
<tr>
<td>In the message text:</td>
<td></td>
</tr>
<tr>
<td><em>type</em></td>
<td></td>
</tr>
<tr>
<td>Substring filter part type</td>
<td></td>
</tr>
<tr>
<td><strong>System action:</strong> The LDAP server continues to run, but the operation fails.</td>
<td></td>
</tr>
<tr>
<td><strong>User response:</strong> Correct the search filter so that the parts of the substring filter are in the correct sequence. Then, reissue the operation.</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>R010045</th>
<th>type filter has an empty filter set</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong> An LDAP search operation failed because some part of the filter involved in the operation is missing. This can occur, for example, if an AND filter is missing the attribute value to search on.</td>
<td></td>
</tr>
<tr>
<td>In the message text:</td>
<td></td>
</tr>
<tr>
<td><em>type</em></td>
<td></td>
</tr>
<tr>
<td>Filter type</td>
<td></td>
</tr>
<tr>
<td><strong>System action:</strong> The LDAP server continues to run, but the operation fails.</td>
<td></td>
</tr>
<tr>
<td><strong>User response:</strong> Correct the search input so that all parts of the filter are completely specified. Then, reissue the operation.</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>R010047</th>
<th>The new entry DN must exist in the same backend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong> An LDAP modify DN operation failed because it attempts to create an entry under a referral entry. A referral entry is one that contains the referral object class and the ref attribute. A referral entry refers to a different entry and cannot be the parent of any entry.</td>
<td></td>
</tr>
<tr>
<td><strong>System action:</strong> The LDAP server continues to run, but the operation fails.</td>
<td></td>
</tr>
<tr>
<td><strong>User response:</strong> Correct the modify DN input so that it does not attempt to move entries under a referral entry. Then, reissue the operation.</td>
<td></td>
</tr>
</tbody>
</table>
R010048  The specified permissions are not allowed for the access class in aclEntry attribute value 'value'

Explanation: An LDAP modify or add operation failed because it includes a value for the aclEntry attribute that is not valid. The value specifies the wrong type of permissions for an access class. The acceptable permissions for the object access class are a and d. The acceptable permissions for all other access classes are r, w, s, and c.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the aclEntry value in the add or modify input. Then, reissue the operation.

R010049  name failed with return code return_code, reason code reason_code

Explanation: An LDAP operation or utility failed because an attribute value cannot be hashed, encrypted, or decrypted. The attribute is encrypted or hashed based on the pwEncryption or secretEncryption option in the LDAP server configuration file. The attribute is usually one of the following: userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw.

In the message text:

name
  Routine name

return_code
  Return code from routine

reason_code
  Reason code from routine

System action: The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the routine indicated is CRYPT, see the description of crypt() in z/OS XL C/C++ Runtime Library Reference for more information about the error. If an ICSF routine is indicated, see the description of the routine in z/OS Cryptographic Services ICSF Application Programmer’s Guide for more information about the error. If the problem persists, contact the service representative.

R010050  Label 'name' is not defined

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be encrypted or decrypted. During encryption, the AES or DES key label specified in the pwEncryption or secretEncryption option in the LDAP server configuration file must match a key label in the LDAPKEYS data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. The attribute is usually one of the following: userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw.

In the message text:

name
  Label name

System action: The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the AES or DES key label indicated in the message is not present in the LDAPKEYS data set or the ICSF CKDS, add the label and key. If the error occurs during decryption, the original AES or DES key label that was used for encryption of the value must be added to the LDAPKEYS data set or the ICSF CKDS to allow successful AES or
DES decryption. If using the LDAPKEYS data set with the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

**R010051  ICSF services are not available**

**Explanation:** An LDAP operation or utility failed because ICSF is not running while hashing, encrypting, or decrypting an attribute value set up to use AES, DES, SHA-2, or salted SHA-2. This error can also occur while performing AES or DES encryption or decryption and the key label does not reside in the LDAPKEYS data set. The attribute is usually one of the following: userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw.

**System action:** The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

**Administrator response:** Use any server messages and ERROR debug trace output to assist in locating and correcting the problem.

- If performing AES or DES decryption of an attribute value and the key label resides in the ICSF CKDS, verify that ICSF is started.
- If performing AES or DES decryption of an attribute value and the key label resides in the LDAPKEYS data set, verify that the LDAPKEYS DD card in the LDAP server procedure is correct and contains the key label. If using the ds2ldif utility, use the -k option to specify the location of the LDAPKEYS data set.
- If performing AES or DES encryption, verify that the key label specified on the pwEncryption option in the LDAP server configuration file is in the ICSF CKDS or the LDAPKEYS data set. If using the ldif2ds utility and the key label resides in the LDAPKEYS data set, use the -k option to specify the location of the LDAPKEYS data set.
- If the attribute value is hashed in SHA-2 or salted SHA-2, verify that ICSF is started.

If the problem persists, contact the service representative.

---

**R010052  Incorrect key length for label 'name'**

**Explanation:** An LDAP operation or utility failed because an attribute value is set up to use AES or DES encryption with a key in the LDAPKEYS data set that is not the correct length. During encryption, the AES or DES key label specified in the pwEncryption or secretEncryption option in the LDAP server configuration file must match a key label in the LDAPKEYS data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. A DES key in the LDAPKEYS data set must be 8, 16, or 32 bytes long and have odd parity. In a DES key, the lower-order bit of each byte is the parity bit. The parity bit must be set so that there is an odd number of 1's in each byte, but the bit is not used for encryption. An AES key in the LDAPKEYS data set must be 32 bytes long. See Symmetric encryption keys for more information.

In the message text:

```
name
```

**Label name**

**System action:** The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

**Administrator response:** Use any server messages and ERROR debug trace output to help locate and correct the problem. Update the AES or DES key in the LDAPKEYS data set to have a valid length. If using the LDAP server, then restart the LDAP server.

---

**R010053  Incorrect key parity for label 'name'**

**Explanation:** An LDAP operation or utility failed because an attribute value is set up to use DES encryption with a key in the LDAPKEYS data set that does not have odd parity. During encryption, the DES key label specified in the pwEncryption or secretEncryption option in the LDAP server configuration file must match a key label in the LDAPKEYS data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. A DES key in the LDAPKEYS data set must be 8, 16, or 32 bytes long and have odd parity. In a DES key, the lower-order bit of each byte is the parity bit. The parity bit must be set so that there is an odd...
number of 1's in each byte, but the bit is not used for encryption. See Symmetric encryption keys for more information.

In the message text:

name

Label name

System action: The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Update the DES key in the LDAPKEYS data set to specify a valid key. If using the LDAP server, then restart the LDAP server.

R010054 Encryption type type is not supported

Explanation: An LDAP operation or utility failed because an attribute value cannot be hashed or encrypted by the method specified in the pwEncryption or secretEncryption option in the LDAP server configuration file. The hashing or encryption method specified in the pwEncryption or secretEncryption option is not recognized by the LDAP server or utility because an internal programming error occurred. The attribute is usually one of the following: userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw.

In the message text:

type

Numeric hashing or encryption type

System action: The LDAP server continues to run, but the operation fails. The ldif2ds utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If using the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

R010055 Encryption tag 'value' is not supported

Explanation: An LDAP operation or utility failed because the encryption tag specified in an attribute value is not valid. The attribute is usually one of the following: userPassword or ibm-slapdAdminPw. The server compatibility level must be 6 or greater to use Salted SHA-1 (SSHA) tagged attribute values. The server compatibility level must be 7 or greater to use SHA-2 or Salted SHA-2 tagged attribute values.

In the message text:

value

Tag value

System action: The LDAP server continues to run, but the operation fails. The ds2ldif or ldif2ds utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Verify that the serverCompatLevel option is set to the correct value and the encryption tag is recognized by the LDAP server or utility. See the pwEncryption option in Customizing the LDAP server configuration for more information. If necessary, restart the LDAP server. If the problem persists, contact the service representative.

R010056 Encrypted data length is not a multiple of number

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be decrypted because the encrypted data is not a valid length. The length of the encrypted data must be a multiple of the length indicated in the reason code. The attribute is usually one of the following: userPassword, ibm-slapdAdminPw, secretKey, replicaCredentials, ibm-replicaKeyPwd, or ibm-slapdMasterPw.
R010057 • R010061

In the message text:

number

Data length multiplier

System action: The LDAP server continues to run, but the operation fails. The `ds2ldif` utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. The attribute value may need to be replaced with a new value because the encrypted data is corrupted. If the problem persists, contact the service representative.

---

R010057 Incorrect key value for label 'name'

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be decrypted. During decryption, the AES or DES key label is specified in the encrypted attribute value. The AES or DES key is unable to decrypt the AES or DES encrypted data. The attribute is usually one of the following: `userPassword`, `ibm-slapdAdminPw`, `secretKey`, `replicaCredentials`, `ibm-replicaKeyPwd`, or `ibm-slapdMasterPw`.

In the message text:

name

Label name

System action: The LDAP server continues to run, but the operation fails. The `ds2ldif` utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Restore the original AES or DES key in the ICSF CKDS or the `LDAPKEYS` data set to allow AES or DES decryption to occur. If using the `LDAPKEYS` data set with the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

---

R010058 Old and new password values were not supplied

Explanation: An LDAP native password modify operation failed because the input contains a `userPassword` attribute add or delete modification which does not contain a value. The delete modification must specify the existing password or password phrase value and the add modification must specify the new value. The delete modification must precede the add modification.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, specify the existing password or password phrase value in the delete modification for `userPassword` and the new value in the add modification. Then reissue the operation.

---

R010060 LDAP protocol version 3 is required for extended operations

Explanation: An LDAP extended operation failed because the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support extended operations.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Either do not use extended operations, or rebind using protocol version 3 and then reissue the extended operation.

---

R010061 Only GetDnForUserid and GetPrivileges extended operations are supported

Explanation: An LDAP operation failed because this connection to the LDAP server is restricted to usage for Policy Director. Only the Policy Director extended operations, `GetDnForUserid` and `GetPrivileges` can be processed on this connection.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not use this connection for any operations other than the Policy Director extended operations.
R010062  Unable to communicate with cross-system group owner

Explanation: An LDAP operation failed because the sysplex replica server is unable to communicate with the sysplex owner server over XCF (Cross System Facility)

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Verify that XCF is still running. Use any server messages and ERROR debug trace output to help locate and solve the problem. If the problem persists, contact the service representative.

R010064  cn=monitor search requires filter (objectclass=*)

Explanation: An LDAP search operation of the monitor backend failed because the search filter specified in the operation is not objectclass=*. To search the monitor backend, specify a target of cn=monitor and a filter of objectclass=*

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the filter in the search input. Then, reissue the operation.

R010065  Unable to format attribute type 'attribute' and value in entry 'name'

Explanation: The LDAP ds2ldif utility failed because it is unable to unload the entry because the attribute type and value for the entry could not be formatted into LDIF format. This formatted data is written to an internal buffer before it is written to the output LDIF file.

In the message text:

attribute
   Attribute name (and sometimes its value)

name
   Distinguished name of the entry

System action: The LDAP server continues to run, but the utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, restart the utility.

Administrator response: Verify that the attribute values for the entry contain the appropriate data so that they can be properly formatted to the output LDIF file. If necessary, perform an LDAP search request to retrieve the entry and the attribute values to verify them. Then, reissue the operation.

R010066  Unable to write to file 'file_name': error_code/reason_code - 'error_string'

Explanation: The ds2ldif utility or the LDAP server encountered an error while attempting to write a record to the output file. The output file is either a z/OS UNIX System Services file, a partitioned data set, or a sequential data set.

The file name is specified on -o option of the ds2ldif utility. The error code, reason code, and error text indicated in the reason code are returned from one of the following: fputs(), fflush(), or fclose(). See the descriptions of these routines in [z/OS XL C/C++ Runtime Library Reference] for more information about the error.

In the message text:

file_name
   Output file name

error_code
   Error code from function

reason_code
   Reason code from function

error_string
   Text corresponding to the error code

System action: The LDAP server continues to run, but the utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, restart the utility.
**R010067 • R010070**

**Administrator response:** Use the information in the reason code to resolve the problem.

---

**R010067**  
**No referrals defined for read only replica, unable to update entry 'name'**

**Explanation:** An LDAP add, modify, delete, or modify DN operation failed because the targeted LDAP server is a read-only replica or consumer server that does not know to what master or supplier server it should resend the operation. A read-only replica or consumer server cannot perform operations that update the directory. For basic replication, it uses the `masterServer` configuration option to determine the master server, otherwise it uses the `referral` configuration option. For advanced replication, it uses the servers specified in the `ibm-replicaReferralURL` attribute value of the replication context entry. See [Basic replication] and [Advanced replication] for more information.

In the message text:

`name`  
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** For basic replication, ensure that the appropriate values are specified for the `masterServer` and `referral` options in the LDAP server configuration file. Then, restart the LDAP server. For advanced replication, ensure that the appropriate values are specified for the `ibm-replicaReferralURL` attribute value of the replication context entry.

---

**R010068**  
Paged search is allowed only when bound as an LDAP administrator

**Explanation:** An LDAP search operation failed because a user that is not an LDAP administrator specified the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`). Paged searches are only supported when bound as an LDAP administrator.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Do not specify the `PagedResults` control on the search request. If a paged search is needed, contact an LDAP administrator. Then, reissue the operation.

**Administrator response:** If non-administrators need to issue paged searches, set the `ibm-slapdPagedResAllowNonAdmin` attribute value to `true` in the `cn=configuration` entry.

---

**R010069**  
Sorted search is allowed only when bound as an LDAP administrator

**Explanation:** An LDAP search operation failed because a user that is not an LDAP administrator specified the `SortKeyRequest` control (identifier is `1.2.840.113556.1.4.473`). Sorted searches are only supported when bound as an LDAP administrator.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Do not specify the `SortKeyRequest` control on the search request. If a sorted search is needed, contact an LDAP administrator. Then, reissue the operation.

**Administrator response:** If non-administrators need to issue sorted searches, set the `ibm-slapdSortSrchAllowNonAdmin` attribute value to `true` in the `cn=configuration` entry.

---

**R010070**  
Paged search support is disabled

**Explanation:** An LDAP search operation failed because the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`) was specified in the request but paged searches are not enabled in the LDAP server. Paged searches are enabled in the LDAP server when the `ibm-slapdPagedResLmt` attribute value in the `cn=configuration` entry is greater than 0.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Do not specify the `PagedResults` control (identifier is `1.2.840.113556.1.4.319`). If a paged search is needed, contact an LDAP administrator. Then, reissue the operation.

**Administrator response:** If paged search is needed, update the `ibm-slapdPagedResLmt` attribute value in the `cn=configuration` entry to have a value greater than 0.
R010071  Sorted search support is disabled

Explanation: An LDAP search operation failed because the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473) was specified in the request but sorted searches are not enabled in the LDAP server. Sorted searches are enabled in the LDAP server when the ibm-slapdSortKeyLimit attribute value in the cn=configuration entry is greater than 0.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not specify the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473). If a sorted search is needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If sorted search is needed, update the ibm-slapdSortKeyLimit attribute value in the cn=configuration entry to have a value greater than 0.

R010072  Maximum of size sorted search keys has been exceeded

Explanation: An LDAP search operation failed because the number of sort keys in the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473) exceeded the maximum number of sort keys allowed by the LDAP server. The number of sort keys that are allowed to be specified on a sorted search request is controlled by the ibm-slapdSortKeyLimit attribute value in the cn=configuration entry.

In the message text:

size

Maximum number of sorted search keys

System action: The LDAP server continues to run, but the operation fails.

User response: Reduce the number of sort keys in the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473). If all sort keys are needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the maximum allowed number of sort keys must be increased, update the ibm-slapdSortKeyLimit attribute value in the cn=configuration entry.

R010073  Sort key matching rule is inappropriate

Explanation: An LDAP search operation failed because the ordering rule specified in the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473) is not appropriate for the schema syntax. See LDAP directory schema for information about the appropriate matching or ordering rules with the schema syntax.

System action: The LDAP server continues to run, but the operation fails.

User response: Update the ordering rule in the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473) to use an appropriate ordering rule for the schema syntax. Then, reissue the operation.

R010074  Sort key attribute specified more than once

Explanation: An LDAP search operation failed because an attribute type was specified more than once in the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473).

System action: The LDAP server continues to run, but the operation fails.

User response: Update the SortKeyRequest control (identifier is 1.2.840.113556.1.4.473) to specify each sort key attribute type once. Then, reissue the operation.

R010500  Unable to retrieve normalized values for attribute 'name'

Explanation: An LDAP operation failed because the normalized attribute values could not be retrieved for the attribute type.

In the message text:

name

Attribute name

System action: The LDAP server continues to run, but the operation fails to be replicated.
R010501  •  R010504

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

---

**R010501**  Unable to retrieve the next change ID for replication context with DN *name*

**Explanation:** An LDAP operation failed because the next change identifier could not be obtained for the replication context.

In the message text:

```plaintext
name
```
Distinguished name of context

**System action:** The LDAP server continues to run, but the operation fails to be replicated.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

---

**R010502**  More than one replication agreement exists for DN *name* and consumer URL *url*

**Explanation:** An LDAP add or modify operation failed because more than one replication agreement entry with the same consumer server URL (ibm-replicaURL) was found under the replication context entry.

In the message text:

```plaintext
name
```
Distinguished name

```plaintext
url
```
Consumer URL

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Update the operation input to specify a different consumer server URL for the ibm-replicaURL attribute value in the replication agreement entry. Then, reissue the operation input.

---

**R010503**  The *name1* and *name2* attributes are not allowed on DN *name3*

**Explanation:** An LDAP add operation failed because the attribute types are not allowed to be in the distinguished name (DN) entry.

In the message text:

```plaintext
name1
```
First attribute name

```plaintext
name2
```
Second attribute name

```plaintext
name3
```
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Update the distinguished name entry to remove the attribute types from the entry or operation input. Then, reissue the operation input.

---

**R010504**  DN *name* cannot be a replication context

**Explanation:** An LDAP add or modify operation failed because the distinguished name (DN) is not allowed to be a replication context entry. The cn=localhost, cn=pwdpolicy,cn=ibmpolicies, and cn=configuration entries are not allowed to be replication contexts.

In the message text:
R010505 • R010509

name
Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer specify an objectclass value of ibm-replicationContext in the entry. Then, reissue the operation input.

---

R010505  Unable to find replication context for DN ‘name’

Explanation: An LDAP operation failed because the replication context entry could not be found.

In the message text:

name
Distinguished name of context

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that a replication context entry is specified in the request. If it is a replication context entry, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

---

R010506  Gateway server must be a Master server

Explanation: An LDAP operation failed because a gateway server must be configured as a master server. The ibm-replicationServerIsMaster attribute value in the replica subentry must be set to true to designate this server as a master server.

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the replica subentry to set the ibm-replicationServerIsMaster attribute to true. Then, reissue the operation input.

---

R010507  Credential objectclass not found

Explanation: An LDAP operation failed because the credentials entry referenced by the ibm-replicaCredentialsDN in the replication agreement does not have a valid objectclass value. A credentials entry must have an objectclass value of ibm-replicationCredentialsSimple or ibm-replicationCredentialsExternal.

System action: The LDAP server continues to run, but the operation fails.

User response: Either update the ibm-replicaCredentialsDN attribute value in the replication agreement entry or modify the existing entry to specify an objectclass value of ibm-replicationCredentialsSimple or ibm-replicationCredentialsExternal.

---

R010508  No objectclass attribute found in entry

Explanation: An LDAP operation failed because does not have an objectclass attribute value.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. Then reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

---

R010509  Credential DN ‘name’ is in use and cannot be deleted

Explanation: An LDAP delete operation failed because the supplier server credentials entry is in use by a replication agreement entry.

In the message text:

name
Distinguished name of credential entry
R010510 • R010513

User response: If the credentials entry must be deleted, all references to the entry in the ibm-replicaCredentialsDN attribute value of replication agreement entries must be removed. To find all references to the credentials entry, use an LDAP search operation with the filter: ibm-replicaCredentialsDN=dn. Update those entries to reference another credentials entry or delete those entries. Then, reissue the operation.

R010510 Filter DN 'name' is in use and cannot be deleted

Explanation: An LDAP delete operation failed because the replication filter entry is in use by a replication agreement entry.

In the message text:

name
  Distinguished name of filter entry

User response: If the replication filter entry must be deleted, all references to the entry in the ibm-replicaFilterDN attribute value of replication agreement entries must be removed. To find all references to the replication filter entry, use an LDAP search operation with the filter: ibm-replicaFilterDN=dn. Update those entries to reference another filter entry, remove the ibm-replicaFilter value, or delete those entries. Then, reissue the operation.

R010511 Adding an ibm-replicationContext to DN 'name' is not allowed

Explanation: An LDAP modify operation failed because the distinguished name (DN) is not allowed to be a replication context entry. The cn=localhost, cn=pwdpolicy,cn=ibmpolicies, and cn=configuration entries are not allowed to be replication contexts.

In the message text:

name
  Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer specify an objectclass value of ibm-replicationContext in the entry. Then, reissue the operation.

R010512 Modification of the replication subentry's 'name' attribute is not allowed

Explanation: An LDAP modify operation failed because modification of the replica subentry is not allowed. The ibm-replicaServerID attribute value cannot be modified after this entry is created. If this attribute value must be changed, all entries under the replica subentry must be deleted and then readded.

In the message text:

name
  Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer update the attribute in the replica subentry. Then, reissue the operation.

R010513 Modification is not valid. Replication context entry is no longer a replication context entry

Explanation: An LDAP modify operation failed because modifying a replication context entry to no longer be a replication context is not allowed when replica group, replica subentry, or replication agreement entries still exist under the replication context entry. Other replication topology entries must be modified or deleted before modifying this entry to no longer be a replication context.

System action: The LDAP server continues to run, but the operation fails.

User response: If the advanced replication topology is no longer needed, delete all advanced replication topology entries that reside under the replication context. Then, reissue the operation.
R010514  Cannot rename a replication topology entry
Explanation: An LDAP modify DN operation failed because renaming of a replication topology entry is not allowed. Replication topology entries that are not allowed to be changed include replication contexts, replica subentry, and replication agreements. See Advanced replication for more information.
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the modify DN input so that it does not rename a replication topology entry. Then, reissue the operation.

R010515  Agreement with DN 'name' does not support realignment
Explanation: An LDAP modify DN operation with realignment failed because the consumer server does not support attribute value realignment.
In the message text:

name  Distinguished name of replication agreement
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the modify DN input so that it does not perform realignment of attributes that have DN syntax. Then, reissue the operation.

R010516  Resulting entry is not in same replication context as target entry
Explanation: An LDAP modify DN operation failed because the resulting name of the entry results in it being in a different replication context. Modify DN operations are supported by advanced replication as long the renamed entry resides in the same replication context.
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the modify DN input so that the rename resides in the same replication context. Then, reissue the operation.

R010517  Unable to parse URL for attribute 'name'
Explanation: An LDAP modify operation failed because the attribute value did not specify a valid URL. The URL format is: ldap[s]://[IP_address|hostname][:portNumber]
In the message text:

name  Attribute name
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the URL attribute value so that it has a valid format. Then, reissue the operation.

R010518  User does not have authority to create/update a replication topology entry
Explanation: An LDAP add, modify, or delete operation failed because the user does not have the appropriate authority to add, modify, or delete a replication topology entry. An LDAP root, directory data, or replication administrator or the master server distinguished name (DN) are allowed to administer replication topology entries.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator or the master server DN to create or update replication topology entries.
**R010519 • R010753**

**R010519  Cannot modify a replication topology entry**

**Explanation:** An LDAP modify operation failed because a replica group, replica subentry, or replication agreement entry was attempted to be modified into a replication context entry. These replication topology entries are not allowed to have dual roles in a replication topology.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to no longer modify the entry into a replication context entry. Then, reissue the operation.

---

**R010750  No request data is found**

**Explanation:** An LDAP extended operation failed because there was no data to process in the request. See Supported extended operations for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Verify that the extended operation is properly encoded. Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

---

**R010751  Decoding error occurs when processing extended operation**

**Explanation:** An LDAP extended operation failed because the request could not be decoded. See Supported extended operations for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Verify that the extended operation is properly encoded. Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

---

**R010752  The syntax of the replication context DN is not valid**

**Explanation:** An LDAP extended operation failed because the syntax of the replication context distinguished name (DN) is not valid.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid replication context DN that exists and is a valid DN. Then, reissue the operation.

---

**R010753  The backend for entry 'name' does not replicate**

**Explanation:** An LDAP extended operation failed because the distinguished name (DN) specified in the request is not participating in a replication topology.

In the message text:

name

- Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid replication context or replication agreement DN that participates in a replication topology. Then, reissue the operation.
The entry 'name' does not exist or is not a replication context

**Explanation:** An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist or is not a valid replication context.

In the message text:

`name`  
Distinguished name of entry

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid DN that exists and is a replication context. Then, reissue the operation.

User does not have the authority to perform this extended operation

**Explanation:** An LDAP extended operation failed because the bound user does not have the authority to perform the extended operation. See [Supported extended operations](#) for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator to issue the extended operation or grant authorization for you to issue the extended operation. Then, reissue the operation.

Error encountered when normalizing the DN

**Explanation:** An LDAP extended operation failed because the syntax of the distinguished name (DN) of the replication topology entry is not valid and could not be normalized.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid replication topology DN. Then reissue the operation.

Unexpected error occurs while processing the extended operation

**Explanation:** An LDAP extended operation failed because the LDAP server detects an internal programming error during processing.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

The action specified on the extended operation input is not valid

**Explanation:** An LDAP extended operation failed because the *action* field encoded in the request is not valid. The *action* field is used in the [Cascading control replication](#), [Control replication queue](#), and [Control replication](#) extended operations. See [Supported extended operations](#) for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid integer for the *action* field. Then, reissue the operation.

The timeout value specified on the extended operation input cannot be negative

**Explanation:** An LDAP extended operation failed because the *timeout* field encoded in the request is a negative number that is not valid. The *timeout* field is used in the [Cascading control replication](#) and [Replication topology](#) extended operations and must be zero or greater. See [Supported extended operations](#) for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a valid integer for the *timeout* field. Then, reissue the operation.
R010760  The requested option specified for the error log extended operation is not valid.

Explanation: An LDAP extended operation failed because the errorOption field encoded in the request is not valid. The errorOption field is used in the Control replication error log extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid integer for the errorOption. Then, reissue the operation.

R010761  No replication agreement DN is specified.

Explanation: An LDAP extended operation failed because the replication agreement distinguished name (DN) is not encoded in the request. The replication agreement DN must be encoded in the Control replication error log extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a replication agreement DN. Then, reissue the operation.

R010762  The syntax of the replication agreement DN is not valid.

Explanation: An LDAP extended operation failed because the syntax of the replication context distinguished name (DN) is not valid. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication agreement DN that exists and is a valid DN. Then, reissue the operation.

R010763  The entry 'name' does not exist or is not under a replication context.

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist or is not under a valid replication context entry. See Supported extended operations for more information about the extended operations.

In the message text:

name

   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid DN that exists and is under a replication context. Then, reissue the operation.

R010764  The entry 'name' does not exist, is not an agreement, or is not serviced by this server.

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist, is not a valid replication agreement, or the entry is managed by another server. See Supported extended operations for more information.

In the message text:

name

   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid DN that exists, is a replication agreement, and is managed by this server. Then, reissue the operation.
R010765  The failure ID 'identifier' exists but is not logged for 'name'

Explanation: An LDAP extended operation failed because the failureId field encoded in the request exists in the directory but is not present in the replication agreement entry. The failureId field is used in the Control replication error log extended operation. See Supported extended operations for more information.

In the message text:

identifier  Failure identifier
name  Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to specify the correct replication agreement entry and failure ID. The multi-valued ibm-replicationFailedChanges attribute specifies the valid failure IDs for the replication agreement entry. Then reissue the operation.

R010766  Data for the requested failure ID 'identifier' cannot be retrieved or formatted

Explanation: An LDAP extended operation failed because the failureId field encoded in the request cannot be retrieved or formatted. The failureId field is used in the Control replication error log extended operation. See Supported extended operations for more information.

In the message text:

identifier  Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the correct failureId is specified. If the problem persists, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010767  The scope specified on the extended operation input is not valid

Explanation: An LDAP extended operation failed because the scope field encoded in the request is not valid. The scope field is used in the Control replication extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid scope value. Then, reissue the operation.

R010768  No replication agreement found for the context entry 'name'

Explanation: An LDAP extended operation failed because the replication context distinguished name (DN) encoded in the request does not have at least one valid replication agreement entry. The replication context is used in the Control replication error log and Replication topology extended operations. See Supported extended operations for more information.

In the message text:

name  Distinguished name of context

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a replication context DN that has at least one replication agreement entry. Then, reissue the operation.
R010769 • R010773

R010769  Change ID is not specified or is not valid with skip single option
Explanation: An LDAP extended operation failed because the changeld field encoded in the request is not valid when skipping a single replication change. The changeld field is used in the Control replication queue extended operation. See Supported extended operations for more information.
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input to specify a valid change ID or update the operation input to skip all replication changes. Then, reissue the operation.

R010770  Error encountered while retrieving the list of changes
Explanation: An LDAP extended operation failed because the list of replication changes or updates cannot be retrieved when performing the Control replication queue extended operation.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010771  Requested change ID 'identifier1' does not match next change ID 'identifier2'
Explanation: An LDAP extended operation failed because the changeld field encoded in the request does not match the next change identifier in the replication agreement. The changeld field is used in the Control replication queue extended operation and must match the next pending change in the replication queue. See Supported extended operations for more information.
In the message text:

\[identifier1\]
Requested change identifier

\[identifier2\]
Next change identifier
System action: The LDAP server continues to run, but the operation fails.
User response: Correct the operation input to specify the next pending change ID. The next pending change ID can be found in the multi-valued ibm-replicationPendingChanges attribute type. Then, reissue the operation.

R010772  Error encountered when server is updating the replication status
Explanation: An LDAP extended operation failed because an error was encountered while updating the replication status. The replication status is updated while performing the Control replication queue extended operation. See Supported extended operations for more information.
System action: The LDAP server continues to run, but the operation fails.
User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.
Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010773  There are no pending changes to skip
Explanation: An LDAP extended operation did not find any pending changes in the replication queue that needed to be skipped. Pending replication changes can be skipped by using the Control replication queue extended operation. The extended operation has completed successfully since there are no pending changes to skip in the replication queue. See Supported extended operations for more information.
System action: The LDAP server continues to run.
R010774  Context DN is required but not specified

Explanation: An LDAP extended operation failed because a replication context distinguished name (DN) is required but has not been specified. A replication context DN is required in the Replication topology extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the LDAP server input to specify a valid replication context DN. Then, reissue the operation.

R010775  Replication agreement entry 'name' was deleted

Explanation: An LDAP extended operation failed because the replication agreement distinguished name (DN) entry has been deleted. The Replication topology extended operation requires a valid and existing replication agreement entry. See Supported extended operations for more information.

In the message text:

name  Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the LDAP server input to specify a valid replication agreement DN. Then, reissue the operation.

R010776  Failed to contact target 'host:port' using replication agreement 'name'

Explanation: An LDAP extended operation failed because the LDAP server is not able to connect to the consumer server identified in the replication agreement entry.

In the message text:

host  Host name

port  Host port

name  Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the replication agreement entry has the correct host name, port number, and credentials entry specified for the consumer server. If the replication agreement entry is correct, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the server is not already running on the specified host or port numbers, start the server. Verify that the credentials entries on the supplier and consumer servers are using the same bind distinguished name and password values.

R010777  Replication extended operation timed out

Explanation: An LDAP extended operation failed because the timeout field encoded in the request has been exceeded. The timeout field is used in the Cascading control replication and Replication topology extended operations. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Increase the timeout value field to allow enough time for the extended operation to complete. Then, reissue the operation.

R010778  number1 servers synchronized successfully out of number2 attempts

Explanation: An LDAP extended operation was able to successfully synchronize the replication topology entries. Replication topology entries are synchronized by using the Replication topology extended operation. See Supported extended operations for more information.
R010779 • R010781

In the message text:

`number1`
Number of successful synchronizations

`number2`
Total number of attempted synchronizations

**System action:** The LDAP server continues to run. If the number of successful synchronizations equals the total number of attempted synchronizations, then the operation was successful. If the number of successful synchronizations does not equal the total number of attempted synchronizations, then the operation either fails or is only partially successful.

**User response:** If the operation is not successful, verify that all replication topology entries that are being synchronized are correct. In particular, verify that the credentials entries used on the supplier and consumer servers are using the bind distinguished name (DN) or password values with a simple bind credentials entry or the same SSL certificate with an SASL EXTERNAL bind credentials entry. Then, reissue the operation.

---

**R010779** Replication topology extended operation failed

**Explanation:** An LDAP extended operation failed because an error occurred while attempting to synchronize replication topology entries. Replication topology entries are synchronized by using the Replication topology extended operation. See [Supported extended operations](#) for more information.

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If the operation is not successful, verify that all replication topology entries that are being synchronized are correct. In particular, verify that the credentials entries used on the supplier and consumer servers are using the bind distinguished name (DN) or password values with a simple bind credentials entry or the same SSL certificate with an SASL EXTERNAL bind credentials entry. Then, reissue the operation.

---

**R010780** Server `host:port` skipped because there is no connection to it

**Explanation:** An LDAP extended operation skipped the consumer server indicated in the message because there is no current connection to it. The Cascading control replication extended operation provides the ability for an operation to be passed to all replication agreements under the replication context. See [Supported extended operations](#) for more information.

In the message text:

`host`
Host name

`port`
Host port

**System action:** The LDAP server continues to run, but the operation to the specified server fails.

**User response:** Verify that the indicated server is running. If there is not a configured server running on the indicated host name and port numbers, delete or modify the replication agreement entry that has the specified host and port number in the `ibm-replicaURL` attribute value. Then reissue the operation.

---

**R010781** Server `host:port` skipped because it is on hold

**Explanation:** An LDAP extended operation skipped the consumer server indicated in the message because replication is on hold or suspended. The Cascading control replication extended operation provides the ability for an operation to be passed to all replication agreements under the replication context. However, a replication agreement is skipped if replication is already on hold or suspended. See [Supported extended operations](#) for more information.

In the message text:

`host`
Host name

`port`
Host port

**System action:** The LDAP server continues to run, but the operation to the specified server fails.
User response: Verify that replication for the indicated server is on hold or suspended by requesting the ibm-replicationOnHold attribute in the replication agreement entry. Modify the replication agreement entry with the specified host and port number if replication should not be on hold or suspended. Then, reissue the operation.

R010782  Replication context is already quiesced/unquiesced

Explanation: An LDAP extended operation failed because the replication context is already quiesced or unquiesced. The Cascading control replication and Quiesce or unquiesce context extended operations allow a replication context to be quiesced or unquiesced. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: If the replication context is not already in the wanted state, correct the operation input to specify the opposite value. Then, reissue the operation.

R010783  Failure ID 'identifier' was not successfully removed

Explanation: An LDAP extended operation failed because the failureId encoded in the request was not successfully removed from the replication agreement entry. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
  Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify the correct failure ID is specified in the request by requesting the ibm-replicationFailedChanges attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010784  Failure ID 'identifier' successfully removed

Explanation: An LDAP extended operation successfully removed the failureId encoded in the request. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
  Failure identifier

System action: The LDAP server continues to run.

R010785  The replication extended operation will not continue since the target server is a master server

Explanation: An LDAP extended operation failed because the target server is a master server and it does not support the replicated request. The replicated extended operation request is not supported by the master server.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to no longer target a master server with the extended operation. Then, reissue the operation.

R010786  Failed to quiesce supplier

Explanation: An LDAP extended operation failed because the supplier server was not able to be quiesced. The Replication topology extended operation is used to quiesce a supplier server. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.
R010787 • R010790

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010787  Failed to build 'type' list
Explanation: An LDAP extended operation failed because an internal list could not be built.
In the message text:

  type
  Type of list

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010788  Consumer server down or not accepting updates from supplier. Retry for failure ID 'identifier' failed
Explanation: An LDAP extended operation failed because an error occurred while trying the request again in the replication agreement entry for the failureId encoded in the request. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.
In the message text:

  identifier
  Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the consumer server is running and the backend containing the replication topology successfully started. Then, reissue the operation.

R010789  Target server 'host:port' skipped by gateway
Explanation: An LDAP extended operation skipped the server indicated in the message because requests are not forwarded from one gateway server to another gateway server. The Cascading control replication extended operation enables an operation to be passed to all replication agreements under the replication context. See Supported extended operations for more information.
In the message text:

  host
  Host name

  port
  Host port

System action: The LDAP server continues to run, but the operation to the specified server is skipped.

R010790  number changes were skipped
Explanation: An LDAP extended operation successfully skipped the number of changes in the replication queue. The Control replication queue extended operation enables you to skip pending replication changes.
In the message text:

  number
  Number of changes

System action: The LDAP server continues to run.
R010791  Error occurs while parsing data for change ID 'identifier' for replica 'name'

Explanation: An LDAP extended operation failed because an error occurred while parsing and retrieving data from the replication agreement entry for the failureId encoded in the request. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:
identifier  Failure identifier
name  Replica name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010792  Error occurs while applying filter to replication operation

Explanation: An LDAP extended operation failed because an error occurred while applying a replication filter to the entries being replicated. The replication filter entry used by a replication agreement entry is specified in the ibm-replicationFilterDN attribute value.

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the replication filters in use by the replication agreement are valid. Ensure that the replication filters in use do not exclude any required attribute types from being replicated to a consumer server. If necessary, remove the ibm-replicationFilterDN attribute value from the replication agreement or update the replication filters. Then, reissue the operation.

R010793  Failed to retrieve data for failure ID 'identifier'

Explanation: An LDAP extended operation failed because an error occurred while parsing and retrieving data from the replication agreement entry for the failureId encoded in the request. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:
identifier  Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify the correct failure ID is specified in the request by requesting the ibm-replicationFailedChanges attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010794  Unable to remove failure ID 'identifier' from the replication error log

Explanation: An LDAP extended operation failed because an error occurred while removing the failureId encoded in the request from the replication agreement entry. The failureId field is used in the Control replication error log extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:
identifier  Failure identifier
R010795 • R010797

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Verify the correct failure ID is specified in the request by requesting the `ibm-replicationFailedChanges` attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

---

**R010795** The target server `host:port` does not support replication topology entries

**Explanation:** An LDAP extended operation failed because the target server does not support advanced replication topology entries.

In the message text:

- **host**
  - Host name
- **port**
  - Host port

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Verify that the target server supports advanced replication topology entries by ensuring that `useAdvancedReplication on` is specified in the CDBM backend section of the target server's configuration file. If a non-z/OS IBM Tivoli Directory Server is used for the target server, ensure that it is 6.0 or later.

---

**R010796** Failed to add the context DN as a suffix to the config file of the target server `host:port`

**Explanation:** An LDAP extended operation failed because the target server does not have a required suffix in its configuration file and does not support the non-z/OS IBM Tivoli Directory Server Dynamic update requests extended operation to automatically update the server configuration file. The Replication topology extended operation attempted to synchronize replication topology entries on the target server but it does not have the appropriate suffix. It also does not support the non-z/OS IBM Tivoli Directory Server Dynamic update requests extended operation to automatically update the server configuration file.

In the message text:

- **host**
  - Host name
- **port**
  - Host port

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Contact an LDAP administrator. After the problem is resolved, reissue the operation.

**Administrator response:** Update the configuration file of the target server to specify the suffix used by the replication context or replication agreement entry in an LDBM or TDBM backend. Then, restart the target server.

---

**R010797** The target server `host:port` does not have a needed suffix and it does not support config file update

**Explanation:** An LDAP extended operation failed because the target server does not have a required suffix in its configuration file and does not support the non-z/OS IBM Tivoli Directory Server Dynamic update requests extended operation to automatically update the server configuration file. The Replication topology extended operation attempted to synchronize replication topology entries on the target server but it does not have the appropriate suffix. It also does not support the non-z/OS IBM Tivoli Directory Server Dynamic update requests extended operation to automatically update the server configuration file.

In the message text:

- **host**
  - Host name
R010798

Unable to quiesce the target server

Explanation: An LDAP extended operation failed because the distinguished name specified in the request does not exist or is not a valid replication context entry. The Replication topology extended operation attempted to synchronize replication topology entries on the target server.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication context entry. Then, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010800 number1 failures removed successfully, number2 remain

Explanation: An LDAP extended operation successfully removed replication failures from the replication error log. The Control replication error log extended operation enables you to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

number1
  Number of failures removed

number2
  Number of failures remaining

System action: The LDAP server continues to run.

User response: If there are still failures remaining, do a search of the replication agreement entry and request the ibm-replicationFailedChanges operational attribute to determine the remaining failures. See Monitoring and diagnosing advanced replication problems for more information.

R010801 number1 failures retried successfully, number2 remain

Explanation: An LDAP extended operation successfully retried replication failures from the replication error log. The Control replication error log extended operation enables you to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

number1
  Number of failures retried

number2
  Number of failures remaining

System action: The LDAP server continues to run.

Chapter 7. Return and reason codes
**User response:** If there are still failures remaining, do a search of the replication agreement entry and request the `ibm-replicationFailedChanges` operational attribute to determine the remaining failures. See [Monitoring and diagnosing advanced replication problems](#) for more information.

**R010802**  
Failure ID 'identifier' was not successfully retried

**Explanation:** An LDAP extended operation failed because the failure ID could not be successfully retried. The Control replication error log extended operation enables you to delete, display, or retry replication failures. See [Supported extended operations](#) for more information.

In the message text:

```
identifier
```

Failure identifier

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** If there are still failures remaining, do a search of the replication agreement entry and request the `ibm-replicationFailedChanges` operational attribute to determine the remaining failures. See [Monitoring and diagnosing advanced replication problems](#) for more information.

**R010803**  
Failure ID 'identifier' successfully retried

**Explanation:** An LDAP extended operation was able to successfully retry the failure ID from the replication error log. The Control replication error log extended operation provides the ability to delete, display, or retry replication failures. See [Supported extended operations](#) for more information.

In the message text:

```
identifier
```

Failure identifier

**System action:** The LDAP server continues to run and the replication failure is removed from the replication error log.

**R010804**  
The target server 'host:port' does not support the extended operation

**Explanation:** An LDAP extended operation failed because the target server does not support the request. See [Supported extended operations](#) for the supported extended operations.

In the message text:

```
host
```

Host name

```
port
```

Host port

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to specify a supported extended operation. Then, reissue the operation.

**R010805**  
Extended operation failed since target server is not a master server for the context 'name'.

**Explanation:** An LDAP extended operation failed because the target server is not a master server for the replication context distinguished name (DN).

In the message text:

```
name
```

Distinguished name of context

**System action:** The LDAP server continues to run, but the operation fails.

**User response:** Correct the operation input to target the extended operation against the master or supplier server in the replication topology. Then, reissue the operation.
### Remote crypto plug-in reason codes

This section lists the reason codes that are issued by the remote crypto plug-in and their diagnostic information. These reason codes have a prefix of "RC".

<table>
<thead>
<tr>
<th>Reason Code</th>
<th>Description</th>
<th>Explanation</th>
<th>System action</th>
<th>Operator response</th>
<th>User response</th>
<th>Administrator response</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC00001</td>
<td>Unable to allocate storage</td>
<td>The remote crypto operation failed because the plug-in is unable to allocate the necessary storage to continue processing the request.</td>
<td>The remote crypto operation fails.</td>
<td>Increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.</td>
<td>Contact the operator and an LDAP administrator. After the problem is resolved, reissue the request.</td>
<td>Contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.</td>
</tr>
<tr>
<td>RC00002</td>
<td>Unable to decode field from request, rc=return_code</td>
<td>The remote crypto extended operation failed because the plug-in is unable to decode the request. The most likely return code is:</td>
<td>The remote crypto extended operation fails.</td>
<td>For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.</td>
<td>If the problem is in the encoding, verify that the extended operation is correctly encoded. See the Remote crypto plug-in for more information about the extended operation encoding. Then reissue the extended operation request. If the problem is a storage issue, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.</td>
<td>For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.</td>
</tr>
<tr>
<td>RC00003</td>
<td>Unable to encode field, rc=return_code</td>
<td>The remote crypto extended operation failed because the plug-in is unable to encode the response. The most likely return code is:</td>
<td>The remote crypto extended operation fails.</td>
<td>For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RC00004 • RC00006

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

---

RC00004  Unable to set pblock parameter arg, errno=errno

Explanation: The remote crypto extended operation failed because the plug-in is unable to set a value in the internal plug-in parameter block.

In the message text:

arg
  arg specified on slapi_pblock_set()

errno
  errno set by slapi_pblock_set()

System action: The remote crypto extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Using the arg and errno values from the error text, see the description of slapi_pblock_set() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

---

RC00005  Unable to get pblock parameter arg, errno=errno

Explanation: The remote crypto extended operation failed because the plug-in is unable to get a value from the internal plug-in parameter block.

In the message text:

arg
  arg specified on slapi_pblock_get()

errno
  errno set by slapi_pblock_get()

System action: The remote crypto extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Using the arg and errno values from the error text, see the description of slapi_pblock_get() in z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for more information about the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

---

RC00006  Specified hexadecimal value value for variable variable is not valid

Explanation: The remote crypto extended operation failed because the hexadecimal value for the field is not valid. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

value
  Value of variable

variable
  Variable name

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.
RC00007  Unable to decode required element field from request

Explanation: The remote crypto extended operation failed because the plug-in is unable to decode a required ASN.1 element from the input request value. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
  Request field

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00008 Encountered an unexpected hexadecimal tag value tagValue while trying to decode field

Explanation: The remote crypto extended operation failed because the plug-in has encountered an unexpected tag value on a request field. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
  Request field

tagValue
    Tag value that is not valid

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00009 Value specified for field is not valid.

Explanation: The remote crypto extended operation failed because the crypto plug-in has encountered a value for a field that is not valid. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
  Request field

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00010 Unable to create mutex: error_code/reason_code - error_text

Explanation: The remote crypto operation failed because the plug-in is unable to create a mutex. See the description of pthread_mutex_init() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

error_code
  Error code from pthread_mutex_init()

reason_code
  Reason code from pthread_mutex_init()

error_text
  Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Use the information in the message to correct the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.
RC00011 • RC00013

RC00011  Unable to acquire mutex: error_code/reason_code - error_text

Explanation: The remote crypto operation failed because the plug-in is unable to acquire a mutex. See the description of pthread_mutex_lock() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
- error_code
  Error code from pthread_mutex_lock()
- reason_code
  Reason code from pthread_mutex_lock()
- error_text
  Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Use the information in the message to correct the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

RC00012  Unable to release mutex: error_code/reason_code - error_text

Explanation: The remote crypto operation failed because the plug-in is unable to release a mutex. See the description of pthread_mutex_unlock() in z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:
- error_code
  Error code from pthread_mutex_unlock()
- reason_code
  Reason code from pthread_mutex_unlock()
- error_text
  Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Use the information in the message to correct the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

RC00013  No SAF identity found for DN='dn'

Explanation: The remote crypto extended operation failed because the user has not bound to the LDAP server or has not bound to the LDAP server with credentials that result in an SAF identity. The remote crypto operation requires an LDAP bind done in one of following manners:
- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM or TDBM binds that are not using native authentication do not result in a SAF identity being used. See the Remote crypto plug-in for more information.

In the message text:
- dn  Distinguished name bound to the connection
System action: The remote crypto extended operation fails.
User response: Perform a supported bind and reissue the extended operation.

**RC00014 Length is not valid: field (length)**

Explanation: The remote crypto extended operation failed because the length of a value is not valid. The request field indicates a length field of type integer whose value was not valid, or a string field whose encoded length was not valid. See the [Remote crypto plug-in](#) for more information about the extended operation encoding.

In the message text:

*field*
  Request field

*length*
  Length specified

System action: The remote crypto extended operation fails.
User response: Correct the input data and reissue the extended operation request.

**RC00015 Value specified for rule array count (count) is not consistent with the length of the rule array (length)**

Explanation: The remote crypto extended operation failed because the rule array count value is larger than the number of rules the rule array can hold. Note that each rule is 8 bytes in length and the total length of the rule array must be a multiple of 8. See the [Remote crypto plug-in](#) for more information about the extended operation encoding.

In the message text:

*count*
  Rule array count specified

*length*
  Length of the rule array specified

System action: The remote crypto extended operation fails.
User response: Correct the rule array count value or rule array, then reissue the extended operation request.

**RC00016 A bind to the LDAP server is required before attempting this function**

Explanation: The remote crypto extended operation failed because the user has not bound to the LDAP server. The remote crypto operation requires an LDAP bind done in one of following manners:

- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM or TDBM binds that are not using native authentication do not result in a SAF identity being used. See the [Remote crypto plug-in](#) for more information.

System action: The remote crypto extended operation fails.
User response: Perform a supported bind and reissue the extended operation request.

**RC00017 Length of value specified for field (length) is not valid. A minimum of min_length bytes is required**

Explanation: The remote crypto extended operation failed because the length of a value is too short. See the [Remote crypto plug-in](#) for more information about the extended operation encoding.

In the message text:

*field*
  Request field

*length*
RC00018

*length*
Length of the value specified

*min_length*
Required minimum length of the value

**System action:** The remote crypto extended operation fails.

**User response:** Correct the input data and reissue the extended operation request.

---

RC00018 Length of value specified for field (length) is not valid. Data contents indicate a minimum of min_length bytes is required

**Explanation:** The remote crypto extended operation failed because the length of a value is too short based on data within the request field. This error is issued for token identifiers whose length is defined by the data contents of the token identifier itself. Either the amount of data supplied is smaller than the length defined in the data, or it is smaller than the number of bytes needed to determine the defined length. See the [Remote crypto plug-in](https://www.ibm.com/support/knowledgecenter/en/SFPSGS_12.1.0/com.ibm.zos.v2r11.world_wide_browsing.doc/remote_crypto.html) for more information about the extended operation encoding. See [z/OS Cryptographic Services ICSF Application Programmer's Guide](https://www.ibm.com/support/knowledgecenter/en/SF1SL0_12.1.0/com.ibm.zos.v2r12.doc/gdfs/gdfs_icsf.html) for more information about ICSF token identifier formats.

In the message text:

*field*
Request field

*length*
Length of the value specified

*min_length*
Required minimum length of the value based on its contents

**System action:** The remote crypto extended operation fails.

**User response:** Correct the input data and reissue the extended operation request.
ICTX plug-in reason codes

This section lists the reason codes that are issued by the ICTX plug-in and their diagnostic information. These reason codes have a prefix of "ITYXOR".

ITYXOR00  LDAP server is out of storage

Explanation: An LDAP operation failed because the LDAP server is unable to allocate the necessary storage to continue processing the request.

System action: Depending on the severity of the storage problem, the LDAP server might continue or might end. The LDAP operation fails.

Operator response: Increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then, restart the LDAP server.

ITYXOR01  Server is not program controlled

Explanation: An LDAP operation failed because a call to __passwd() returned EMVSERR indicating that the function is not supported in an address space where a load was done from an uncontrolled library.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact the LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the BPX.DAEMON facility class profile is defined, then all modules within the address space must be loaded from a controlled library. This includes all modules in the application and runtime libraries. See z/OS UNIX System Services Planning for more information about checking program control. If the problem persists, contact the service representative.

ITYXOR03  Password is incorrect, or userID is undefined/revoked

Explanation: An LDAP bind operation to the ICTX plug-in failed. Either the password that is specified in the bind does not match the password of the z/OS Security Server user that is associated with the bind DN or the z/OS Security Server user definition is not defined or is revoked. For RACF, the password can be a password or a password phrase. Also, for RACF, the user profile must be defined, with a password or password phrase, and a UID value in the OMVS segment.

System action: The LDAP server continues to run, but the operation fails.

User response: If the password (or password phrase) is not correct, reissue the bind request with the correct value. If the user is not defined in the z/OS Security Server, contact a z/OS Security Server administrator.

ITYXOR04  DN is not a valid RACF bind DN

Explanation: An LDAP operation to the ICTX plug-in failed because it involved a distinguished name (DN) that is not a valid ICTX DN.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a DN value that is a valid ICTX DN. In particular, the format of an ICTX DN is racfid=x, cn=ictx. For the racfid that is part of this DN, the racfid value must be from 1 to 8 characters long. The value must not contain a space or a comma, and the value cannot be an asterisk (*). Then, reissue the LDAP operation.
ITYXOR08 Request OID not supported by ICTX

Explanation: An extended operation request to the ICTX plug-in failed because the ICTX plug-in does not support the extended operation OID. The ICTX plug-in does not contain any processing for the requested OID.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the correct OID is specified in the operation input. See z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for the OIDs of the extended operations that the ICTX plug-in supports. Then, reissue the operation.

ITYXOR14 Failure decoding request value

Explanation: The ICTX request failed because it includes a sequence that is not valid and cannot be decoded.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Verify that the ICTX extended operation input is correctly encoded. See z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Contact an LDAP administrator to determine if there are any server messages or ERROR debug trace output generated during the ICTX request processing that might help locating and correcting the problem. Then, reissue the ICTX extended operation.

Administrator response: If requested, gather any server message and ERROR debug output that is created by the ICTX processing.

ITYXOR15 Request version is not found

Explanation: The ICTX request failed because it did not include a version.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Update your ICTX input to include a version. Check that all the sequences in the ICTX operation input are correctly encoded. See z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Then, reissue the ICTX extended operation.

ITYXOR16 Itemlist is not found

Explanation: The ICTX request failed because it did not include an itemlist.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Update your ICTX input to include an itemlist. Check that all the sequences in the ICTX operation input are correctly encoded. See z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Then, reissue the ICTX extended operation.

ITYXOR17 Failure getting plugin parameter block value

Explanation: The ICTX extended operation failed because it was unable to get a value from the internal plug-in parameter block.

System action: The LDAP server continues to run, but the ICTX request fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.
ITYXOR18  Failure setting plugin parameter block value

Explanation:  The ICTX extended operation failed because it was unable to set a value in the internal plug-in parameter block.

System action:  The LDAP server continues to run, but the ICTX request fails.

Operator response:  For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response:  Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response:  For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

ITYXOR19  Unsupported bind mechanism

Explanation:  The LDAP bind operation to the ICTX plug-in failed because it specifies an authentication method that is not allowed.

System action:  The LDAP server continues to run, but the operation fails.

User response:  The ICTX operation requires an LDAP bind that is done in one of following manners:

- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.
- A simple bind to the ICTX plug-in, which has a suffix of cn=ICTX. The bind distinguished name is in the following format: racfid=userid,cn=ICTX.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM, CDBM, or TDBM binds that are not using native authentication, do not result in a SAF identity being used. See [z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS](http://www.ibm.com) for more information. Change the bind input to use one of the supported authentication methods. Then, reissue the operation.
Appendix. Accessibility

Accessible publications for this product are offered through IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

If you experience difficulty with the accessibility of any z/OS information, send a detailed message to the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html) or use the following mailing address.

IBM Corporation
Attention: MHVRCFS Reader Comments
Department H6MA, Building 707
2455 South Road
Poughkeepsie, NY 12601-5400
United States

Accessibility features

Accessibility features help users who have physical disabilities such as restricted mobility or limited vision use software products successfully. The accessibility features in z/OS can help users do the following tasks:
• Run assistive technology such as screen readers and screen magnifier software.
• Operate specific or equivalent features by using the keyboard.
• Customize display attributes such as color, contrast, and font size.

Consult assistive technologies

Assistive technology products such as screen readers function with the user interfaces found in z/OS. Consult the product information for the specific assistive technology product that is used to access z/OS interfaces.

Keyboard navigation of the user interface

You can access z/OS user interfaces with TSO/E or ISPF. The following information describes how to use TSO/E and ISPF, including the use of keyboard shortcuts and function keys (PF keys). Each guide includes the default settings for the PF keys.
• z/OS TSO/E Primer
• z/OS TSO/E User’s Guide
• z/OS V2R2 ISPF User’s Guide Vol I

Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users who access IBM Knowledge Center with a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line because they are considered a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that the screen reader is set to read out
punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1) are mutually exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The * symbol is placed next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element *FILE with dotted decimal number 3 is given the format 3 \* FILE. Format 3* FILE indicates that syntax element FILE repeats. Format 3* \* FILE indicates that syntax element * FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol to provide information about the syntax elements. For example, the lines 5.1*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, it indicates a reference that is defined elsewhere. The string that follows the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 means that you must refer to separate syntax fragment OP1.

The following symbols are used next to the dotted decimal numbers.

? indicates an optional syntax element
The question mark (?) symbol indicates an optional syntax element. A dotted decimal number followed by the question mark symbol (?) indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that the syntax elements NOTIFY and UPDATE are optional. That is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.

! indicates a default syntax element
The exclamation mark (!) symbol indicates a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicate that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the dotted decimal number can specify the ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the
default option for the FILE keyword. In the example, if you include the FILE keyword, but do not specify an option, the default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, the default FILE(KEEP) is used.

However, if you hear the lines 2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE), the default option KEEP applies only to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.

* indicates an optional syntax element that is repeatable

The asterisk or glyph (*) symbol indicates a syntax element that can be repeated zero or more times. A dotted decimal number followed by the * symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line 5.1* data area, you know that you can include one data area, more than one data area, or no data area. If you hear the lines 3*, 3 HOST, 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

Notes:

1. If a dotted decimal number has an asterisk (*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.

2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.

3. The * symbol is equivalent to a loopback line in a railroad syntax diagram.

+ indicates a syntax element that must be included

The plus (+) symbol indicates a syntax element that must be included at least once. A dotted decimal number followed by the + symbol indicates that the syntax element must be included one or more times. That is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the * symbol, the + symbol can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the * symbol, is equivalent to a loopback line in a railroad syntax diagram.
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for service, and current service activity will cease if a problem is determined to be associated with out-of-support devices. In such cases, fixes will not be issued.

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