

z/OS Communications Server



IP Messages: Volume 2 (EZB, EZD)

Version 2 Release 2

Note:

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 809.

This edition applies to Version 2 Release 2 of z/OS (5650-ZOS), and to subsequent releases and modifications until otherwise indicated in new editions.

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About this document

This document describes the Internet Protocol (IP) messages that occur in z/OS® Communications Server. The information in this document supports both IPv6 and IPv4. Unless explicitly noted, information describes IPv4 networking protocol. IPv6 support is qualified in the text.

For information about how to set up, initialize, and customize your Transmission Control Protocol/Internet Protocol (TCP/IP) services system, see the z/OS Communications Server: IP Configuration Reference, the z/OS Communications Server: IP Configuration Guide and the z/OS Communications Server: IP Programmer's Guide and Reference. For information about how to use the applications on your TCP/IP system, see z/OS Communications Server: IP User's Guide and Commands.

This document refers to Communications Server data sets by their default SMP/E distribution library name. Your installation might, however, have different names for these data sets where allowed by SMP/E, your installation personnel, or administration staff. For instance, this document refers to samples in SEZAINST library as simply in SEZAINST. Your installation might choose a data set name of SYS1.SEZAINST, CS390.SEZAINST or other high level qualifiers for the data set name.

Who should read this document

This document assists TCP/IP operators, system programmers, and users to:

- Analyze a problem
- Classify the problem as a specific type
- Describe the problem to the IBM® Software Support Center

Familiarity with TCP/IP concepts and terms is assumed.

How this document is organized

The messages are listed in alphanumeric order by message ID. For each message ID, the book contains the text and a description of the message. This book contains the following chapters:

- Chapter 2, "EZB0xxxx messages," on page 7 contains messages in the EZB0xxxx range.
- Chapter 3, "EZB1xxxx messages," on page 79 contains messages in the EZB1xxxx range.
- Chapter 4, "EZB2xxxx messages," on page 97 contains messages in the EZB2xxxx range.
- Chapter 5, "EZB3xxxx messages," on page 147 contains messages in the EZB3xxxx range.
- Chapter 6, "EZB4xxxx messages," on page 227 contains messages in the EZB4xxxx range.
- Chapter 7, "EZB6xxxx messages," on page 259 contains messages in the EZB6xxxx range.

- Chapter 9, “EZB9xxxx messages,” on page 263 contains common messages that are called by several application and function components. These messages are in the EZB9xxxx range.
- Chapter 10, “EZHxxxx messages,” on page 265 contains IBM Health Checker for z/OS messages in the EZBHxxxx range.
- Chapter 11, “EVD0xxxx messages,” on page 279 contains messages in the EZD0xxxx range.
- Chapter 12, “EVD1xxxx messages,” on page 387 contains messages in the EZD1xxxx range.
- Chapter 13, “EVD2xxxx messages,” on page 761 contains messages in the EZD2xxxx range.
- Appendix A, “Related protocol specifications,” on page 783 lists the related protocol specifications for TCP/IP.
- Appendix B, “Accessibility,” on page 807 describes accessibility features to help users with physical disabilities.
- “Notices” on page 809 contains notices and trademarks used in this document.
- “Bibliography” on page 819 contains descriptions of the documents in the z/OS Communications Server library.

How to use this document

To use this document, you should be familiar with z/OS TCP/IP Services and the TCP/IP suite of protocols.

Determining whether a publication is current

As needed, IBM updates its publications with new and changed information. For a given publication, updates to the hardcopy and associated BookManager® softcopy are usually available at the same time. Sometimes, however, the updates to hardcopy and softcopy are available at different times. The following information describes how to determine if you are looking at the most current copy of a publication:

- At the end of a publication's order number there is a dash followed by two digits, often referred to as the dash level. A publication with a higher dash level is more current than one with a lower dash level. For example, in the publication order number GC28-1747-07, the dash level 07 means that the publication is more current than previous levels, such as 05 or 04.
- If a hardcopy publication and a softcopy publication have the same dash level, it is possible that the softcopy publication is more current than the hardcopy publication. Check the dates shown in the Summary of Changes. The softcopy publication might have a more recently dated Summary of Changes than the hardcopy publication.
- To compare softcopy publications, you can check the last 2 characters of the publication's file name (also called the book name). The higher the number, the more recent the publication. Also, next to the publication titles in the CD-ROM booklet and the readme files, there is an asterisk (*) that indicates whether a publication is new or changed.

How to contact IBM service

For immediate assistance, visit this website: <http://www.software.ibm.com/network/commserver/support/>

Most problems can be resolved at this website, where you can submit questions and problem reports electronically, and access a variety of diagnosis information.

For telephone assistance in problem diagnosis and resolution (in the United States or Puerto Rico), call the IBM Software Support Center anytime (1-800-IBM-SERV). You will receive a return call within 8 business hours (Monday – Friday, 8:00 a.m. – 5:00 p.m., local customer time).

Outside the United States or Puerto Rico, contact your local IBM representative or your authorized IBM supplier.

If you would like to provide feedback on this publication, see “Communicating your comments to IBM” on page 823.

Conventions and terminology that are used in this document

Commands in this book that can be used in both TSO and z/OS UNIX environments use the following conventions:

- When describing how to use the command in a TSO environment, the command is presented in uppercase (for example, NETSTAT).
- When describing how to use the command in a z/OS UNIX environment, the command is presented in bold lowercase (for example, **netstat**).
- When referring to the command in a general way in text, the command is presented with an initial capital letter (for example, Netstat).

All the exit routines described in this document are *installation-wide exit routines*. The installation-wide exit routines also called installation-wide exits, exit routines, and exits throughout this document.

The TPF logon manager, although included with VTAM®, is an application program; therefore, the logon manager is documented separately from VTAM.

Samples used in this book might not be updated for each release. Evaluate a sample carefully before applying it to your system.

Note: In this information, you might see the following Shared Memory Communications over Remote Direct Memory Access (SMC-R) terminology:

- RDMA network interface card (RNIC), which is used to refer to the IBM 10GbE RoCE Express® feature.
- Shared RoCE environment, which means that the 10GbE RoCE Express feature operates on an IBM z13™ (z13) or later system, and that the feature can be used concurrently, or shared, by multiple operating system instances. The RoCE Express feature is considered to operate in a shared RoCE environment even if you use it with a single operating system instance.

For definitions of the terms and abbreviations that are used in this document, you can view the latest IBM terminology at the IBM Terminology website.

Clarification of notes

Information traditionally qualified as Notes is further qualified as follows:

Note Supplemental detail

Tip Offers shortcuts or alternative ways of performing an action; a hint

Guideline

Customary way to perform a procedure

Rule Something you must do; limitations on your actions**Restriction**

Indicates certain conditions are not supported; limitations on a product or facility

Requirement

Dependencies, prerequisites

Result Indicates the outcome

Prerequisite and related information

z/OS Communications Server function is described in the z/OS Communications Server library. Descriptions of those documents are listed in "Bibliography" on page 819, in the back of this document.

Required information

Before using this product, you should be familiar with TCP/IP, VTAM, MVSTM, and UNIX System Services.

Softcopy information

Softcopy publications are available in the following collection.

Titles	Order Number	Description
<i>IBM System z Redbooks Collection</i>	SK3T-7876	The IBM Redbooks [®] publications selected for this CD series are taken from the IBM Redbooks inventory of over 800 books. All the Redbooks publications that are of interest to the System z [®] platform professional are identified by their authors and are included in this collection. The System z subject areas range from e-business application development and enablement to hardware, networking, Linux, solutions, security, parallel sysplex, and many others. For more information about the Redbooks publications, see http://www-03.ibm.com/systems/z/os/zos/zfavorites/ .

Other documents

This information explains how z/OS references information in other documents.

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 Information Roadmap (SA23-2299). The Roadmap describes what level of documents are supplied with each release of z/OS Communications Server, and also describes each z/OS publication.

To find the complete z/OS library, visit the z/OS library in IBM Knowledge Center (www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

Relevant RFCs are listed in an appendix of the IP documents. Architectural specifications for the SNA protocol are listed in an appendix of the SNA documents.

The following table lists documents that might be helpful to readers.

Title	Number
<i>DNS and BIND</i> , Fifth Edition, O'Reilly Media, 2006	ISBN 13: 978-0596100575
<i>Routing in the Internet</i> , Second Edition, Christian Huitema (Prentice Hall 1999)	ISBN 13: 978-0130226471
<i>sendmail</i> , Fourth Edition, Bryan Costales, Claus Assmann, George Jansen, and Gregory Shapiro, O'Reilly Media, 2007	ISBN 13: 978-0596510299
<i>SNA Formats</i>	GA27-3136
<i>TCP/IP Illustrated, Volume 1: The Protocols</i> , W. Richard Stevens, Addison-Wesley Professional, 1994	ISBN 13: 978-0201633467
<i>TCP/IP Illustrated, Volume 2: The Implementation</i> , Gary R. Wright and W. Richard Stevens, Addison-Wesley Professional, 1995	ISBN 13: 978-0201633542
<i>TCP/IP Illustrated, Volume 3: TCP for Transactions, HTTP, NNTP, and the UNIX Domain Protocols</i> , W. Richard Stevens, Addison-Wesley Professional, 1996	ISBN 13: 978-0201634952
<i>TCP/IP Tutorial and Technical Overview</i>	GG24-3376
<i>Understanding LDAP</i>	SG24-4986
<i>z/OS Cryptographic Services System SSL Programming</i>	SC14-7495
<i>z/OS IBM Tivoli Directory Server Administration and Use for z/OS</i>	SC23-6788
<i>z/OS JES2 Initialization and Tuning Guide</i>	SA32-0991
<i>z/OS Problem Management</i>	SC23-6844
<i>z/OS MVS Diagnosis: Reference</i>	GA32-0904
<i>z/OS MVS Diagnosis: Tools and Service Aids</i>	GA32-0905
<i>z/OS MVS Using the Subsystem Interface</i>	SA38-0679
<i>z/OS Program Directory</i>	GI11-9848
<i>z/OS UNIX System Services Command Reference</i>	SA23-2280
<i>z/OS UNIX System Services Planning</i>	GA32-0884
<i>z/OS UNIX System Services Programming: Assembler Callable Services Reference</i>	SA23-2281
<i>z/OS UNIX System Services User's Guide</i>	SA23-2279
<i>z/OS XL C/C++ Runtime Library Reference</i>	SC14-7314
<i>zEnterprise System and System z10 OSA-Express Customer's Guide and Reference</i>	SA22-7935

Redbooks publications

The following Redbooks publications might help you as you implement z/OS Communications Server.

Title	Number
<i>IBM z/OS V2R1 Communications Server TCP/IP Implementation, Volume 1: Base Functions, Connectivity, and Routing</i>	SG24-8096
<i>IBM z/OS V2R1 Communications Server TCP/IP Implementation, Volume 2: Standard Applications</i>	SG24-8097
<i>IBM z/OS V2R1 Communications Server TCP/IP Implementation, Volume 3: High Availability, Scalability, and Performance</i>	SG24-8098
<i>IBM z/OS V2R1 Communications Server TCP/IP Implementation, Volume 4: Security and Policy-Based Networking</i>	SG24-8099
<i>IBM Communication Controller Migration Guide</i>	SG24-6298

Title	Number
<i>IP Network Design Guide</i>	SG24-2580
<i>Managing OS/390 TCP/IP with SNMP</i>	SG24-5866
<i>Migrating Subarea Networks to an IP Infrastructure Using Enterprise Extender</i>	SG24-5957
<i>SecureWay Communications Server for OS/390 V2R8 TCP/IP: Guide to Enhancements</i>	SG24-5631
<i>SNA and TCP/IP Integration</i>	SG24-5291
<i>TCP/IP in a Sysplex</i>	SG24-5235
<i>TCP/IP Tutorial and Technical Overview</i>	GG24-3376
<i>Threadsafte Considerations for CICS</i>	SG24-6351

Where to find related information on the Internet

z/OS

This site provides information about z/OS Communications Server release availability, migration information, downloads, and links to information about z/OS technology

<http://www.ibm.com/systems/z/os/zos/>

z/OS Internet Library

Use this site to view and download z/OS Communications Server documentation

www.ibm.com/systems/z/os/zos/bkserv/

IBM Communications Server product

The primary home page for information about z/OS Communications Server

<http://www.software.ibm.com/network/commserver/>

IBM Communications Server product support

Use this site to submit and track problems and search the z/OS Communications Server knowledge base for Technotes, FAQs, white papers, and other z/OS Communications Server information

<http://www.software.ibm.com/network/commserver/support/>

IBM Communications Server performance information

This site contains links to the most recent Communications Server performance reports.

<http://www.ibm.com/support/docview.wss?uid=swg27005524>

IBM Systems Center publications

Use this site to view and order Redbooks publications, RedpapersTM, and Technotes

<http://www.redbooks.ibm.com/>

IBM Systems Center flashes

Search the Technical Sales Library for Techdocs (including Flashes, presentations, Technotes, FAQs, white papers, Customer Support Plans, and Skills Transfer information)

<http://www.ibm.com/support/techdocs/atstrmstr.nsf>

Tivoli® NetView® for z/OS

Use this site to view and download product documentation about Tivoli NetView for z/OS

<http://www.ibm.com/support/knowledgecenter/SSZJDU/welcome>

RFCs

Search for and view Request for Comments documents in this section of the Internet Engineering Task Force website, with links to the RFC repository and the IETF Working Groups web page

<http://www.ietf.org/rfc.html>

Internet drafts

View Internet-Drafts, which are working documents of the Internet Engineering Task Force (IETF) and other groups, in this section of the Internet Engineering Task Force website

<http://www.ietf.org/ID.html>

Information about web addresses can also be found in information APAR II11334.

Note: Any pointers in this publication to websites are provided for convenience only and do not serve as an endorsement of these websites.

DNS websites

For more information about DNS, see the following USENET news groups and mailing addresses:

USENET news groups

<comp.protocols.dns.bind>

BIND mailing lists

<https://lists.isc.org/mailman/listinfo>

BIND Users

- Subscribe by sending mail to bind-users-request@isc.org.
- Submit questions or answers to this forum by sending mail to bind-users@isc.org.

BIND 9 Users (This list might not be maintained indefinitely.)

- Subscribe by sending mail to bind9-users-request@isc.org.
- Submit questions or answers to this forum by sending mail to bind9-users@isc.org.

The z/OS Basic Skills Information Center

The z/OS Basic Skills Information Center is a web-based information resource intended to help users learn the basic concepts of z/OS, the operating system that runs most of the IBM mainframe computers in use today. The Information Center is designed to introduce a new generation of Information Technology professionals to basic concepts and help them prepare for a career as a z/OS professional, such as a z/OS systems programmer.

Specifically, the z/OS Basic Skills Information Center is intended to achieve the following objectives:

- Provide basic education and information about z/OS without charge

- Shorten the time it takes for people to become productive on the mainframe
- Make it easier for new people to learn z/OS

To access the z/OS Basic Skills Information Center, open your web browser to the following website, which is available to all users (no login required):
<http://www-01.ibm.com/support/knowledgecenter/zosbasics/com.ibm.zos.zbasics/homepage.html?cp=zosbasics%2F0>

Summary of changes for IP Messages: Volume 2 (EZB, EZD)

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Changes made in z/OS Version 2 Release 2

This document contains information previously presented in z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM), SC27-3657-01, which supported z/OS Version 2 Release 1.

New information

- EZD159I
- EZD2030I
- EZD2031I
- EZD2032I
- EZD2033I
- EZD2034I
- EZD2040I
- EZD2041I

Changed information

- EZB2460E
- EZBH008E

Deleted information

- EZB880I

Changes made in z/OS Version 2 Release 1, as updated December 2013

This document contains information previously presented in z/OS Communications Server: IP Messages Volume 2 (EZB, EZD), SC27-3655-00, which supported z/OS Version 2 Release 1.

New information

- EZD2029I

Summary of changes for z/OS Version 2 Release 1

For specifics on the enhancements for z/OS Version 2, Release 1, see the following publications:

- z/OS Summary of Message and Interface Changes
- z/OS Introduction and Release Guide
- z/OS Planning for Installation
- z/OS Migration

Chapter 1. IP message standards introduction

This topic contains the following information about IP message standards:

- “Message text formats”
- “Message description formats” on page 3
- “Message routing codes” on page 4
- “Message descriptor codes” on page 5
- “Message groups” on page 6

Message text formats

Most IP messages are preceded by an identifier, as illustrated in Figure 1.

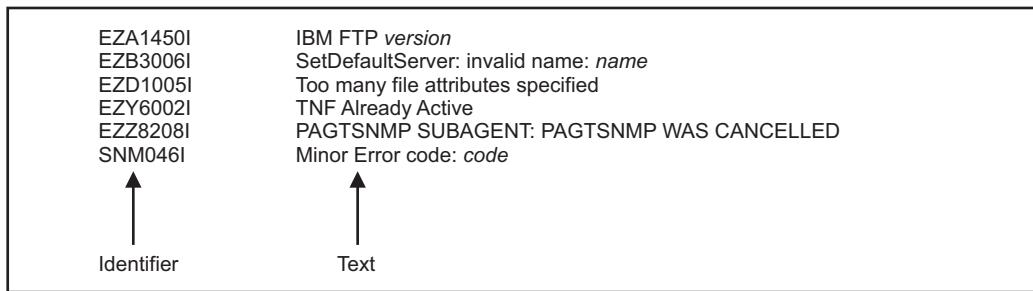


Figure 1. Sample IP message format

Message identifiers

All message identifiers include the following sections:

- Prefix
- Message number
- Message type code

See Figure 2 on page 2 for a sample IP message identifier.

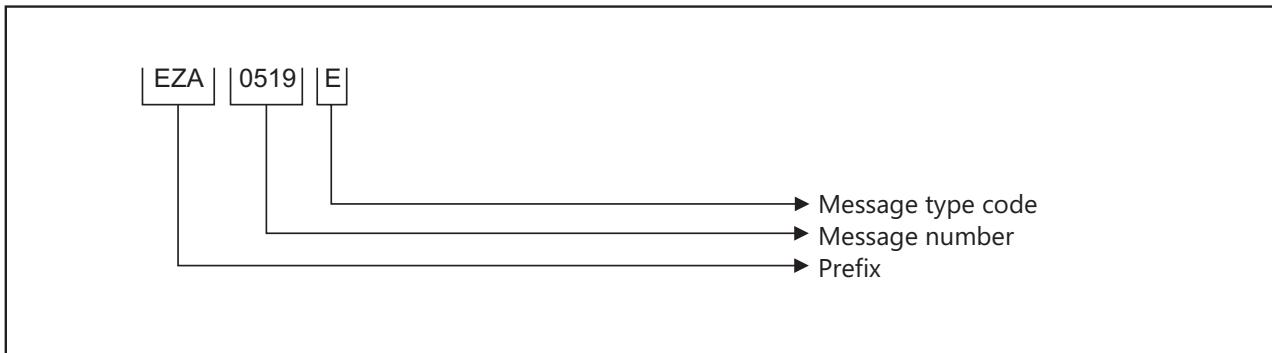


Figure 2. Sample IP message identifier

Prefix

Message identifiers include a prefix that identifies the source of the message. The following message prefixes are used by TCP/IP and its associated applications:

- EZA
- EZAIN
- EZAOP
- EZB
- EZBH
- EZD
- EZY
- EZYF
- EZYP
- EZYR
- EZYT
- EZYX
- EZZ
- SNM

Message number

Message identifiers include a unique 2- through 4-digit message number.

Message type code

The following type codes are used in IP messages:

A Action

The message indicates that an action is required.

E Eventual Action

You must eventually take some action to correct a problem. The system continues processing without waiting for a response.

I Information

The message is for your information. This type code can be used to notify you of an error. No response is necessary, but you might need to take some action.

S Severe Error

The message is for a system programmer.

W Wait

Processing stops until the operator takes a required action.

Syntax notation in message text

In this documentation, IP messages are described with the following syntax notation:

Non-highlighted characters

Represent the actual text of the message.

italic characters

Represent message variables. The variables are replaced by their values in the actual message.

Braces { }

Represent a group of text strings, only one of which is displayed in the actual message. The text strings are separated by or-signs (!) in the braces.

The braces and or-signs are not displayed in the actual message.

Brackets []

Represent optional messages or optional parts of a message. Optional messages or optional parts of a message are displayed only under certain circumstances that are described in the "Explanation" section of the message. If an optional part has more than one possible value, or-signs separate the possibilities.

The brackets and or-signs are not displayed in the actual message.

Message description formats

A message consists of several sections. Not all sections are used for each message. For messages that are issued as a group, the "Explanation" section of the first message usually contains a complete description of the other messages in the group.

Explanation

Explains why the message was issued and describes all text and variables in the message.

System action

Explains the system state after the message was issued. This section also indicates whether the system is waiting for a reply.

Operator response

Describes actions that the operator can or must take at the console.

System programmer response

Suggests actions, programming changes, or system definition changes that isolate or correct errors or improve the efficiency of the system.

User response

Describes actions that the user can or must take at the terminal.

Problem determination

Additional instructions for determining the cause of the problem, searching problem databases, and if necessary, reporting the problem to the IBM support center. These instructions are for system programmers who can troubleshoot problems.

Source

Element, product, or component that issued the message.

Module

Module or modules that issued the message.

Automation

Indicates whether the message is a candidate for automation.

Example

Example of the message with variable fields replaced with actual values, perhaps in context with other messages.

Message routing codes

Routing codes determine where a message is displayed. More than one routing code might be assigned to the message. With multiple-console support, each console operator receives the messages related only to the commands entered at that console or to the functions assigned to that console, regardless of the routing codes assigned to those messages. If a message that is routed to a particular console cannot be issued at that console, that message is issued at the master console.

The following routing codes are used in IP messages:

Code Meaning

- 1 **Master Console Action:** This message indicates a change in the system status and demands action by the master console operator.
- 2 **Master Console Information:** This message indicates a change in the system status. Such a message does not demand action, but alerts the master console operator to a condition that might require action. This routing code is used for any message that indicates job status, and also for processor and problem program messages to the master console operator.
- 3 **Tape Pool:** This message specifies the status of a tape unit or reel, the disposition of a tape reel, or other tape-oriented information. For example, this can be a message which requests that tapes be mounted.
- 4 **Direct Access Pool:** This message specifies the status of a direct access unit or pack, the disposition of a disk pack, or other direct-access-oriented information. For example, this can be a message which requests that disks be mounted.
- 5 **Tape Library:** This message specifies the tape library information. For example, this can be a message which requests, by volume serial numbers, that tapes be obtained for system or programmer use.
- 6 **Disk Library:** This message specifies the disk library information. For example, this can be a message which requests, by volume serial numbers, that disk packs be obtained for system or programmer use.
- 7 **Unit Record Pool:** This message specifies the unit-record equipment information. For example, this can be a message which requests that printer trains be mounted.
- 8 **Teleprocessing Control:** This message specifies the status or the disposition of data communication equipment. For example, this can be a message that indicates line errors.
- 9 **System Security:** This message is associated with security checking. For example, this can be a message that requires a reply that is specifying a password.

- 10 **System Error Maintenance:** This message indicates either a system error, or an input/output error that cannot be corrected. It also indicates a message that is associated with system maintenance.
- 11 **Programmer Information:** This message is for the problem programmer. This routing code is used only when the program that issued the message cannot route the message to the programmer by using the system-output data set facility. The message is displayed in the system output message class of the job.
- 12 **Emulators:** This message is issued by an emulator program.
- 13 Reserved for customer use.
- 14 Reserved for customer use.
- 15 Reserved for customer use.
- 16 Reserved for future expansion.

Message descriptor codes

Descriptor codes describe the kind of message being issued. These codes, with message routing codes, determine how a message is to be printed or displayed and how a message is to be deleted from a display device. Descriptor codes 1 – 7 are mutually exclusive; only one such code is assigned to a message. Descriptor codes 8 – 10 can be displayed with any other descriptor codes.

The following descriptor codes are used in IP messages:

Code	Meaning
-------------	----------------

1	**System Failure:** This message indicates that an error that cannot be corrected occurs. To continue, the operator must restart the system.
2	**Immediate Action Required:** This message requires an immediate action by the operator. The action is required because the message issuer is in a wait state until the action is taken, or because system performance is degraded until the action is taken.
3	**Eventual Action Required:** This message requires an eventual action by the operator. The task does not await completion of the action.
4	**System Status:** This message indicates the status of a system task or of a hardware unit.
5	**Immediate Command Response:** This message is issued as an immediate response to a system command. The completion of the response is not dependent on another system action or task.
6	**Job Status:** This message contains status information regarding the job or job step.
7	**Application Program/Processor:** This message is issued when a program is in problem mode.
8	**Out-of-Line Message:** This message is one of a group of messages to be displayed out of line. If the device support cannot print a message out of line, the code is ignored, and the message is printed in line with other messages.
9	**Request of the Operator:** This message is written in response to a request of the operator for information by the DEVSERV, MONITOR commands, and other operating system commands.

- 10 This message is issued in response to a **TRACK** command.
- 11 **Critical Eventual Action Required:** This message indicates that a critical event has occurred and must eventually be followed by an action. The message remains on the screen until the action is taken.
- 12 **Important Information:** This message contains important information that must be displayed at the console, but does not require any action in response.
- 13–16 Reserved.

Message groups

A message group contains two or more messages that are displayed together in response to a specific command or error condition. The following example is a message group.

```
EZZ8453I jobtype STORAGE  
EZD2018I location  
EZD2018I storage type current maximum limit  
EZD2018I DISPLAY TCP/IP STOR COMPLETED SUCCESSFULLY
```

In most cases, the "Explanation" section of the first message in the group contains an example of the group and information about all messages in the group. The message descriptions of members of the group refer back to the first message for complete information.

Chapter 2. EZB0xxxx messages

EZB0600I *message*

Explanation: This message is received by the server when the dynamic allocation of a data set or the MVS enqueueing (ENQ) function was unsuccessful.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: S99Error

EZB0603I *offset*

Explanation: This message indicates the offset at which the data string buffer is initialized.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DumpString

EZB0606I *buffer position*

Explanation: This message indicates the position at which the data string buffer is initialized.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DumpString

EZB0611E Data Set name “*arguments*” invalid.

Explanation: An argument declared in the *hlq.LPD.CONFIG* data set is incorrect. This message indicates the incorrect argument as declared by the user.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the argument declared in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for information about the syntax rules for the *hlq.LPD.CONFIG* data set.

Module: LPD

Procedure name: ProcessOperands

EZB0612E • EZB0616I

EZB0612E Data Set “arguments” not found.

Explanation: The argument declared in the *hlq.LPD.CONFIG* data set was not found. This message indicates the argument as declared by the user.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the argument declared in the *hlq.LPD.CONFIG* data set and restart the program. See the z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOperands

EZB0613E Data Set “dataset name” does not contain member “member name”.

Explanation: The data set name specified in the *data set name* parameter of the SEZAINST(LPSPROC) data set does not contain the indicated member.

System action: LPD ends.

Operator response: None.

System programmer response: Specify the correct data set name in the *data set name* parameter of the SEZAINST(LPSPROC) data set. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOperands

EZB0614I IBM MVS LPD version *version level*

Explanation: This message indicates the current version and level of LPD for MVS.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessVersionOption

EZB0615I The option “option” is ambiguous. Use a longer abbreviation.

Explanation: An option specified in a parameter of the SEZAINST(LPSPROC) data set is incomplete. The option was abbreviated; however, the abbreviation is too short to distinguish between 2 correct options.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct option in the SEZAINST(LPSPROC) data set and restart the procedure. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOptions

EZB0616I The option “option” was not recognized.

Explanation: An option specified in a parameter of the SEZAINST(LPSPROC) data set is not recognized.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct option parameter of the SEZAINST(LPSPROC) data set and

verify that the option specified is supported on your system. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOptions

EZB0617I Use the TRACE, TYPE or VERSION options as needed.

Explanation: An incorrect option was specified in a parameter of the SEZAINST(LPSPROC) data set. This message indicates the correct options for this parameter. The following list provides the names and descriptions for these options:

VERSION

Displays the version number.

TYPE Activates high-level trace facility in the LPD server. Significant events, such as the receipt of a job for printing, are recorded in the SYSOUT data set specified in your LPSPROC data set.

TRACE

Causes a detailed trace of activities in the LPD server to record in the SYSOUT data set specified in your LPSPROC data set. The detailed tracing can also be activated by the DEBUG statement in the configuration data set (*hlq.LPD.CONFIG*) and by the TRACE command of the SMSG interface.

System action: LPD continues.

Operator response: None.

System programmer response: Enter the correct option and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOptions

EZB0619I Data set prefix not specified

Explanation: The prefix name of the TRACE *name* parameter of the SEZAINST(LPSPROC) data set was not specified. The parameter specifies the prefix of the configuration data set. The default is *hlq*. for the LPD.CONFIG data set.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct data set prefix in the PREFIX *name* parameter of the SEZAINST(LPSPROC) data set. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessOptions

EZB0620I Program error: Invalid option *rc*

Explanation: An error has occurred during processing of the configuration data set. This message indicates the return code received for this procedure.

System action: The program ends abnormally.

Operator response: None.

System programmer response: Verify that the correct option parameters have been declared in the SEZAINST(LPSPROC) data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information. If the error persists, contact the IBM Software Support Center.

Module: LPD

Procedure name: ProcessOptions

EZB0621I • EZB0623I

EZB0621I LPD starting with port *port number*

Explanation: This message indicates the port number on which the LPD connection was initiated.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessArguments

EZB0622E *message*

Explanation: The LPD is shutting down. See the text of the message for further explanation.

System action: LPD ends.

Operator response: None.

System programmer response: Check the message content for an indication of configuration problems. Reinitiate TCPIP, if required.

Module: LPD

Procedure name: Restore.

EZB0624I *reason*

Explanation: The restore procedure, which resets the line printer daemon (LPD) counters to the default values and performs a cleanup routine, was initiated and LPD is ending. This message describes the reason for the procedure call and is not always an indication of a problem.

In the message text:

reason

The reason for the procedure call.

System action: LPD ends.

Operator response: Contact the system programmer if the message indicates a problem.

System programmer response: If this message indicates a problem, check for other messages in the LPD log that precede this one, such as EZB0622E and EZB0623I. Use the information from these other messages to determine what action to take and restart LPD.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: LPD

Module: LPD

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: Not applicable.

EZB0623I *errmsg (msgnum)*

Explanation: This message indicates the return code received by the Restore procedure. This procedure initiates a cleanup routine and ends TCPIP processing. This message is displayed with EZB0622I.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAmsgnum in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD ends.

Operator response: None.

System programmer response: Respond as indicated by the message EZAmsgnum.

Module: LPD

Procedure name: Restore

EZB0625E Out of storage for connections!

Explanation: There is not enough storage allocated for a connection to complete.

System action: The program ends abnormally.

Operator response: None.

System programmer response: Allocate more storage for connections.

Module: LPD

Procedure name: AllocConnection

EZB0626I Allocated ConnectionBlock at address

Explanation: A connection block was allocated at the indicated IP address. A connection block is used to build a connection record.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: AllocConnection

EZB0627I Passive open on port port number

Explanation: A passive connection opening was established on the indicated port number.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetNewConnection

EZB0628I Allocated PrinterBlock at address

Explanation: A printer block was allocated at the indicated IP address.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: AllocPrinter

EZB0629I • EZB0635I

EZB0629I *printer name added.*

Explanation: This message indicates the name of the printer that was allocated for the LPD server.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: AllocPrinter

EZB0630I **Spool allocate RC rc, Class default class, DEST NJEdest, ID NJE ID, OUTPUT default spool**

EZB0631I *string*

Explanation: The Network Job Entry system (NJE) is being used as the remote printing application for LPD. This message indicates the SYSOUT class, the name of the NJE node, the device user ID, the output name, and the value of the data buffer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0632I *string*

Explanation: This message indicates the size of the data buffer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0633I **Use DEST and IDENTIFIER for MVS.**

Explanation: The DEST and IDENTIFIER parameters should be used for this MVS system. The DEST option sets the destination node. The default is the local node. The IDENTIFIER option specifies the device user ID. The default is SYSTEM.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0635I **Spool allocate RC spool rc, Class default class, OUTPUT default spool**

EZB0636I string

Explanation: The Network Job Entry system (NJE) is being used as the remote printing application for LPD. This message indicates the SYSOUT class, the name of the NJE node, the device user ID, the output name, and the value of the data buffer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0637I string

Explanation: This message indicates the size of the data buffer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0640I The errors reported above prevent startup of dataset name

Explanation: The indicated data set name could not be opened. See the previous messages, which provide more specific information about this error.

System action: LPD continues.

Operator response: None.

System programmer response: This message is displayed with more specific error messages. Respond as indicated by the previous messages.

Module: LPD

Procedure name: CompletePrinter

EZB0641I Service printer name defined with address address

Explanation: This message indicates the service name and the address space that were declared in the *name* parameter of the SERVICE statement of the *hlq.LPD.CONFIG* data set. The *name* parameter specifies a service where connections are accepted and acknowledged.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: CompletePrinter

EZB0642I Use a class which is one letter.

Explanation: The CLASS=*class* parameter of the service defined in the SERVICE statement of the *hlq.LPD.CONFIG* data set is incorrect. This parameter specifies the SYSOUT class. The default is A for printers and B for punches.

System action: LPD continues.

Operator response: None.

EZB0643I • EZB0646I

System programmer response: Specify the correct class in the CLASS=*class* parameter and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0643I Use a class which is one letter or digit.

Explanation: The CLASS=*class* parameter of the service defined in the SERVICE statement of the *hlq.LPD.CONFIG* data set is incorrect. This parameter specifies the SYSOUT class. The default is A for printers and B for punches.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct class in the CLASS=*class* parameter and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0644I Use a number after the PRIORITY keyword.

Explanation: An unexpected character was received after the PRIORITY=*priority* parameter of the service defined in the SERVICE statement of the *hlq.LPD.CONFIG* data set. The PRIORITY parameter specifies the transmission priority. The default is 50.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the entry declared in the PRIORITY=*priority* parameter and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRCSCDefault

EZB0645I SPOOL only valid for PRINTER or PUNCH

Explanation: SPOOL is valid for the PRINTER or PUNCH services only. These services are specified in the SERVICE statement of the *hlq.LPD.CONFIG* data set.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the parameters declared for the services specified in the SERVICE statement. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0646I Could not spool dataset name device. Return code *rc*

Explanation: The attempt to spool to the data set defined in the *name* parameter of the SERVICE statement was unsuccessful. This message indicates the return code received after this procedure.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct data set name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0647I Only use CLASS, DEST, IDENTIFIER, OTHERS, PRIORITY, SPOOL or TAG as qualifiers.

Explanation: An incorrect parameter was specified in the RSCS statement of the *hlq.LPD.CONFIG* data set. The following list provides a description for these parameters:

CLASS The SYSOUT class. The default is A for printers and B for punches.

DEST Specifies the destination node ID. The default is the node on which LPSERVE is running.

IDENTIFIER

Specifies the device user ID. The default is SYSTEM.

OTHERS

The option is ignored by MVS LPSERVE.

PRIORITY

Specifies the transmission priority. The default is 50.

SPOOL

Supplies the operands for the CP SPOOL command that will be used on the virtual printer or punch that is defined for each new job.

TAG Supplies the operands for the CP TAG command that will be used on the virtual printer or punch that is defined for each new job.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter in the RSCS statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0648I Use a class which is one letter.

Explanation: The CLASS option of the NJE parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set is not correct. The default is A for printers and B for punches.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct CLASS option for the NJE parameter in the SERVICE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0649I Use a class which is one letter or digit.

Explanation: The CLASS option of the NJE parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set is not correct. The default is A for printers and B for punches.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct CLASS option for the NJE parameter in the SERVICE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0650I • EZB0653I

EZB0650I SPOOL only valid for PRINTER or PUNCH

Explanation: SPOOL is valid for the PRINTER or PUNCH services only. These services are specified in the SERVICE statement of the *hlq.LPD.CONFIG* data set.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the parameters declared for the services specified in the SERVICE statement. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0651I Could not spool dataset name device. Return code *rc*

Explanation: The attempt to spool to the data set defined in the *name* parameter of the SERVICE statement was unsuccessful. This message indicates the return code received after this procedure.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct data set name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0652I Only use CLASS, DEST, SPOOL or TAG as qualifiers.

Explanation: An incorrect parameter was specified in the LOCAL statement of the *hlq.LPD.CONFIG* data set. The following list provides a description for these parameters:

CLASS The SYSOUT class. The default is A for printers and B for punches.

DEST Specifies the destination node ID. The default is the node on which LPSERVE is running.

SPOOL

Supplies the operands for the CP SPOOL command that will be used on the virtual printer or punch that is defined for each new job.

TAG Supplies the operands for the CP TAG command that will be used on the virtual printer or punch that is defined for each new job.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter in the RSCS statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: SetPrinterRSCSDefault

EZB0653I The keyword "keyword" is not a keyword.

Explanation: An incorrect parameter was declared in the SMTP statement of the *hlq.LPD.CONFIG* data set. The SMTP statement specifies the SMTP server name, CLASS, and DEST options.

System action: LPD continues. Failed job will not work unless the SMTP statement is defined and LPD is restarted.

Operator response: None.

System programmer response: Correct the parameter declared in the SMTP statement of the *hlq.LPD.CONFIG* data set, and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0654I The keyword “keyword” is too short. Use a longer abbreviation.

Explanation: The indicated option was abbreviated. However, the abbreviation is too short to distinguish between 2 correct options.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct option and restart the procedure. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessLocalandRCSCOptions

EZB0655I Use the SMTP service machine name after “SMTP”.

Explanation: An incorrect parameter was specified in the SMTP statement of the *hlq.LPD.CONFIG* data set. This statement specifies the SMTP server name, CLASS, and DEST options.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct name in the *server_name* parameter of the SMTP statement of the *hlq.LPD.CONFIG* data set and restart the program. If this parameter is omitted, the default is SMTP. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0656I The keyword “keyword” is not a keyword.

Explanation: An incorrect parameter was declared in the SMTP statement of the *hlq.LPD.CONFIG* data set. The SMTP statement specifies the SMTP server name, CLASS, and DEST options.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the parameter declared in the SMTP statement of the *hlq.LPD.CONFIG* data set, and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0657I The keyword “keyword” is too short. Use a longer abbreviation.

Explanation: A parameter of the SMTP statement in the *hlq.LPD.CONFIG* data set is incorrect. This parameter was abbreviated; however, the abbreviation is too short to distinguish between two correct parameters.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter in the SMTP statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0658I • EZB0665I

EZB0658I Use a class which is one letter.

Explanation: The class specified in the CLASS=*class* parameter of the SMTP statement of the *hlq*.LPD.CONFIG data set is incorrect. This parameter specifies the SYSOUT class. The default is A for printers and B for punches. Valid values for this parameter are A through Z.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the class declared in the CLASS=*class* parameter of the SMTP statement in the *hlq*.LPD.CONFIG data set and restart the program.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0659I Use a class which is one letter or digit.

Explanation: The class specified in the CLASS=*class* parameter of the SMTP statement of the *hlq*.LPD.CONFIG data set is incorrect. This parameter specifies the SYSOUT class. The default is A for printers and B for punches. Valid values for this parameter are A through Z and 0 through 9.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the class declared in the CLASS=*class* parameter of the SMTP statement in the *hlq*.LPD.CONFIG data set and restart the program.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0660I Only use CLASS, DEST, IDENTIFIER or OTHERS as qualifiers.

Explanation: A parameter of the SMTP statement in the *hlq*.LPD.CONFIG data set is incorrect. This message indicates the correct parameters for this statement.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter for the SMTP statement of the *hlq*.LPD.CONFIG data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: ProcessSMTPOptions

EZB0665I Cannot open configuration file.

Explanation: The configuration data set could not be opened.

System action: LPD ends.

Operator response: None.

System programmer response: Verify that the name of the configuration data set was specified correctly. Verify that the data set is available to the server. Verify that the server has authority to access the data set.

Module: LPD

Procedure name: PreparePrinters

EZB0666I Use option after you have defined a SERVICE.

Explanation: A parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set was not found. The SERVICE statement specifies a service for which connections are accepted and acknowledged. The following provides a description of the valid parameters for the SERVICE statement:

name The service name must be one to eight characters in length. Only characters permitted in MVS data set names are valid. This value is case-sensitive.

PRINTER

Specifies that the service is to a printer.

PUNCH

Specifies that the service is to a punch device.

NONE Specifies that the service is not currently in use.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter for in the SERVICE statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0667I The keyword "keyword" is ambiguous. Use a longer abbreviation.

Explanation: A statement of the *hlq.LPD.CONFIG* data set is incorrect. An abbreviation was used for this statement; however, the abbreviation is too short to distinguish between two correct statements.

System action: LPD continues.

Operator response: None.

System programmer response: Use the correct statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0668I The keyword "keyword" was not recognized.

Explanation: A statement in the *hlq.LPD.CONFIG* data set is incorrect.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the statement in the *hlq.LPD.CONFIG* data set and restart the job. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0669I Use an integer after "DISK or UNIT".

Explanation: A number is expected after the DISK or UNIT statements of the *hlq.LPD.CONFIG* data set.

System action: LPD halts.

Operator response: None.

System programmer response: Specify the correct value in the parameters of the DISK or UNIT statement of the *hlq.LPD.CONFIG* data set and restart the program.

EZB0670I • EZB0672I

Module: LPD

Procedure name: PreparePrinters

EZB0670I Use either START or END after "EXIT".

Explanation: Specify the START or END parameter with the EXIT statement of the *hlq.LPD.CONFIG* data set. The following provides a description for these parameters:

Parameter	Description
START	Specifies that the program is invoked after allocating and opening the output data set, but before anything is written to the data set.
END	Specifies that the program is invoked just before closing the output data set.

System action: LPD continues.

Operator response: None.

System programmer response: Use the correct parameter with the EXIT statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0671I Use either START or END after "EXIT".

Explanation: An incorrect parameter was specified in the EXIT statement of the *hlq.LPD.CONFIG* data set. The following provides a description for these parameters:

Parameter	Description
START	Specifies that the program is invoked after allocating and opening the output data set, but before anything is written to the data set.
END	Specifies that the program is invoked just before closing the output data set.

System action: LPD continues.

Operator response: None.

System programmer response: Use the correct parameter with the EXIT statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0672I Use name after type of EXIT.

Explanation: The program name specified in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set is incorrect or not found. This parameter specifies the name of the program to be invoked after allocating and opening, but before closing, an output data set.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct program name in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0673I Could not load EXIT program name.

Explanation: The program name specified in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set could not be accessed. This parameter specifies the name of the program to be invoked after allocating and opening, but before closing, an output data set. This message is displayed when the START parameter was specified with the EXIT statement.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct program name was specified in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set and restart the program.

The library containing the program should be in the system's link list, (LNKLSTxx) or a STEPLIB definition can be used if the library is APF authorized.

Module: LPD

Procedure name: PreparePrinters

EZB0674I Could not load EXIT program name.

Explanation: The program name specified in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set could not be accessed. This parameter specifies the name of the program to be invoked after allocating and opening, but before closing, an output data set. This message is displayed when the END parameter was specified with the EXIT statement.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct program name was specified in the *program* parameter of the EXIT statement in the *hlq.LPD.CONFIG* data set and restart the program.

The library containing the program should be in the system's link list, (LNKLSTxx) or a STEPLIB definition can be used if the library is APF authorized.

Module: LPD

Procedure name: PreparePrinters

EZB0675I Use either MAIL or DISCARD after "FAILEDJOB".

Explanation: A parameter specified in the FAILEDJOB statement of the *hlq.LPD.CONFIG* data is incorrect or not found. This statement specifies whether a notice of unsuccessful jobs should be mailed to users or a job is discarded without notification. The following provides a description for these parameters:

MAIL Specifies that notices of unsuccessful jobs are mailed to users.

DISCARD

Specifies that unsuccessful jobs are discarded without notice.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct parameter in the FAILEDJOB statement of the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0676I • EZB0679I

EZB0676I Use an integer after "LINESIZE".

Explanation: The value specified in the *length* parameter of the LINESIZE statement in the *hlq.LPD.CONFIG* data set was not found. This parameter specifies the number of characters in a line on a page. Lines longer than this number are truncated. The default is 132.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the value declared in the *length* parameter of the LINESIZE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0677I Use an integer after "LINESIZE"

Explanation: The value specified in the *length* parameter of the LINESIZE statement in the *hlq.LPD.CONFIG* data set is incorrect. This parameter specifies the number of characters in a line on a page. Lines longer than this number are truncated. The default is 132.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the value declared in the *length* parameter of the LINESIZE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0678I Use only one of LOCAL, NJE, RSCS, and REMOTE.

Explanation: The destination type parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set is not correct. The following list provides a description of the valid destination types for this parameter:

LOCAL

Specifies that the data sets are written to the local MVS printer or punch.

NJE Specifies that the data sets are delivered to the Network Job Entry (NJE) system.

RSCS Specifies that the data sets are delivered to the Remote Spooling Communications Subsystem (RSCS).

REMOTE

Specifies that the data sets are forwarded to a remote printer.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the destination type parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0679I Allocated ObeyBlock at address

Explanation: The OBEY statement for the *hlq.LPD.CONFIG* data set has been received. This statement specifies user IDs authorized to use the SMSG interface provided with LPD. This message indicates that an address has been allocated an ObeyBlock, or authorization to use the SMSG interface. See z/OS Communications Server: IP Configuration Reference for more information.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PreparePrinters

EZB0680I Use an integer after "PAGESIZE".

Explanation: The value specified in the *lines* parameter of the PAGESIZE statement in the *hlq.LPD.CONFIG* data set was not found. This parameter specifies the number of lines on a page. The default is 60.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct value in the *lines* parameter of the PAGESIZE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0681I Use an integer after "PAGESIZE".

Explanation: The value specified in the *lines* parameter of the PAGESIZE statement in the *hlq.LPD.CONFIG* data set is incorrect. This parameter specifies the number of lines on a page. The default is 60.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct value in the *lines* parameter of the PAGESIZE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0682I Use a printer@hostname after "REMOTE".

Explanation: The destination specified in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set was not found. This parameter indicates the destination printer at a specified IP host. This can be an IP name or an IP address.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct entry in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0683I Use a printer@hostname after "REMOTE".

Explanation: The destination specified in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set is incorrect. This parameter indicates the destination printer at a specified IP host. This can be an IP name or an IP address.

System action: LPD continues.

EZB0684I • EZB0686I

Operator response: None.

System programmer response: Check for the correct entry in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0684I Cannot reach destination

Explanation: The destination specified in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set could not be reached. This parameter indicates the destination printer at a specified IP host. This can be an IP name or an IP address.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct destination in the *printer@hostname* parameter of the REMOTE statement, and for the correct service name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set, and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0685I Use only one of LOCAL, NJE, RSCS, and REMOTE.

Explanation: The destination type parameter specified for the SERVICE statement in the *hlq.LPD.CONFIG* data set is not correct. The following list provides a description of the valid service names for this parameter:

LOCAL

Specifies that the data sets are written to the local MVS printer or punch.

NJE Specifies that the data sets are delivered to the Network Job Entry (NJE) system.

RSCS Specifies that the data sets are delivered to the Remote Spooling Communications Subsystem (RSCS).

REMOTE

Specifies that the data sets are forwarded to a remote printer.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the destination type parameter declared for the SERVICE statement in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0686I Host "host" resolved to address. Printer name is "printer name".

Explanation: This message indicates the host name, IP address, and the printer name to which the destination address was resolved. The destination address is specified in the *printer@hostname* parameter of the REMOTE statement in the *hlq.LPD.CONFIG* data set.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PreparePrinters

EZB0687I Use only one of LOCAL, NJE, RSCS, and REMOTE.

Explanation: The service name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set is incorrect. The following list provides a description of the valid service names for this parameter:

LOCAL

Specifies that the data sets are written to the local MVS printer or punch.

NJE Specifies that the data sets are delivered to the Network Job Entry (NJE) system.

RSCS Specifies that the data sets are delivered to the Remote Spooling Communications Subsystem (RSCS).

REMOTE

Specifies that the data sets are forwarded to a remote printer.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the service name declared in the *name* parameter of the SERVICE parameter in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0688I Use a printer name and type after "SERVICE".

Explanation: The service name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set was not found. The SERVICE statement specifies the service name for which connections are accepted and acknowledged.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct name specified in the *name* parameter of the SERVICE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0689I The service "service name" has been described more than once.

Explanation: The service name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set is a duplicate. This statement specifies a service for which connections are accepted and acknowledged.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct name specified in the *name* parameter of the SERVICE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0690I Use a printer name and type after "SERVICE".

Explanation: The service name specified in the *name* parameter of the SERVICE statement in the *hlq.LPD.CONFIG* data set was not found. This statement specifies a service for which connections are accepted and acknowledged.

System action: LPD continues.

Operator response: None.

EZB0691I • EZB0693I

System programmer response: Check for the correct name specified in the *name* parameter of the SERVICE statement and restart the program.

Module: LPD

Procedure name: PreparePrinters

EZB0691I Use "PRINTER" or "PUNCH" as a SERVICE type.

Explanation: The parameter specified in the SERVICE statement of the *hlq.LPD.CONFIG* data set is incorrect. This statement indicates a service for which connections are accepted and acknowledged. The following provides a description of the valid parameters for this statement:

name The service name must be one to eight characters in length. Only characters permitted in MVS data set names are valid. This value is case-sensitive.

PRINTER

Specifies that the service is to a printer.

PUNCH

Specifies that the service is to a punch device.

NONE Specifies that the service is not currently in use.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct parameter is specified in the SERVICE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters.

EZB0692I Use a Volume Serial after "VOLUME".

Explanation: An incorrect value was declared in the VOLUME statement of the *hlq.LPD.CONFIG* data set.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct entry specified in the VOLUME statement of the *hlq.LPD.CONFIG* data set and restart the program. The correct length of this parameter is six characters.

Module: LPD

Procedure name: PreparePrinters

EZB0693I Use a Table Name after "TRANSLATETABLE".

Explanation: The name specified in the *name* parameter of the TRANSLATETABLE statement in the *hlq.LPD.CONFIG* data set was not found. This parameter specifies the name of the translation table. If a DBCS conversion parameter is specified, *name* is used to determine which DBCS table to load.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct name was specified in the *name* parameter of the TRANSLATETABLE statement and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0694I Could not load Translate Table.

Explanation: The translation table name specified in the *name* parameter of the TRANSLATETABLE statement in the *hlq.LPD.CONFIG* data set could not be loaded. This statement specifies the translation table to be used by the client and is found in the *name.TCPXLBIN* data set.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct translate table name is specified in the *name* parameter of the TRANSLATETABLE statement, verify that the *name.TCPXLBIN* data set is available to the server, and restart the program. If a DBCS conversion parameter is specified in the SMTP.SMTP.CONFIG data set, *name* is used to determine which DBCS translation table to load.

Module: LPD

Procedure name: PreparePrinters

EZB0695I Could not load translate table with name - *name* for printer *printer_name*

Explanation: The Line Printer Daemon (LPD) attempted to load an SBCS translation table corresponding to the name provided by the TRANSLATETABLE or XLATETABLE statement in the *hlq.LPD.CONFIG* data set. This statement specifies the translation table to be used by the remote client for SBCS ASCII to EBCDIC translations.

All data sets in the search order hierarchy for the required translate table data set either do not exist, or do not contain data in the required format for SBCS binary translate tables.

name is an input string that becomes part of the translation table data set name (for example, *hlq.name.TCPXBLIN*).

printer_name is the name of the printer service.

System action: LPD continues, however the printer service is unavailable.

Operator response: Notify the system programmer.

System programmer response: Configure a valid SBCS binary translate table data set in the search order hierarchy for the required SBCS translation table. See the z/OS Communications Server: IP Configuration Reference for more information about using translation tables including search order hierarchy and customization.

Module: LPD

Procedure name: PreparePrinters

EZB0696I Program error: Invalid option *option*

Explanation: An incorrect statement was specified in the *hlq.LPD.CONFIG* data set. This message indicates the statement as declared in this data set.

System action: TCPIP ends.

Operator response: None.

System programmer response: Restart TCPIP, correct the statement specified in the *hlq.LPD.CONFIG* data set and restart the program. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: PreparePrinters

EZB0697I ...End of Printer chain...

Explanation: The *hlq.LPD.CONFIG* data set statements have been processed to build the control tables representing the supported printers.

System action: LPD continues.

Operator response: None.

System programmer response: None.

EZB0698I • EZB0702I

Module: LPD

Procedure name: PreparePrinters

EZB0698I InitEmulation failed

Explanation: The procedure InitEmulation, which starts the process to allow commands to run in non-EC mode machines, was not successful.

System action: TCPIP ends.

Operator response: None.

System programmer response: Run a 3270 type terminal emulator or use a 3270 type display station and restart TCPIP.

Module: LPD

Procedure name: PrepareTCP

EZB0699I Starting TCP/IP service connection

Explanation: A connection was initiated to the TCPIP services.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrepareTCP

EZB0700I BeginTcpip: errmsg (msgnum)

Explanation: The procedure BeginTcpip, which informs the TCPIP address space that you want to start using its services, was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: TCPIP ends.

Operator response: None.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPD

Procedure name: PrepareTCP

EZB0701I TCP/IP turned on.

EZB0702I Host "host ID" Domain "domain ID" TCPIP Service Machine "service ID"

Explanation: TCPIP services have been initiated for the indicated host, domain, and printer IDs.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrepareTCP

EZB0703I FSEND failed errmsg (msgnum)

Explanation: The procedure FSEND, which sends data on a TCP connection, was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the **EZA** message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPD

Procedure name: SendACK

EZB0704I Abort issued for connection connection number

Explanation: The procedure DoAbortConnection, which shuts down a specific connection, was initiated. This message indicates the connection number for which the TcpAbort procedure was started.

System action: The TCP connection ends.

Operator response: None.

System programmer response: Reinitiate the connection if required.

Module: LPD

Procedure name: DoAbortConnection

EZB0705I date time

Explanation: This message indicates the current date and time.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrintTimeStamp

EZB0706I Terminating connection connection message

Explanation: Because of an incorrect return code received from TCP, the connection ends. This message indicates the connection number and the reason for the termination. This message is displayed with EZB0705I.

System action: This connection ends.

Operator response: None.

System programmer response: Reinitiate the connection if required.

Module: LPD

Procedure name: TerminateConnection

EZB0707I Adding "message line" to message.

Explanation: The indicated message line was added to the message input buffer.

System action: LPD continues.

Operator response: None.

EZB0708I • EZB0713I

System programmer response: None.

Module: LPD

Procedure name: DoSendQueueList

EZB0708I FSend of response sent

Explanation: The procedure FSend, which sends data on a TCP connection, was initiated.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoSendQueueList

EZB0710I New command *command code (no operands)*

Explanation: This message indicates the command code that was received from the client.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewCommand

EZB0711I New command *command code data "parameter"*.

Explanation: This message indicates the command code and the additional operands that have been received from the client.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewCommand

EZB0712I Command rejected. Printer "*printer*" not recognized.

Explanation: A command from the client was received that contains an operand with an unrecognized printer ID.

System action: The LPD to LPD connection ends.

Operator response: Reinitiate the connection, check for the correct printer ID, and resubmit the command. See z/OS Communications Server: IP User's Guide and Commands for more information.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: DoNewCommand

EZB0713I Printer "*print*" not found

Explanation: The printer specified in the remote printing command is incorrect. This message indicates the printer ID as declared by the user.

System action: LPD continues.

Operator response: Check for the correct printer ID and resubmit the command. See z/OS Communications Server: IP User's Guide and Commands for more information.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: DoNewCommand

EZB0716I Job job ID comment printer name site

Explanation: This message indicates the job ID that was placed onto the queue for the designated printer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrintJobLogLine

EZB0717E Could not erase dataset name RC=rc

Explanation: The job submitted by the client could not be erased from the queue after processing. This message indicates the data set name and return code that was passed.

System action: LPD continues.

Operator response: None.

System programmer response: Check for error messages in the LPD log and trace.

Module: LPD

Procedure name: EraseFile

EZB0718E Could not open "queue name QUEUE".

Explanation: The specified queue could not be opened.

System action: LPD continues.

Operator response: None.

System programmer response: This message should be preceded by more specific messages. Correct the errors indicated by the preceding messages.

Module: LPD

Procedure name: SavePrinterQueue

EZB0719I Allocated JobBlock at address

Explanation: The print job block received from the client was allocated at the indicated IP address.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: AllocJob

EZB0720I • EZB0724E

EZB0720I Site file “name SITE” record 1 unreadable.

Explanation: The first record of the HOSTS.SITEINFO data set could not be read.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the HOSTS.SITEINFO data set was generated and installed, and that the records have been entered using the correct record format. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: LoadSite

EZB0721I Site file “name SITE” record 2 unreadable.

Explanation: The second record of the HOSTS.SITEINFO data set could not be read.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the HOSTS.SITEINFO data set was generated and installed and that the records have been entered using the correct record format.

Module: LPD

Procedure name: LoadSite

EZB0722I Could not open “name SITE”.

Explanation: The HOSTS.SITEINFO data set could not be opened. When making changes to the HOSTS.LOCAL data sets, you must generate and install new HOSTS.SITEINFO and HOSTS.ADDRINFO data sets. Use the MAKESITE statement as either a TSO command or a batch job to generate the new data sets.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the HOSTS.SITEINFO data set was generated and installed and that the records have been entered using the correct record format.

Module: LPD

Procedure name: LoadSite

EZB0723I Allocated StepBlock at address

Explanation: A StepBlock was allocated at the indicated IP address.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: AllocStep

EZB0724E Could not open control file “site name job ID printer name”. Job abandoned.

Explanation: The control data set specified in the LPR command received by the server could not be opened. This message indicates the site, the job ID, and the remote printer ID.

System action: LPD continues.

Operator response: None.

System programmer response: Verify that the correct data set name was specified in the LPR command and that the data set is available to the server and reissue the LPR command.

Module: LPD

Procedure name: ProcessControlFile

EZB0725I Reloading job *job*.

Explanation: The job ID, specified in the remote printing command, is reloaded.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: LoadJob

EZB0726I Could not open "site job ID".

Explanation: The job ID specified in the LPR command received by the server could not be processed because the indicated site could not be opened. This message indicates the site and the job ID specified.

System action: LPD continues.

Operator response: Make sure the correct destination ID is used for its corresponding parameter and the correct job name is declared in the JOB parameter of the LPR command. See z/OS Communications Server: IP Configuration Reference for more information.

System programmer response: None.

Module: LPD

Procedure name: LoadJob

EZB0727I Job *job ID* abandoned. Job file too short.

Explanation: The procedure readln, which reads the data set specified by the client on the LPR command, returned a nonzero return code.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct job ID specified in the Job *jobname* parameter of the LPR command and submit the command again. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: LoadJob

EZB0728I Job *job ID* abandoned. Job file too short.

Explanation: The procedure readln, which reads the data set specified by the client on the LPR command, returned a nonzero return code.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct job ID specified in the Job *jobname* parameter of the LPR command and submit the command again. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: LoadJob

EZB0729I • EZB0733I

EZB0729I Job *job ID* abandoned. Job file too short.

Explanation: The procedure readln, which reads the data set specified by the client on the LPR command, returned a nonzero return code.

System action: LPD continues.

Operator response: None.

System programmer response: Check for the correct job ID specified in the Job *jobname* parameter of the LPR command and submit the command again. See z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: LoadJob

EZB0730I Job *job ID* abandoned. Not enough storage.

Explanation: The job ID specified in the *jobname* parameter of the LPR command received by the server could not be completed because of insufficient storage.

System action: LPD continues.

Operator response: Inform the system programmer about this message.

System programmer response: Check for the storage requirements needed to process the LPR command, allocate more storage, and reissue the command.

Module: LPD

Procedure name: LoadJob

EZB0731I Work Queue start

Explanation: The work queue was initiated.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrintWorkQueue

EZB0732I *job number* *job ID*

Explanation: This message indicates the print job received from the client was placed onto the queue for the designated service.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrintWorkQueue

EZB0733I Work Queue end

Explanation: The work queue is empty. The print server returns to a passive wait state awaiting the next print request.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PrintWorkQueue

EZB0734I Job jobnumber: added to work queue

Explanation: TCPIP displays this message while tracing is on. The specified job number is displayed as it is added to the list of queued jobs.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: QueueJobWork

EZB0735I stepblock_address datasize action_code dataset name

Explanation: TCPIP issues this message when tracing is on. The StepBlock address, data size, action code and data set name of the current job are displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DumpStepChain

EZB0736I Could not open name QUEUE

Explanation: LPD could not open the specified data set that is queued for printing.

System action: LPD continues.

Operator response: Check the syntax of the specified data set name or verify that you have authority to print through the system programmer.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: LoadPrinterQueue

EZB0737I Reloading dataset name queue

Explanation: LPD issues this message while tracing is on. While attempting to queue the previous data set name, an error was detected. The data set name is reloaded into the list of queued data sets.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: LoadPrinterQueue

EZB0738I • EZB0747E

EZB0738I Ignoring job number from site *name* because there is no SITE file.

Explanation: TCPIP was unable to locate the site for the specified job number.

System action: LPD continues.

Operator response: None.

System programmer response: Make sure the site was defined using the MAKESITE command.

Module: LPD

Procedure name: LoadPrinterQueue

EZB0739I Validating user *user*

Explanation: This message occurs while tracing is on. The userid of the submitter of the print job is validated.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: LoadPrinterQueue

EZB0740I Validation failed. RC *rc*

Explanation: TCPIP issues this message while tracing is on. While attempting to validate the password for the currently queued job an error was detected.

System action: LPD continues.

Operator response: Inform the system programmer of the error.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: ValidateJob

EZB0744I *address* punch line

Explanation: LPD displays the address of the punch command text and the punch line number. The punch line text represents the information sent to SMTP from LPD.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: Punchline

EZB0747E Could not allocate SMTP Spool

Explanation: The SMTP device could not allocate the spool for the batch data set submitted using the SMTP command.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Make sure the SMTP device is activated.

Module: LPD

Procedure name: SendFailingMail

EZB0748E Could not open spool to SMTP. Return code was *last error*

Explanation: LPD could not spool a job to the indicated SMTP service. A nonzero return code was returned.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Make sure the SMTP statement is updated to include accurate information for its parameters in the *hlq.LPD.CONFIG* data set. Also make sure that the MAIL parameter is used with the FAILEDJOB statement. For more information about the SMTP and FAILEDJOB statements, see z/OS Communications Server: IP Configuration Reference. Check the return code issued in this message and the return codes listed under SMTP in the z/OS Communications Server: IP and SNA Codes to further determine and correct the error.

Module: LPR

Procedure name: SendFailingMail

EZB0750E Could not deallocate Spool File *ddname* Error code was *rc*

Explanation: The SMTP server was unable to deallocate the specified spool file after attempting to close the SMTP connection.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Check the return code issued in this message and the return codes listed under SMTP in the z/OS Communications Server: IP and SNA Codes to determine and correct the error.

Module: LPR

Procedure name: SendFailingMail

EZB0751I Released StepBlock at *address*

Explanation: The SMTP server displays this message as the job at the specified address is deleted from storage.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: RemoveJobFiles

EZB0753I New subcommand *command* (no operands)

Explanation: This message is displayed while tracing is on. A new SMTP subcommand was detected by LPD with no optional operands.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DoNewSubcommand

EZB0754I New subcommand *command* *operands* *operands*

Explanation: This message is displayed while tracing is on. A new SMTP subcommand was detected by LPD. The new subcommand and optional operands are displayed.

System action: LPD continues.

Operator response: None.

EZB0755I • EZB0759E

System programmer response: None.

Module: LPR

Procedure name: DoNewSubcommand

EZB0755I Released StepBlock at address

Explanation: This message occurs while tracing is on. This message is displayed when the previous subcommand is deleted from the stated storage area.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DoNewSubcommand

EZB0756I Job number *number* is invalid.

Explanation: The LPD server was unable to queue the specified job number for processing. The connection was terminated.

System action: LPD continues.

Operator response: Resubmit the job using the LPR command.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: DoNewSubcommand

EZB0757I Duplicate file name "*dataset name*".

Explanation: This message indicates that the specified data set was previously recognized by LPD. The job is ignored and the next job is processed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewSubcommand

EZB0759E Failed to allocate block for *jobnumber* from *site*

Explanation: The service machine was unable to allocate enough storage to process the specified job at the specified site.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewSubCommand

EZB0760E Failed to open "dataset name".

Explanation: The server machine's attempt to open the stated data set failed. The connection is terminated.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Check for preceding error message EZB0600I in the LPD log to see why the open failed.

Module: LPD

Procedure name: DoNewSubcommand

EZB0761E Could not open data file "dataset name". Job abandoned.

Explanation: The server machine issues this message after attempting to open the data file at the specified site with the specified file type. The job is abandoned.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Make sure the specified site is defined by the MAKESITE command.

Module: LPR

Procedure name: DoSendStep

EZB0762I Sending subcommand *command* with an operand of *operand*

Explanation: LPD issues this message while tracing is on. LPD acknowledges sending the indicated subcommand with the indicated operand.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DoSendJob

EZB0763I Closing connection *connection*

Explanation: This message is issued while tracing is on. The connection between the client and the LPD server has been closed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoCloseConnection

EZB0764I ACK received on connection *connection* for job *jobnumber* in state *jobstate*

Explanation: This message is issued while tracing is on. LPD has received an acknowledgment of the specified connection. The current state of the job is also displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

EZB0765I • EZB0769I

Procedure name: DoNewAck

EZB0765I ACK in unexpected job state *jobstate*

Explanation: This message is issued while tracing is on. LPD received an ACK from the remote host, but the job state was bad. See message EZB0764I for job and connection number.

System action: LPD continues.

Operator response: Check all physical ports and power switch to verify that the printer is ready for printing. If the problem persists, contact your hardware support personnel.

System programmer response: None.

Module: LPD

Procedure name: DoNewAck

EZB0766I NACK has value *number*

Explanation: This message is issued while tracing is on. The remote host refused to complete processing for this job.

System action: LPD continues.

Operator response: Check the printer and make sure it is active. If the problem persists, contact your hardware support personnel.

System programmer response: None.

Module: LPD

Procedure name: DoNewAck

EZB0767I Timer cleared for connection *connection*

Explanation: This message is issued while tracing is on. LPD has successfully cleared the timer for the specified connection.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewData

EZB0768I Ignoring Data delivered on connection *connection*

Explanation: This message is issued while tracing is on. The buffer has been exhausted. The data to be delivered is ignored.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Increase the specified buffer size using the DATABUFFERPOOLSIZE statement.

Module: LPD

Procedure name: DoNewData

EZB0769I Job *jobnumber* removed from work queue

Explanation: This message is issued while tracing is on. LPD issues this message when the specified job number is removed from the list of queued jobs.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: RemoveJobWork

EZB0770I Job *jobnumber* not found in printer chain.

Explanation: LPD issues this message when the specified job number is not found in the print queue.

System action: LPD halts.

Operator response: Notify the system programmer.

System programmer response: Check the LPD trace. Job may have already printed. Restart LPD.

Module: LPD

Procedure name: RemoveJobPrinter

EZB0771I Released JobBlock at *address*

Explanation: LPD issues this message while tracing is on. The storage space allocated for the job block at the specified address was released.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: FreeJob

EZB0772I End Connection *connection* for *errmsg* (*msgnum*)

Explanation: The specified LPD server connection has ended.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the **EZA** message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPD

Procedure name: DoEndConnection

EZB0773I Connection *connection* terminated for *errmsg* (*msgnum*)

Explanation: This message indicates that the specified connection has been terminated.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the **EZA** message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPD

EZB0774I • EZB0778S

Procedure name: DoEndConnection

EZB0774I Connection ended abruptly.

Explanation: The LPD connection with the remote printer has terminated. LPD received a job and the connection state was not CONNCLOSING.

System action: LPD continues.

Operator response: None.

System programmer response: Review the trace and restart the job. If DEBUG is not on, define DEBUG in the LPD.CONFIG and restart the job.

Module: LPD

Procedure name: DoEndConnection

EZB0775I Released StepBlock at address

Explanation: This message is issued while tracing is on. The block at the specified address was freed of storage.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoEndConnection

EZB0776I Released StepBlock at address

Explanation: This message is issued while tracing is on. The storage space specified was released because there were no jobs awaiting processing.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoEndConnection

EZB0777I Released ConnectionBlock at address

Explanation: This message is issued while tracing is on. The storage space specified for the LPD connection was released because there were no jobs awaiting processing.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoEndConnection

EZB0778S LPD terminating because errmsg (msgnum)

Explanation: This message is displayed while tracing is on. The LPD server has terminated operation.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAmsgnum in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD halts.

Operator response: Notify system programmer.

System programmer response: Respond as indicated by the message EZAmmsgnum.

Module: LPD

Procedure name: DoEndConnection

EZB0779I New connection state state on connection address with reason errmsg (msgnum)

Explanation: This message indicates that LPD has made a new connection state at the specified address.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAmmsgnum in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAmmsgnum.

Module: LPD

Procedure name: DoNewConnState

EZB0780I Abort failed errmsg (msgnum)

Explanation: This message is issued as a result of the LPD's unsuccessful attempt to disconnect the TCP connection.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAmmsgnum in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAmmsgnum.

Module: LPD

Procedure name: DoEndConnection

EZB0781I Connection aborted because port number (number) is out of range.

Explanation: This message is issued while tracing is on. The LPD connection was aborted because the stated port number was not defined as a legitimate port. Legitimate ports range from 721 to 731, inclusive.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Use the PORT statement to define the legitimate ports. For more information about the PORT statement, see the z/OS Communications Server: IP Configuration Reference.

Module: LPD

Procedure name: DoNewConnState

EZB0782I • EZB0786I

EZB0782I Connection open. Reading command.

Explanation: This message is issued while tracing is on. The LPD connection is open and now reading the submitted connection state command.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoNewConnState

EZB0783I Aborting Connection *connection* - Timed out

Explanation: The specified connection was aborted because the timer expired.

System action: LPD continues.

Operator response: None.

System programmer response: Assist the user as necessary. Use the TIMER command to set the timer to an appropriate time limit.

Module: LPD

Procedure name: DoConnectionTimeOut

EZB0784I Could not retrieve SMSG

Explanation: LPD was unable to retrieve a queued Smsg. Therefore, the message could not be queued for processing.

System action: LPD continues.

Operator response: None.

System programmer response: See message EZB0800I.

Module: LPD

Procedure name: ProcessSMSG

EZB0785I Attempted SMSG from "user" ignored.

Explanation: The SMSG from the specified user was ignored. LPD was unable to locate the user ID in the OBEYFILE.

System action: LPD continues.

Operator response: Notify the system programmer.

System programmer response: Make sure the specified user ID is listed in the OBEYFILE using the OBEY command.

Module: LPD

Procedure name: ProcessSMSG

EZB0786I Command received "string"

Explanation: LPD issues this message when the specified special messages string is received.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessSMSG

EZB0788I Command not understood.

Explanation: LPD does not recognize the command issued through the SMSG interface.

System action: LPD continues.

Operator response: Correct the syntax and reissue the command.

System programmer response: None.

Module: LPD

Procedure name: ProcessSMSG

EZB0789I GetNextNote with ShouldWait of *number*

Explanation: This message is issued while tracing is on. TCP is initializing processing procedures to retrieve the next queued notification. The ShouldWait function is set to either a true or false value depending on whether TCP is to wait for notification before the next one is available.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0790I GetNextNote returns. Connection *connection* Notification *notification*

Explanation: This message is issued while tracing is on. The connection number and the notification status are returned upon successful completion of the GetNextNote procedure.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0791I New TCP notice arrived

Explanation: This message is issued while tracing is on. TCP has received the next queued notification.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0792I Connection: *connection*

Explanation: This message is issued while tracing is on. This message displays the connection number of the TCP connection.

System action: LPD continues.

Operator response: None.

System programmer response: None.

EZB0793I • EZB0797I

Module: LPD

Procedure name: ProcessTCP

EZB0793I Notification: *notification*

Explanation: This message is issued while tracing is on. This message displays the notification status of the current TCP connection.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0794I NewState: *newstate*

Explanation: This message is issued while tracing is on and notification has changed. The new state is displayed in this message.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0795I ConnState: *connectionstate*

Explanation: This message is issued while tracing is on. If TCP does not detect a connection state change, this message is displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0796I BytesDelivered: *number*

Explanation: This message is issued while tracing is on. The number of data bytes delivered on the TCP connection are displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0797I SendTurnCode: *errormsg (msgnum)*

Explanation: This message is issued while tracing is on. TCP failed in its attempt to send data on the TCP connection.

errormsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the **EZA** message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: LPD continues.

Operator response: None.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPD

Procedure name: ProcessTCP

EZB0798I Queueing job *jobnumber*

Explanation: This message is issued while tracing is on. The specified job is queued for processing.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0799I Reading additional data on *connection*

Explanation: This message is issued while tracing is on. Processing of the current job continues on the specified connection.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessTCP

EZB0800I Ignoring TCP/IP notice *notification* on *connection*

Explanation: This message is issued while tracing is on. The TCP connection has failed or was not recognized. Use the type identifier issued in this message and the z/OS Communications Server: IP Programmer's Guide and Reference to determine and correct the problem.

System action: LPD continues.

Operator response: None.

System programmer response: Assist the user as necessary.

Module: LPD

Procedure name: ProcessTCP

EZB0801I Filter *option* not supported. Job abandoned.

Explanation: This message could display for one of the following reasons:

- The option type of the filters parameter used with the LPR command is not supported by the line printer daemon.
- The option type of the filters parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set is not supported by the line printer daemon.

System action: LPD continues.

Operator response: Correct the option type of the filters parameter for the LPR command or in the SERVICE statement of the *hlq.LPD.CONFIG* data set. Reissue the job. See z/OS Communications Server: IP User's Guide and

EZB0802E • EZB0805E

Commands for information about the LPR command or the z/OS Communications Server: IP Configuration Reference for information about the SERVICE statement.

System programmer response: None.

Module: LPD

Procedure name: DoStartStep

EZB0802E Could not open data file *dataset* Job abandoned.

Explanation: LPD was unable to access the indicated data set. The print job is not completed.

System action: LPD continues.

Operator response: Reissue the print job with a valid data set name or PDS member. See z/OS Communications Server: IP User's Guide and Commands for more information about using the LPR command. None.

System programmer response: None.

Module: LPD

Procedure name: DoStepStart

EZB0803E Could not define device for job. Unknown type *type* treated as "NONE".

Explanation: LPD encountered a printer type defined in the SERVICE statement that was not valid or unknown.

System action: LPD continues.

Operator response: None.

System programmer response: Correct the device type parameter for the SERVICE statement in *hlq.LPD.CONFIG* data set. For more information about the SERVICE statement, see z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: GetJobDevice

EZB0804E printer kind is unknown *address*

Explanation: LPD was not able to recognize the route parameter for the indicated printer. The route parameter was defined to something other than remote, local or NJE.

System action: LPD continues.

Operator response: Notify the system programmer of this message.

System programmer response: Correct the route parameter for the SERVICE statement in the *hlq.LPD.CONFIG* data set. For information about the SERVICE statement, see z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: GetJobDevice

EZB0805E Could not allocate Spool Class *class*

Explanation: The LPD server was unable to set a spool file for the specified printer class as a result of buffer exhaustion. See messages EZB0806I and EZB0807I.

System action: LPD continues.

Operator response: None.

System programmer response: Resubmit the LPD command.

Module: LPD

Procedure name: GetJobDevice

EZB0806I Copies copies, Font font, form form, output printer

Explanation: LPD issues this message when a nonzero return code is returned during spool file allocation. The number of copies, font size, form, and printer name are provided. See message EZB0807I.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0807I bufferlength

Explanation: The length of the data buffer which failed while attempting to allocate a spool file is displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0808I bufferlength

Explanation: The length of the alternate data buffer which failed while attempting to allocate a spool file is displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0809E Could not open spool to destination Return code was error

Explanation: LPD was unable to open a spool file to the specified printer destination. A return code is passed.

System action: LPD continues.

Operator response: None.

System programmer response: Use the return code listed in this message and z/OS Communications Server: IP and SNA Codes.

Module: LPD

Procedure name: GetJobDevice

EZB0810I Spool printertype address for user. Return code was rc

Explanation: LPD issues this message while tracing is on or a nonzero return code is displayed. The printer type, address, user, and return code are displayed with this message after the spool is allocated.

System action: LPD continues.

Operator response: None.

System programmer response: Check the meaning of the RC issued by CP spool "FOR" command.

Module: LPD

EZB0811E • EZB0815I

Procedure name: GetJobDevice

EZB0811E *printertype kind is unknown deviceaddress*

Explanation: The LPR command has a destination defined that is not known. The destination is defined after the jobname parameter.

System action: LPD continues.

Operator response: Specify the correct destination in the jobname parameter and reissue the LPR command. For more information about the LPR command see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0812I *Spool TO address superseded by FOR user*

Explanation: The SMTP spool to the default user address was superseded by the specified user ID.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0813I *Spooling printer this way how*

Explanation: This message is displayed while tracing is on. LPD acknowledges the parameter indicated for the LPR command on the specified printer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0814E *Could not spool printer address type. Return code was rc*

Explanation: This message is issued while tracing is on. The LPD server was not able to spool the printer at the stated address with the specified type. A nonzero return code was returned.

System action: Printer not spooled.

Operator response: None.

System programmer response: Use the return code value to determine the error and reissue the command.

Module: LPD

Procedure name: GetJobDevice

EZB0815I *Tagging printer with tag*

Explanation: This message is issued while tracing is on. The indicated RSCS tag has been assigned to the indicated printer.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: GetJobDevice

EZB0816E Could not TAG printer address tag Return code was rc

EZB0817I Response was response

Explanation: The LPD server was not able to assign the specified tag to the printer at the indicated address. A nonzero return code was passed.

System action: LPD continues.

Operator response: None.

System programmer response: Use the return code value and the response string provided with message EZB0817I to determine and correct the cause of the error.

Module: LPD

Procedure name: GetJobDevice

EZB0819I Job jobnumber rescheduled -- no storage

Explanation: This message is issued while tracing is on. LPD was unable to allocate a connection for the specified job number. No storage block was available for a connection.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoStartSending

EZB0820I Trying to open with local port port

Explanation: This message is issued while tracing is on. LPD is attempting to open the specified local port for communication.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoStartSending

EZB0821I Job jobnumber abandoned -- Open failed or no ports

Explanation: This message is issued while tracing is on.

- LPD was unable to open a connection to the specified REMOTE Print Server (LPD) on another host. A TcpOpen error occurred.
- LPD was unable to open a local port to the specified REMOTE Print Server (LPD) on another host. No ports in the range 721–731 were available.

In the message text:

jobnumber

The number assigned by the LPR client to this job.

System action: LPD continues.

EZB0822I • EZB0825I

Operator response: Resubmit the print job when a connection to the REMOTE print server can be established.

System programmer response: None.

Module: LPD

Procedure name: DoStartSending

EZB0822I Sending command *number* with operand *address*

Explanation: This message is issued while tracing is on. LPD is sending the specified command to the specified printer address.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoOpenSending

EZB0823I Sending ACK at end of data file on connection for job *jobnumber*

Explanation: This message is issued while tracing is on. The LPD server has read the data set on the specified connection for the specified job number and is sending an ACK.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: DoContinueSending

EZB0824I ProcessWork starting on job queue

Explanation: This message is issued while tracing is on. LPD is now processing the next job queued.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessWork

EZB0825I Job *jobnumber* for printer dispatched in state *state*

Explanation: This message is issued while tracing is on. The job number, printer, and print state are displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessWork

EZB0826E Job *jobnumber* (*state*) abandoned - Incorrect state.

Explanation: LPD has terminated the processing of the specified job number because an incorrect job state was detected.

System action: LPD continues.

Operator response: Resubmit the job using the LPR command.

System programmer response: Make sure the failed job is mailed to the user using the MAIL command. For more information see the z/OS Communications Server: IP Programmer's Guide and Reference.

Module: LPD

Procedure name: ProcessWork

EZB0827I ProcessWork end with queue

Explanation: This message is issued while tracing is on. LPD has finished processing the queued jobs.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessWork

EZB0831I IBM MVS LPD Version *version* on *date* at *time*

Explanation: When the LPD server is initialized this message is displayed. The LPD version number, date, and starting time are displayed.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: LPD MAIN

EZB0833I Could not get identity!

Explanation: The LPD server was unable to identify the user ID, host name, TCP service and domain name during its start up procedure. LPD does not start.

System action: LPD continues.

Operator response: None.

System programmer response: Make sure the user ID, host name, TCP service, and domain name have all been specified using the LPD command and its subcommands. For more information of the LPD command and its subcommands, see z/OS Communications Server: IP Configuration Reference for more information.

Module: LPD

Procedure name: LPD MAIN

EZB0834I Ready

Explanation: LPD is initialized and ready for processing.

System action: LPD is initialized.

Operator response: None.

System programmer response: None.

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Module: LPD

Procedure name: LPD MAIN

EZB0835I Ignored data is *string*

Explanation: This message displays while tracing is on; it is preceded by EZB0768I. Data was delivered on the connection, but because the data is unrecognizable, it is ignored. The connection is closed.

System action: LPD continues.

Operator response: See EZB0768I.

System programmer response: See EZB0768I. Use the data from the message to determine if the LPD was sent bad data.

Module: LPD

Procedure name: DoNewData

EZB0850I Using Table for DBCS Translate: *data set*

Explanation: The DBCS translation table has been successfully loaded from the binary translation table data set in the search order hierarchy.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: LoadDbcsTables

EZB0851I Could not load DBCS Translate Table: *data set*

Explanation: DBCS conversion is configured for the LPD, but the required DBCS translation table could not be loaded.

System action: The program continues.

Operator response: None.

System programmer response: Configure a valid DBCS binary translate table data set in the search order hierarchy for the required DBCS translation table. See z/OS Communications Server: IP Configuration Reference for more information about loading and customizing DBCS translation tables.

Module: LPD

Procedure name: LoadDbcsTables

EZB0852I Use a NLS option after "NLSTRANSlate".

Explanation: An NLS option is expected after the NLSTRANSlate keyword of the SERVICE statement of the *hlq.LPD.CONFIG* data set.

System action: LPD continues.

Operator response: None.

System programmer response: Specify the correct value in the parameter of NLSTRANSlate keyword of the SERVICE statement of the *hlq.LPD.CONFIG* data set and restart the program.

Module: LPD

Procedure name: ProcessNlsOptions

EZB0853E Use an integer after JOBPACING.

Explanation: A number is expected after the JOBPACING statement in the *hlq.LPD.CONFIG* data set.

System action: LPD continues using the default value.

Operator response: None.

System programmer response: Specify the correct value for the parameter in the JOBPACING statement in the *hlq.LPD.CONFIG* data set and restart the program.

Module: LPD

Procedure name: PreparePrinters

EZB0854E Use an integer after STEPLIMIT.

Explanation: A number is expected after the STEPLIMIT statement in the *hlq.LPD.CONFIG* data set.

System action: LPD continues using the default value.

Operator response: None.

System programmer response: Specify the correct value for the parameter in the STEPLIMIT statement in the *hlq.LPD.CONFIG* data set and restart the program.

Module: LPD

Procedure name: PreparePrinters

EZB0855I Loaded translation table from dataset for printer *printer_name*

Explanation: The Line Printer Daemon (LPD) loaded the following SBCS translation table corresponding to the name provided by the TRANSLATETABLE or XLATETABLE statement in the *hlq.LPD.CONFIG* data set. This statement specifies the translation table to be used by the remote client for SBCS ASCII to EBCDIC translations.

dataset is the fully qualified data set name.

printer_name is the name of the printer service.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: PreparePrinters

EZB0856I Loaded translation table from *dataset*

Explanation: The Line Printer Daemon (LPD) loaded the SBCS translation table to be used if the printer service does not have TRANSLATETABLE or XLATETABLE statements specified.

dataset is the fully qualified data set name.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessOptions

EZB0857I • EZB0903E

EZB0857I Using hardcoded translation tables.

Explanation: Hardcoded translation tables will be used because the Line Printer Daemon (LPD) was unable to load an SBCS translation table using the data set names of *jobname*.STANDARD.TCPXLBIN or *hlq*.STANDARD.TCPXLBIN. These tables are equivalent to *hlq*.STANDARD.TCPXLBIN, which are shipped with the product.

See z/OS Communications Server: IP Configuration Reference for more information about using translation tables including search order hierarchy and customization.

System action: LPD continues.

Operator response: None.

System programmer response: None.

Module: LPD

Procedure name: ProcessOptions

EZB0900I *command name version version*

Explanation: Displays the line printer command used and the version level of the program. This message is displayed when you use the *version* parameter with the LPR, LPQ, LPRM, and LPRSET commands.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM, LPRSET

Procedure name: ProcessVersionOption

EZB0901E The option *option* is ambiguous. Use a longer abbreviation.

Explanation: The abbreviated option submitted at the command line is ambiguous.

System action: The command is terminated.

Operator response: Reissue the required option with a longer abbreviation at the LPR command line. For a list of valid abbreviations using the LPR command, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR, LPRM

Procedure name: ProcessOptions

EZB0902E Use a host name after HOST option.

Explanation: The HOST option was specified without indicating host name.

System action: The command is terminated.

Operator response: Reissue a valid host name at the HOST option. For a list of valid host names, contact the system operator.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0903E The option *option* was not recognized.

Explanation: The program cannot recognize the option you have entered. Valid options will be provided. This message will precede the valid options for your command.

System action: The command is terminated.

Operator response: Reissue the valid option using the LPR command.

System programmer response: None.

Module: LPQ, LPR, LPRM, LPRSET

Procedure name: ProcessOptions

EZB0904I Use the ALL, HOST, PRINTER, TRACE, TYPE or VERSION options as needed.

Explanation: This message displays valid options that may be used with LPT, LPQ, and LPRM commands.

System action: The command is terminated.

Operator response: None.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: ProcessOptions

EZB0905E Use a printer name after PRINTER option.

Explanation: The PRINTER option was specified without specifying a printer name.

System action: The command is terminated.

Operator response: Reissue the LPR command and the PRINTER option using a valid printer. For more information about the LPR command and the PRINTER option, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0906E Program error: Invalid option option.

Explanation: You specified an invalid option. To see a list of options, type HELP followed by your command or see z/OS Communications Server: IP User's Guide and Commands for more information.

System action: The command is terminated.

Operator response: Reissue the LPR command and a valid option.

System programmer response: None.

Module: LPR, LPQ, LPRM, LPRSET

Procedure name: ProcessOptions

EZB0907E Cannot get a printer name.

Explanation: The program cannot find a default printer name in the *user_id.LASTING.GLOBALV* data set.

System action: Processing continues.

Operator response: Use the LPRSET command to set up a default printer name. For more information see z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPQ, LPR, LPRM

Procedure name: ProcessOptions

EZB0908I • EZB0912E

EZB0908I Printer name from global variable PRINTER = "printer"

Explanation: LPR displays the default printer name, taken from the *user_id.LASTING.GLOBALV* data set. For more information about the *user_id.LASTING.GLOBALV* data set, see z/OS Communications Server: IP Configuration Reference.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0909E Use the PRINTER option this way: PRINTER nameofprinter<@printerhost>

Explanation: You issued the PRINTER option with the *at-sign* without specifying the printer name.

System action: The command is terminated.

Operator response: Reissue the printer option using the correct syntax as described in the message.

System programmer response: None.

Module: LPR, LPRM, LPQ

Procedure name: ProcessOptions

EZB0910E Cannot get the printer host.

Explanation: The program cannot find the default host name from the *user_id.LASTING.GLOBALV* data set.

System action: The command is terminated.

Operator response: Specify the host name on the command line, or use the LPRSET command to set up a default host name. For more information about the LPRSET command see z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPQ, LPR, LPRM

Procedure name: ProcessOptions

EZB0911I Host name from global variable PRTHOST = "host "

Explanation: If the LPR, LPQ, or LPRM command lines do not have a specified printer host, the GLOBALV variables PRINTER and PRTHOST are reviewed in the *user_id.LASTING.GLOBALV* data set and the name of the host in use is displayed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions.

EZB0912E The printer name is not known.

Explanation: The program does not recognize the printer name.

System action: Processing continues.

Operator response: Check the printer name at the server machine, and reissue the command with a valid printer name or use the LPRSET command to set a default printer name at the specified host. See z/OS Communications

Server: IP User's Guide and Commands for more information about setting up a default printer in the *user_id.LASTING.GLOBALV* data set.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0913E The host name is not known.

Explanation: The program cannot determine the host name.

System action: The command is terminated.

Operator response: Use a valid host name with the command. The LPRSET command can be used to set up a default host name for a default printer. See z/OS Communications Server: IP User's Guide and Commands for more information about setting up a default host in the *user_id.LASTING.GLOBALV* data set.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0914E Please specify the printer name and host either as a command option or with the LPRSET command.

Explanation: The program cannot determine the printer name or the printer host.

System action: Processing continues.

Operator response: Reissue your command with a valid printer name and host. The LPRSET command can be used to set a default printer and host using the GLOBALV variables in the *user_id.LASTING.GLOBALV* data set. For more information, see z/OS Communications Server: IP User's Guide and Commands.

System programmer response: If the problem continues, obtain more information using the TYPE or TRACE functions.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0915I Begin "cmd" to printer "printer" at host "foreignhost"

Explanation: This message indicates which printer and remote host are being used for your task. The task is indicated by "cmd" in the message, which can be LPR, LPQ, or LPRM.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: ProcessOptions

EZB0916I Sending command *command argument: operand*

Explanation: This message indicates the command was successfully sent to the remote host.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: SendCommand

EZB0917I • EZB0921I

EZB0917I Command successfully sent

Explanation: The command was successfully sent and acknowledged by the remote print server.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: SendCommand

EZB0918E Command was not sent successfully

Explanation: The command was not acknowledged by the remote host; therefore, the transmission was unsuccessful.

System action: The command is terminated.

Operator response: Reenter the command using the correct syntax.

System programmer response: Assist the operator if necessary.

Module: LPQ, LPRM

Procedure name: SendCommand

EZB0919I InitEmulation failed

Explanation: An error occurred initializing EC mode emulation. EC mode emulation is required to run TCPIP on a non-EC mode machine.

System action: Processing terminated.

Operator response: Reinitialize EC mode to on. If a problem occurs contact the system programmer.

System programmer response: EC-mode emulation can only be accessed when the processor is running. If a program is running in a 24-bit addressing mode, the program can be changed to a 31-bit addressing mode, which causes a branch to a module residing above the 16Mb virtual storage. For more information see *IBM Assembler Language Programming Book*.

Module: LPQ, LPR, LPRM

Procedure name: LPR Main

EZB0920I Requesting TCP/IP service at *date time*

Explanation: This message indicates the time and date that LPR, LPQ, or LPRM requested TCPIP service. This message is displayed if the TRACE option is specified.

System action: Process continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0921I Granted TCP/IP service at *date time*

Explanation: TCPIP service is provided for the command requested.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0922I Resolving *foreignhost* at *date time*

Explanation: The remote host is being resolved at the indicated time and date.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: DrainConnection, PrintLineWithTabs

EZB0923I Both the printer and the host name are not known.

Explanation: The program could not determine the printer name or the host name.

System action: The command is terminated.

Operator response: Check the host name and printer name for the correct information and reenter the command. Use the LPRSET command to set a default printer and host name. For more information see z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPQ, LPR, LPRM

Procedure name: ProcessOptions

EZB0924I Host *host name* resolved to *host_addr* at *date time*

Explanation: The remote host name has been resolved to the indicated Internet address along with the time and date.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0925I TCP/IP turned on.

Explanation: TCPIP services are now ready for use.

System action: Processing continues with the next request.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0926I Host “*host*” Domain “*domain*” TCP/IP Service Machine *name*

Explanation: This message indicates the host name, its domain name equivalent, and the TCPIP service machine in use.

System action: Processing continues.

Operator response: None.

EZB0927I • EZB0931I

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0927I Trying to open with local port *port* to foreign host address *address*

Explanation: This message is issued while tracing is on and LPR is first initiated. TCPIP is attempting to open a connection with the stated local port to the stated foreign host address.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0928I Connection open from local port *port* to foreign host address *address*

Explanation: This message is issued while tracing is on. TCPIP indicates that the specified local port has successfully connected to the specified foreign host address.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0929I Connected to *host*

Explanation: The local port has completed a successful telecommunication line to the remote port. This means your command has been accepted and transmitted through TCPIP services.

System action: Processing continues with the next request.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0930I Connection closed

Explanation: TCPIP services ends the connection when your task has completed processing.

System action: Processing ends successfully.

Operator response: None.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main, LPQ Main, or LPRM Main

EZB0931I Notification: *SayNotEn*

Explanation: This message provides information about whether the data has been delivered and whether the connection state has been changed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: DrainConnection, ReceiveData

EZB0932I NewState: *SayConSt*

Explanation: The state of the connection to TCPIP has changed. The new state is indicated in the message.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: DrainConnection, ReceiveData

EZB0933I ConnState: *SayConSt*

Explanation: This message indicates the state of the connection to TCPIP.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: DrainConnection, ReceiveData

EZB0934I BytesToRead: *bytes*

Explanation: This message indicates the number of bytes contained in a transmission from TCPIP.

System action: The system continues processing.

Operator response: If the data is not acknowledged, TCPIP will retransmit the data to make sure that the data is received.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: DrainConnection, ReceiveData

EZB0935I BytesDelivered: *bytes*

Explanation: This message indicates the number of bytes delivered for your task, if the trace option is used.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Module: LPQ, LPRM

Procedure name: ReceiveBytes, ReceiveData

EZB0936E BeginTcpip: *errmsg (msgnum)*

Explanation: The function BeginTcpip, which is used to start TCPIP service for LPQ or LPRM, was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in

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errmsg. For more information about this message, see message EZAm*snum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the message EZAm*snum*.

Module: LPQ, LPRM

Procedure name: LPR Main, LPQ Main or LPRM Main

EZB0939E Could not get identity! (*errmsg (msgnum)*)

Explanation: TCPIP was unable to identify the user requesting service.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*snum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing ends.

Operator response: Respond as indicated by the message EZAm*snum*.

System programmer response: Assist the user as necessary.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main, LPQ Main or LPRM Main

EZB0940E Unknown host *host*

Explanation: The specified host does not exist or is entered incorrectly.

System action: Processing halts.

Operator response: Reenter the correct host name or address using the LPRSET command.

System programmer response: None.

Module: LPR, LPRM, LPQ

Procedure name: LPR Main

EZB0941E Handle: *errmsg (msgnum)*

Explanation: The Handle procedure, which specifies what notifications to receive in a given set, was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*snum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the message EZAm*snum*.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0942E Connection to host failed.

Explanation: The attempt to connect to the specified host was not successful.

System action: Processing halts.

Operator response: Try to restart the connection by issuing the LPD command. For more information about the LPD command check the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0943I No local printer ports available now. Bind Conn failed.

Explanation: All of the local printer ports are either busy or not ready.

System action: Processing halts.

Operator response: Wait and try the command again.

System programmer response: None.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0944E Could not set option (errmsg (msgnum))

Explanation: The procedure that sets an option for a TCP connection was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPQ, LPRM LPR, LPQ, LPRM

Procedure name: LPR Main, LPR Main, LPRM Main

EZB0945E Could not send command errmsg (msgnum)

Explanation: The function which sends the commands was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPRM, LPQ

Procedure name: LPR Main

EZB0946E • EZB0949E

EZB0946E Failed to read buffer *errmsg* (*msgnum*)

Explanation: The procedure that attempts to receive the data was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPRM, LPQ

Procedure name: LPR Main

EZB0947E TcpClose&colon *errmsg* (*msgnum*)

Explanation: The function that closes the connection was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0948E Could not abort connection *errmsg* (*msgnum*)

Explanation: The application was unable to abort a connection.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing halts.

Operator response: Notify the system programmer.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPR, LPQ, LPRM

Procedure name: LPR Main

EZB0949E Failed to send from SendACK. return code = *rc* and Error Number = *errno*.

Explanation: The SendACK function, used by the server to relay acknowledgment, was not received by the host. The current port number and the user IP address are displayed with this message.

errno is the UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: Processing continues.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendACK

EZB0950E Failed to send from SendCommand. return code = *rc* and Error Number = *errno*.

Explanation: The function that sends the acknowledgment was unsuccessful. The command was not sent. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendCommand

EZB0951E Did not receive ACK for receive control file command

Explanation: SendCommand did not receive an acknowledgment code from the receiving host, and the control file command was not received.

System action: LPR halts.

Operator response: Try the command again making sure the host is ready and the connection is open.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendControlFile

EZB0952E Failed to send control line block. return code = *rc* and Error Number = *errno*.

Explanation: The function that sends the data was unsuccessful. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendControlFile

EZB0953E Did not receive ACK for control file

Explanation: The function TcpFReceive returned an F RECEIVError, indicating that the receive request was rejected. The control file was not received.

System action: LPR halts.

Operator response: Make sure the receiving host is ready and try the request again.

System programmer response: Assist the user as necessary.

Module: LPR

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Procedure name: SendControlFile

EZB0954E File could not be opened.

Explanation: LPR was unable to open a data set.

System action: Processing continues.

Operator response: Verify that the data set is in storage accessible to LPR.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0955E File contains no valid print lines.

Explanation: The data set is empty.

System action: Processing continues.

Operator response: Make sure the data set you wish to print contains at least one character.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0956E Failed to send data block *errmsg* (*msgnum*)

Explanation: The attempt to send the information was unsuccessful.

errmsg is the text of the message that describes the error.

msgnum is the 4-digit numeric portion of the message identifier of the EZA message whose text is displayed in *errmsg*. For more information about this message, see message EZAm*msgnum* in the z/OS Communications Server: IP Messages Volume 1 (EZA).

System action: Processing continues.

Operator response: Notify the system programmer.

System programmer response: Respond as indicated by the message EZAm*msgnum*.

Module: LPR

Procedure name: SendLineFlush

EZB0957E Did not receive ACK for receive data file command. Code = *code*.

Explanation: The host did not receive an acknowledgment from the LPR receive data command.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about return codes and error numbers. The current port number and the user IP address are displayed with this message.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendDataFile

EZB0958E File could not be opened.

Explanation: The specified data set could not be opened.

System action: LPR halts.

Operator response: Verify that you have access to the data set and try to open it again.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendDataFile

EZB0959E Did not receive ACK for data file

Explanation: The remote host did not acknowledge that it received a data set.

System action: If no acknowledgement is received, the data set is retransmitted. Processing continues.

Operator response: Notify the system programmer of the error.

System programmer response: Check why LPD did not send acknowledgement. Starting LPD (server) with "DEBUG" on, will help.

Module: LPR

Procedure name: SendDataFile

EZB0960E Did not receive ACK after close

Explanation: The remote host did not send a message acknowledging that it has closed. The connection remains open.

System action: Processing continues.

Operator response: Try to close the connection again.

System programmer response: None.

Module: LPR

Procedure name: DrainConnection

EZB0961I Control file name is dataset name

Explanation: The name of the control data set is displayed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: MakeFileNames

EZB0962I Data file name is dataset name

Explanation: The name of the current data set is displayed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: MakeFileNames

EZB0965E Use the form: command name DataSetName.

Explanation: This message displays the correct format for the indicated command. For more information about the commands, see the z/OS Communications Server: IP User's Guide and Commands.

System action: The command is not processed.

EZB0967E • EZB0970E

Operator response: Reenter the command using the form given in the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOperands

EZB0967E Data Set name "name" invalid.

Explanation: The specified data set name is incorrect.

System action: The command is not processed.

Operator response: Make sure that the data set name uses the correct format and syntax and that the data set is in storage accessible to the host.

System programmer response: Assist the user as necessary.

Module: LPD, LPR

Procedure name: ProcessOperands

EZB0968E Data Set "name" not found or inaccessible, return code = rc.

Explanation: This message may issue one of the following return codes:

Return code

Description

4 Data set name not found

12 Data set name is missing

24 Data set is an unprintable VSAM file

If another return code is issued, this indicates that the data set attributes may make the data set inaccessible.

System action: LPR halts.

Operator response: Reenter the LPR command using the correct data set name. If the data set name is correct, check the data set attributes.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOperands

EZB0969E Data Set "name" does not contain member "member".

Explanation: The specified data set name does not contain the specified member name.

System action: The LPR command is not processed.

Operator response: Reenter the command using the correct data set name and the correct member name.

System programmer response: None.

Module: LPR

Procedure name: ProcessOperands

EZB0970E Data Set "name" invalid organization.

Explanation: The function FindDSName exited abnormally because the file's organization was incorrect.

System action: Processing continues.

Operator response: Recheck the organization and reenter the file. Notify the system programmer if the problem persists.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOperands

EZB0971E Use a matching quotation mark at the end of the string.

Explanation: There is a missing quotation mark at the end of the string.

System action: The LPR command is not processed.

Operator response: Make sure there are appropriate quotation marks and reenter the string.

System programmer response: None.

Module: LPR

Procedure name: LPRToken

EZB0973E Use either BINARY or NOBINARY but not both.

Explanation: Either BINARY or NOBINARY can be chosen. Data cannot be sent as BINARY and NOBINARY.

System action: The LPR command is not processed.

Operator response: Reenter the LPR command specifying either the BINARY or NOBINARY options.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0974E Use a token after the CLASS option.

Explanation: After the CLASS option, you must enter a name of a host. If you do not want to name another host name, the CLASS option is not required. For more information about the LPR command and its options, see the z/OS Communications Server: IP User's Guide and Commands.

System action: LPR command is not processed.

Operator response: Reenter the LPR command and the CLASS option using a name of a host.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOptions

EZB0975E Use a count after the COPIES option.

Explanation: This message indicates that there is no number following the COPIES option. The COPIES option specifies how many copies are to be printed. If this option is not used, one copy will be printed.

System action: LPR command is not processed.

Operator response: Reenter the LPR command with the COPIES option and fill in a number, specifying the number of copies you want printed. If only one copy is needed, the COPIES option is not required.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0976E • EZB0980E

EZB0976E Use a letter after the FILTER option.

Explanation: No filter was specified after the filter option in the LPR command. The filter option specifies the type of processing to be done with the data.

System action: The LPR command is not processed.

Operator response: Reenter the LPR command using the filter option with a valid filter. See z/OS Communications Server: IP User's Guide and Commands for more information about the LPR command.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOptions

EZB0977E Use a number after the INDENT option.

Explanation: A numeric argument was not specified for the INDENT option of the LPR command.

System action: LPR command is not processed.

Operator response: Reenter the LPR command, specifying a numeric argument for the INDENT option. For more information about the LPR command and the INDENT option, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0978E Use a token after the JOB option.

Explanation: You must specify a name when using the JOB option. The name is the printing job's description to the remote system.

System action: The LPR command is not processed.

Operator response: Reenter the LPR command with a name following the JOB option. For more information about the JOB option of the LPR command see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0979E Use a number after the LINECOUNT option.

Explanation: You must enter a number following the LINECOUNT option to specify the number of lines to be printed before a new heading is printed.

System action: The LPR command is not processed.

Operator response: Reenter the LPR command with the LINECOUNT option using a valid number. For more information see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0980E Use an identification after NAME option.

Explanation: You did not specify a name after the NAME option in the LPR command. (The NAME option specifies the job information to be provided by the remote system in response to a query.)

System action: The LPR command is not processed.

Operator response: Resubmit the LPR command supplying a name after the NAME option. For more information about the LPR command and the NAME option, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0981E Use a title after the TITLE option.

Explanation: You did not specify the title after the TITLE option in the LPR command.

System action: The LPR command is not processed.

Operator response: Resubmit the LPR command supplying a name after the TITLE option. For more information about the LPR command and the TITLE option, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0982E Use a number after the TOPMARGIN option.

Explanation: You did not specify a number after the TOPMARGIN option in the LPR command. (This number specifies the number of lines designated for the top margin).

System action: The LPR command is not processed.

Operator response: Resubmit the LPR command supplying the number of lines to be designated for the top margin. For more information about the LPR command and the TITLE option, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0983E Use a title after the WIDTH option.

Explanation: You did not specify the line width after the WIDTH option in the LPR command.

System action: The LPR command is not processed.

Operator response: Resubmit the LPR command supplying the line width of the data set. For more information about the LPR command and the WIDTH option see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0984E Use either the NOPOSTSCRIPT or POSTSCRIPT option but not both.

Explanation: You selected both the POSTSCRIPT and the NOPOSTSCRIPT options in the LPR command. You can select only one of these options.

System action: The LPR command is not processed.

Operator response: Reissue the command with the correct option. For more information about the LPR command and the POSTSCRIPT or NOPOSTSCRIPT options, see the z/OS Communications Server: IP User's Guide and Commands.

EZB0985E • EZB0988I

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0985E Use either the POSTSCRIPT or LANDSCAPE option but not both.

Explanation: You selected both the POSTSCRIPT and LANDSCAPE options in the LPR command. You can select only one of these options.

System action: The LPR command is not processed.

Operator response: Reissue the command with the correct option. For more information about the LPR command and the POSTSCRIPT or NOPOSTSCRIPT options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0986E Use either the BINARY OR LANDSCAPE option but not both.

Explanation: You selected both the BINARY and LANDSCAPE options in the LPR command. You may select only one of these options. If you select the LANDSCAPE option, the only valid filter option that you can specify explicitly is the "o" filter.

System action: The LPR command is not processed.

Operator response: Reissue the command using the correct option. For more information about the LPR command and the BINARY or LANDSCAPE options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0987E Use either the FILTER or LANDSCAPE option but not both.

Explanation: You selected both the FILTER and LANDSCAPE options in the LPR command. You may select only one of these options. If you select the LANDSCAPE option, the only valid filter option that you can specify explicitly is the "o" filter.

System action: The LPR command is not processed.

Operator response: Reissue the command with the correct option. For more information about the LPR command and the FILTER or LANDSCAPE options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0988I PostScript program is *number* bytes.

Explanation: This message specifies the number of bytes in the PostScript program.

System action: The LPR command is not processed.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB0989I Use these options.

EZB0990I additional options

EZB0991I additional options or last options

Explanation: TCPIP issues this message when one or more incorrect options is specified in the LPR command. It provides a list of valid options.

System action: The LPR command is not processed.

Operator response: Reissue the LPR command using valid options.

System programmer response: None.

Module: LPR, LPRSET

Procedure name: ProcessOptions

EZB0992I File contains PostScript.

Explanation: TCPIP issues this message when tracing is on and PostScript characters are detected in the data set.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0993E Use the program which produced the PostScript to change to landscape display.

Explanation: The LANDSCAPE option is specified in the LPR command and the file to be printed is a PostScript data set.

System action: The LPR command is not processed.

Operator response: Redefine the data set for landscape display using the original application program that created the POSTSCRIPT file. Then reissue the LPR command without the LANDSCAPE option. See also EZB1010E.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0994E Use the NOPOSTSCRIPT option to prevent special processing of PostScript files.

Explanation: The LPR command contains both POSTSCRIPT and CC options.

System action: The LPR command is not processed.

Operator response: Reissue the LPR command using the NOPOSTSCRIPT option in place of the POSTSCRIPT option. For more information about the LPR command and the POSTSCRIPT and NOPOSTSCRIPT options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0995W • EZB0999I

EZB0995W Ignoring "buffer"

Explanation: TCPIP issues this message when an incorrect carriage control character is detected. The lines containing those incorrect characters are ignored.

System action: Processing continues.

Operator response: Correct the carriage control characters in the data set.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0996W number lines with invalid carriage control characters deleted.

Explanation: TCPIP issues this message when incorrect carriage control characters are detected in the data set that is being processed. The lines containing the incorrect carriage control characters are deleted.

System action: Processing continues.

Operator response: Correct the carriage control characters in the data set and resubmit the job.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB0997I Byte size check starts at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The date and time are recorded before performing a byte size check of the data set.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB0998I Byte size check ends at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The date and time are recorded after performing a byte size check of the data set.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB0999I Send command starts at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. Arguments are passed prior to the actual data transfer. The date and time are recorded before those arguments are passed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

Chapter 3. EZB1xxxx messages

EZB1001 Send command ends at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. After arguments are passed and acknowledgments are received, the date and time are recorded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1001I Send data starts at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. Before the data set is sent to the remote printer, the date and time are recorded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1002I Send data ends at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. When the data set is received by the remote printer, the date and time are recorded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1003I Send ACK starts at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. TCPIP initiates an acknowledgment process. The date and time are recorded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1004I Send ACK ends at date time

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. When the requested acknowledgments are received, the acknowledgment process is complete; the date and time are recorded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1005I Draining the connection.

Explanation: This message occurs while the data is sent from the host to the remote printer and tracing is on. Before the connection between the host and the remote printer closes, the information is taken in and processed by the printer.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DrainConnection

EZB1006E Host *host* did not accept printer name *printer*

Explanation: The indicated host did not recognize the indicated printer.

System action: The LPR command is not processed.

Operator response: Resubmit the job using the correct host printer name.

System programmer response: None.

Module: LPR

Procedure name: DrainConnection

EZB1007I Connection still receiving - aborting it.

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The remote host continues to receive information. When all the information is received, the connection is aborted.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DrainConnection

EZB1008I Connection aborted.

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. TCPIP ended the connection with the remote host.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: DrainConnection

EZB1009I Data file sent.

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The data set has been successfully sent.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1010E Use the program which produced the PostScript to control pagination.

Explanation: This message follows EZB0993E and is issued when the LANDSCAPE option is specified in the LPR command and the file to be printed is a PostScript data set.

System action: The LPR command is not processed.

Operator response: Redefine the data set to control pagination using the original application program that created the POSTSCRIPT file. Then reissue the LPR command without the LANDSCAPE option.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB1011I Queuing control line "number"

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The commands are retrieved in the order in which they were submitted.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: QueueControlLine

EZB1012I Receiving ACK

Explanation: TCPIP issues this message when tracing is on and a data set is sent to a remote printer using the LPR command. TCPIP is receiving acknowledgments from the remote host.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: ReceiveByte

EZB1013I • EZB1017I

EZB1013I ReceiveACK: word for byte value rc

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. TCPIP is receiving acknowledgments from the remote host.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: ReceiveByte

EZB1014I Sending ACK

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The remote host is sending acknowledgments to TCPIP.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendACK

EZB1015I ACK successfully sent

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. The acknowledgment process has been successfully completed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendACK

EZB1016E Did not receive an ACK for command. Code=rc

Explanation: TCPIP issues this message when tracing is on and a data set is sent to the remote printer using the LPR command. TCPIP did not receive an acknowledgment from the remote host. The return code is displayed.

System action: The LPR command is not processed.

Operator response: Resubmit the LPR command.

System programmer response: None.

Module: LPR

Procedure name: SendCommand

EZB1017I Control data sent

Explanation: A control data set was sent to the remote host. The control data set contains the printer setup information.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB1018I Control file sent

Explanation: A control data set was sent to the remote host. The control data set contains the information to be printed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendControlFile

EZB1019E Use the form: LPRSET nameofPrinter@printerhost.

Explanation: You specified an incorrect format for the LPRSET command.

System action: The LPRSET command is not processed.

Operator response: Reissue the LPRSET command with the correct syntax (nameofPrinter@printerhost). For more information about the LPRSET command, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR, LPRSET

Procedure name: ProcessOperands

EZB1020I Your LPR printer is currently set to *printer at host*

Explanation: This message is displayed when the LPRSET (QUERY command is issued. The LPR printer name and host are identified.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPRSET

Procedure name: ProcessQueryOption

EZB1021I Append of host name to LASTING.GLOBALV status *rc*

Explanation: This message is displayed when the LPRSET command is issued while tracing is on. The remote host name is added to the LASTING.GLOBALV data set. This message is followed by EZB1022I and EZB1023I.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPRSET

Procedure name: ProcessArguments

EZB1022I Append of printer name to LASTING.GLOBALV status *rc*

Explanation: This message is displayed when the LPRSET command is issued while tracing is on. The printer name is added to the LASTING.GLOBALV data set. This message appears with EZB1021I and EZB1023I.

System action: Processing continues.

Operator response: None.

EZB1023I • EZB1025E

System programmer response: None.

Module: LPRSET

Procedure name: ProcessArguments

EZB1023I Printer set to printer at host

Explanation: This message is displayed when the LPRSET command is issued while tracing is on. The LPR printer name and host are identified. This message is preceded by EZB1021I and EZB1022I.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPRSET

Procedure name: ProcessArguments

EZB1024E System error error setting printer.

Explanation: This message occurs as a result of a failure while attempting to set the LPR printer. For more information about the LPRSET command, see the z/OS Communications Server: IP User's Guide and Commands.

System action: The LPRSET command is not processed.

Operator response: Check the remote printer and resubmit the job.

System programmer response: None.

Module: LPRSET

Procedure name: ProcessArguments

EZB1025E Cannot use BINARY with a DBCS Translation Mode.

Explanation: The BINARY parameter may not be specified with any other of the following LPR command line parameters:

- JIS78KJ
- JIS83KJ
- SJISKANJI
- EUCKANJI
- IBMKANJI
- HANGEUL
- KSC5601
- TCHINESE

System action: The LPR command is not processed.

Operator response: Consult the system programmer.

System programmer response: Specify either the BINARY parameter or a DBCS translation mode parameter. See z/OS Communications Server: IP User's Guide and Commands for more information about using DBCS conversion in LPR.

Module: LPR

Procedure name: ProcessDbcsOption

EZB1026E Cannot use multiple DBCS Translation Modes.

Explanation: More than one of the following LPR command line parameters was specified:

- JIS78KJ
- JIS83KJ
- SJISKANJI
- EUCKANJI
- IBMKANJI
- HANGEUL
- KSC5601
- TCHINESE

System action: The LPR command is not processed.

Operator response: Consult the system programmer.

System programmer response: Specify only one of the above DBCS translation mode parameters. See z/OS Communications Server: IP User's Guide and Commands for more information about using DBCS conversion in LPR.

Module: LPR

Procedure name: ProcessDbcsOption

EZB1027E Unable to Load DBCS_translate_table_dataset

Explanation: LPR was attempting to load a DBCS translation table corresponding to the DBCS conversion mode parameter specified on the LPR command line. All data sets in the search order hierarchy for the required translate table data set, either do not exist, or do not contain data in the required format for DBCS binary translate tables.

System action: The LPR command is not processed.

Operator response: Consult the system programmer.

System programmer response: Configure a valid DBCS binary translate table data set in the search order hierarchy for the required DBCS translation table. See z/OS Communications Server: IP User's Guide and Commands for more information about the loading and customizing of DBCS translation tables.

Module: LPR

Procedure name: LoadDbcsTables

EZB1043E Failed to Send PostScript_id. Return code = rc. Error Number= errno.

Explanation: This message is issued because the LPD server failed to send the PostScript ID that is contained in the PostScript data file.

errno is the UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: Notify the system programmer.

System programmer response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

Module: LPR

Procedure name: SendDataFile

EZB1044E Specify a user name after USER option.

Explanation: The LPR command was entered with no user name specified for the USER option.

System action: LPR halts.

Operator response: Reenter the LPR command, specifying a user name after the USER option. For more

EZB1045E • EZB1047E

information, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: None.

Module: LPR

Procedure name: ProcessOptions

EZB1045E Send ACK failed. return code = *rc*. Error Number = *errno*.

Explanation: The client machine failed while attempting to send acknowledgments to the server machine. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1046E Shutdown failed. return code = *rc*. Error Number = *errno*.

Explanation: While attempting to close the TCP connections on both the client and server sides, an error was detected. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1047E Send Control File failed. return code = *rc*. Error Number = *errno*.

Explanation: An error was detected while attempting to send the file format information. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1048E Send Data File failed. return code = *rc*. Error Number = *errno*.

Explanation: An error was detected while attempting to send the data file containing the file data. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1049E Send printer command did not receive ACK. ACK message = *message*.

Explanation: No acknowledgment was received from the server while attempting to send a printer command. An acknowledgment message was passed. The current port number and the user IP address are displayed with this message.

System action: LPR halts.

Operator response: Use the ACK message to determine and correct the problem.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendDataFile

EZB1050E Failed to Send Data. return code = *rc*. Error Number = *errno* port number = *port* remote ip address = *ipaddr*

Explanation: An error was detected while attempting to send data to the server machine.

rc is the return code from the subroutine that was called.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

port is the number of the connecting port.

ipaddr is the remote IP address.

System action: LPR halts.

Operator response: If *rc* is -1 and *errno* is 0, then there was a read error while trying to access the DBCS translation tables. Check your translation tables and their location. Correct any problems with the DBCS translation tables and try the LPR command again.

If *rc* is -2 and *errno* is 0, then there are DBCS characters that are not valid in the print file that you are trying to send. Turn on the trace option in LPR to see more messages from the translation routines. Correct the print file and try the LPR command again.

If *rc* is -1 and *errno* is nonzero, then look up the *errno* in the z/OS UNIX System Services Messages and Codes for help in diagnosing the exact problem.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1051E • EZB1054E

EZB1051E Failed to Open connection to Port Number = *port*. return code = *rc* error number = *errno* port number = *port* remote ip address = *ipaddr*

Explanation: The attempt to open a connection at the stated port was unsuccessful. The requested port, return code, error number, current port, and the IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: Try to access the stated port number again. If the problem persists, notify the system programmer.

System programmer response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

Module: LPR

Procedure name: SendDataFile

EZB1052E StartTcpip: return code = *rc* and Error Number = *errno*.

Explanation: An error was detected while attempting to initialize TCPIP.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: SendDataFile

EZB1053E Could not set option. return code = *rc* and Error Number = *errno*.

Explanation: While attempting to set the socket KeepAlive option, an error was detected.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1054E TcpClose: return code = *rc* and Error Number = *errno*.

Explanation: While attempting to close the TCP connection on both the client and server machines an error was detected. The current port number and the user IP address are displayed with this message.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: LPR halts.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1055E Use a three-digit number after the JNUM option.

Explanation: The value specified for JNUM is not valid. It is either missing, greater than or less than three digits, or is not numeric. The JNUM value can be any 3-digit number in the range 000—999. The print job is not processed.

System action: LPR halts.

Operator response: Correct the JNUM value specified on the LPR command.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: ProcessOptions

EZB1056E Invalid Internet address *Foreignhost*.

Explanation: You provided an address containing numbers greater than 255. This is an invalid IP address for LPR.

System action: LPR halts.

Operator response: Check the IP address to which you are sending your output.

System programmer response: Assist the user as necessary.

Module: LPR

Procedure name: MainLoop

EZB1057I Loaded translation table from *data set name*

Explanation: The fully qualified data set name used by LPR for the translation tables is displayed. These tables are used to translate EBCDIC to ASCII and ASCII to EBCDIC. This message may be issued more than once if more than one table is loaded. The last table loaded of a particular type will be the one used. (This will be the one cited in the last occurrence of this message).

System action: Processing continues.

Operator response: If the data set name displayed is not the one desired, verify that the expected data set exists. The search order used by LPR to find the translation data set is described in the z/OS Communications Server: IP Configuration Reference. If the data set name displayed is empty (" "), then no translate data set was found in the search order. Create the desired translate table, or correct the TRANSLATE option specified on the LPR command.

System programmer response: Verify that the system translate tables are correctly installed under the correct high level qualifier (for example, *hlq.STANDARD.TCPXLBIN*). For information about determining the high level qualifier used, see the z/OS Communications Server: IP Configuration Reference.

Module: LPR

Procedure name: ProcessOptions

EZB1058E Data Set *dataset_name* not found

Explanation: The line printer requester (LPR) was unable to find the data set that was used in the invocation of the LPR command.

In the message text:

dataset_name

The name of the data set that could not be found.

System action: LPR ends.

Operator response: No action is needed.

System programmer response: Assist the user, as necessary.

EZB1059E • EZB1098I

User response: Reenter the LPR command using a correct data set name. If the data set name is correct, verify that the data set exists and is cataloged. If the data set does exist and is cataloged, contact the system programmer.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: LPT

Module: LPR

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

EZB1058E Data Set USER1.TCPIP.DATA2 not found

EZB1059E Data Set *dataset_name* larger than 2,147,483,647 bytes

Explanation: The data set is too large to be sent using the LPR command.

In the message text:

dataset_name

The name of the data set that is being sent.

System action: LPR ends.

Operator response: None.

System programmer response: Not Applicable.

User response: You can either make the data set smaller or use another mechanism to send the data set to a remote printer.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: LPT

Module: LPR

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZB1059E Data Set USER1.TCPIP.DATA larger than 2,147,483,647 bytes

EZB1098I return code = *rc*. Error Number = *errno*.

Explanation: See the user response. The text of this message is usually appended to the end of other messages.

errno is the z/OS UNIX System Services return code. return codes are listed and described in the z/OS UNIX System Services Messages and Codes.

System action: Depending on the return code and error number in this message, LPR process may continue or may terminate.

Operator response: See z/OS Communications Server: IP and SNA Codes for information about TCP/IP return codes and the z/OS UNIX System Services Messages and Codes for information about the *errno*. If the return code is -1 and error number is 0, then negative acknowledgment was received from the server. Turn on the trace for the server to find out why the server rejected the LPR request.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1099I Port Number = *port*. Remote IP Addr = *target address*

Explanation: See the user response. The text of this message is usually appended to the end of other messages. This message displays the port number and the IP address currently in use.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: LPR

Procedure name: SendDataFile

EZB1100I Cannot load translate table with name - *name* using defaults

Explanation: The Line Printer Request (LPR) attempted to load an SBCS translation table corresponding to the TRANSLATETABLE or XLATETABLE parameter specified on the LPR command line. All data sets in the search order hierarchy for the required translate table data set, either do not exist, or do not contain data in the required format for SBCS binary translate tables.

name is an input string that becomes part of the translation table data set name (for example, *hlq.name.TCPXLBIN*).

System action: LPR continues, however, default hardcoded tables are used for translations.

Operator response: Notify the system programmer.

System programmer response: Configure a valid SBCS binary translate table data set in the search order hierarchy for the required SBCS translation table. See z/OS Communications Server: IP Configuration Reference for more information about using translation tables, including search order hierarchy and customization.

Module: LPR

Procedure name: ProcessOptions

EZB1200E Error parsing argument "option" (*specifier*) ; unknown kind

Explanation: XWindows has encountered an option or specifier that it does not recognize in a user-submitted command line. The command line is not processed.

System action: XWindows continues.

Operator response: Correct the syntax and resubmit the command.

System programmer response: None.

Module: PARSECMD

Procedure name: _XReportParseError

EZB1201E Bad image *image_type*: error found in routine: *routine*

Explanation: Xwindows received an incorrect image type from the indicated routine. The image type and Xwindows error code are displayed in the message.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Use the error code given in the message and z/OS Communications Server: IP and SNA Codes to determine the cause of the error, and correct the indicated routine as necessary.

Module: XIMUTIL

Procedure name: _XReportBadImage

EZB1202E • EZB1206E

EZB1202E Xlib: warning, client built for newer rev (*rev_number*) than server (*rev_number*)!

Explanation: The Xwindows client code was built for a newer version of Xwindows than the Xwindows server code. This can result in compatibility errors.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Correct either the client code or the server code to eliminate the revision disparity and rebuild the code.

Module: XOPENDIS

Procedure name: _XRead

EZB1203E Xlib: warning, client is protocol rev *revision*, server is rev *revision*!

Explanation: The Xwindows server is using a different revision of the Xwindows code than the client. This can cause compatibility problems.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Correct the disparity in revision levels between the client and the server and restart Xwindows.

Module: XOPENDIS

Procedure name: _XRead

EZB1204E Xlib: connection to server refused by server

Explanation: This message indicates that no authorization exists between the Xwindow server and the client program. The error causes the server to refuse the connection. The connection is not established.

System action: No Xwindows session can be opened for this client.

Operator response: Issue an Xhost command from the Xserver side.

System programmer response: None.

Module: XOPENDIS

Procedure name: Main

EZB1205E Xlib: sequence lost (0x*number_received* > 0x*number_expected*) in reply type 0x*reply_type*!

Explanation: The Xwindows server received a reply packet with a sequence number greater than the sequence number expected, indicating that a reply packet has been lost.

System action: Xwindows halts processing.

Operator response: Notify the system programmer of the error.

System programmer response: Check the indicated Xclient to determine why the packet was lost and respond as indicated.

Module: XLIBINT

Procedure name: _XSetLastRequestRead

EZB1206E Xlib: unhandled wire event! event number = *number*, display = *display_number*

Explanation: Xwindows encountered an unknown event during conversion between the host format and the wire format.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Check the XEvent structure to make sure it is compatible with the current host. For more information, see the Xwindows documentation.

Module: XLIBINT

Procedure name: _XUnknownWireEvent

EZB1207E Xlib: unhandled native event! event number = *number*, display = *display_number*

Explanation: Xwindows encountered an unknown event while reformatting a wire event to the host structure.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Check the XEvent structure to make sure that it is compatible with the current host. For more information see the Xwindows documentation.

Module: XLIBINT

Procedure name: _XUnknownNativeEvent

EZB1208E XIO: fatal IO error *error_description* on X server *address_of_server*

EZB1209E after *number* requests (*number* known processed) with *number* events remaining. *err_no* (*error*) on X server "server"

Explanation: The Xwindows server encountered an I/O error during processing. The type of error is indicated in the message. The error description portion of this message indicates the cause of the error.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the *error_description* portion of this message.

Module: XLIBINT

Procedure name: _XDefaultIOError

EZB1210I The connection was probably broken by a server shutdown or KillClient.

Explanation: If this message follows messages EZB1208E and EZB1209E, it indicates that the error displayed in those messages was probably caused by the shutdown of the Xwindows server, or by the procedure KillClient, which closes a connection to an Xwindows client.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Check the Xwindows server to determine why it shut down or closed the client connection.

Module: XLIBINT

Procedure name: _XDefaultIOError

EZB1211I Request failed due to IUCV error.

Explanation: This message follows messages EZB1208E and EZB1209E, and indicates that the error displayed in those messages was caused by a failure in the inter-user communication vehicle (IUCV). Xwindows uses IUCV to transmit requests and receive replies.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: See additional messages to determine the cause of the IUCV error and respond as indicated.

EZB1212E • EZB1230I

Module: XLIBINT

Procedure name: _XDefaultIOError

EZB1212E **Xlib:** extension “*extension*” reason on display “*display*”.

Explanation: Xwindows encountered an incorrect event handler when the function XSetExtensionErrorHandler or XMissingExtension is called.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Make sure that the event handler is set correctly before calling the associated extension. For more information see the Xwindows documentation.

Module: EXTUTIL

Procedure name: XExtDisplayInfo

EZB1220I **name:** *argument*, **value:** 0x*hex_value*

Explanation: This message displays the name and hexadecimal value of arguments for Xwindows processing.

System action: Xwindows continues.

Operator response: None.

System programmer response: None.

Module: ARGLIST

Procedure name: PrintArgList

EZB1221E **error_prefix****Error:** *reason*

Explanation: Xwindows has encountered an error. The reason for the error is described in the *reason* portion of this message.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the *reason* portion of this message.

Module: ERROR

Procedure name: _XtDefaultError

EZB1222E **warning_prefix****Warning:** *reason*

Explanation: Xwindows has encountered an error. The reason for the error is described in the *reason* portion of this message.

System action: Xwindows halts.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the *reason* portion of this message.

Module: ERROR

Procedure name: _XtDefaultWarning

EZB1230I **header** **w:** *children*, **m:** *request_mode*, **x:** *x_coordinate*, **y:** *y_coordinate*, **w:** *width*, **h:** *height*, **b:** *border_width*

Explanation: This message displays information about the geometry of the current Xwindows.

System action: Xwindows continues.

Operator response: None.

System programmer response: None.

Module: GEOUTILS

Procedure name: PrintBox

Chapter 4. EZB2xxxx messages

EZB200I *string string hexdata*

Explanation: The contents of a packet or control block are displayed.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: SNAPIA5, SNAPAREA

EZB2010I *program {MVS} update level level*

Explanation: The version of X25IPI currently running has the indicated program name (usually X25IPI) and the indicated update level.

System action: TCPIP continues.

Operator response: None.

System programmer response: Use the update level when reporting errors.

Module: XNX25IPI

Procedure name: None.

EZB2011I **Command:** *command*

Explanation: This message is displayed when tracing is on. The X25 server is processing the command passed to it from the console input program.

System action: The command is processed and execution continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: COMMAND

EZB2012E **Unrecognized command:** *command*

Explanation: The X25 server tried to process an unrecognized command that was passed to it from the console input program.

System action: The X25 server continues processing.

Operator response: Correct the command and resubmit. See z/OS Communications Server: IP Configuration Reference for more information about TCPIP X25 commands.

System programmer response: None.

Module: XNX25IPI

Procedure name: COMMAND

EZB2013T Unrecognized CIB verb= *cibverb*

Explanation: The X25IPI server received an unexpected command verb in a command input buffer from the command queue (QEDIT). The valid commands are STOP, START, and MODIFY.

System action: X25IPI treats the command as STOP and exits.

Operator response: Restart TCPIPX25.

System programmer response: Report the problem to IBM software support services.

Module: XNX25IPI

Procedure name: COMMAND

EZB2020I MCH *lu* state *state session_state*

Explanation: X25IPI status for the indicated MCH is displayed. The following are the *Link_state* fields:

Field Description

X'00'	Restart needed
X'10'	Ready
X'20'	Restart request sent
X'30'	Restart indication received

The following are the VTAM*session_state* fields:

Field Description

X'20'	Enabled for LOGAPPL logon
X'30'	logon pending
X'40'	Opening
X'50'	Open (ready)
X'60'	Closing
X'70'	Unsuccessful

System action: TCPIP continues.

Operator response: None.

System programmer response: Use the status in problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2021I VC *vc* LU *lu* DTE *address state call_state session_state*

Explanation: X25IPI status for the indicated virtual circuit is displayed. The following are the *call_state* fields:

Field Description

X'00'	Waiting for restart on MCH
X'10'	Available for connections
X'20'	Call request sent
X'30'	Call request received
X'40'	Ready for data transfer
X'41'	Reset request sent
X'42'	Reset request received

X'43'	Interrupt request sent
X'44'	Interrupt request received
X'50'	Call collision
X'60'	Clear request sent
X'70'	Clear request received

The following are the VTAM*session_state* fields:

Field	Description
X'00'	Disabled until restart on MCH
X'10'	Available for connections
X'20'	Enabled for NPSI LU logon
X'30'	Logon pending
X'40'	Opening
X'50'	Open (ready)
X'60'	Closing
X'70'	Failed

System action: TCPIP continues.

Operator response: None.

System programmer response: Use the status in problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2022R IP AS_*asname* state connection status

Explanation: X25IPI status for the DLC path to the TCPIP address space is displayed. Possible values are:

X'80'	DLC connection complete
X'40'	DLC connection pending
X'00'	no path

System action: The X25 server continues processing.

Operator response: Use the status in problem determination.

System programmer response: Use the status in problem determination.

Module: XNX25IPI

Procedure name: CLIST

EZB2030I MCH lu RC: *name* IP: *name* SN: *name* TX: *name*

Explanation: In response to an EVENTS command, the internal subroutine names handling events associated with this MCH are displayed.

Subroutine	Description
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IP	VTAM input pending
RC	VTAM request complete
SN	VTAM session notification
TX	Timer expired

EZB2031I • EZB2034I

System action: Processing continues.

Operator response: None.

System programmer response: Use the data for problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2031I VC vc RC: name IP: name SN: name TX: name

Explanation: In response to an EVENTS command, the internal subroutine names handling events associated with this virtual circuit is displayed.

Subroutine

Description

RC VTAM request complete

IP VTAM input pending

SN VTAM session notification

TX Timer expired

System action: Processing continues.

Operator response: None.

System programmer response: Use the data for problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2032I MCH lu

Explanation: The following X25IPI014R VC messages apply to virtual circuits on this MCH.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2033I VC vc DTE_address S send_count R receive_count D drop_count Q queue_size

Explanation: The traffic counts for this virtual circuit are displayed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2034I IP AS_userid S send_count R receive_count D drop_count Q queue_size

Explanation: The traffic counts on the IUCV connection to the TCPIP address space are displayed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2040E MCH *lu* unknown

Explanation: An attempt was made to send a call request for an unknown MCH. The request is ignored. The CERTCALL command is refused.

System action: TCPIP continues.

Operator response: Determine the correct MCH name, and reissue the CERTCALL command.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2041I MCH *lu* restarting

Explanation: X25IPI is restarting this MCH in response to a RESTART command. A VTAM session is initiated for the NPSI MCH LU.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2042E MCH *lu* unavailable

Explanation: X25IPI could not restart this MCH because it is unavailable for logon. The MCH session is left available for initiation by LOGAPPL.

System action: TCPIP continues.

Operator response: Activate the MCH LU through VTAM.

System programmer response: Determine the reason why VTAM refused session initiation.

Module: XNX25IPI

Procedure name: None.

EZB2043E MCH *lu* already started

Explanation: X25IPI could not restart this MCH because it is already active. The request is ignored.

System action: TCPIP continues.

Operator response: Notify the system programmer of the error.

System programmer response: Determine the correct MCH name and reissue the CERTCALL command.

Module: XNX25IPI

Procedure name: None.

EZB2050I *object at address additional*

Explanation: This message reports the locations of internal storage as requested by debug flag 4. The *object* can be "Global storage", "MCH *lu* SDA", or "VC *vc* SDA". The *additional* variable, if present, reports the "stack at *address* limit *address*".

System action: The X25 server continues processing.

EZB2051I • EZB2082I

Operator response: None.

System programmer response: Use the storage addresses for problem determination.

Module: XNX25IPI

Procedure name: STRTLINK

EZB2051I MCH *lu* SDA at *address*

Explanation: The contents of the session data area (SDA) for this connection are dumped.

System action: TCPIP continues.

Operator response: None.

System programmer response: Use the data for problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2080I Dispatch *handler name (event handler address)* SDA *session data area address* ECB *event control block*

Explanation: This message is displayed when tracing is on. The X25 server scans for posted event control blocks and calls event handlers.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: Use the dispatch trace in problem determination.

Module: XNX25IPI

Procedure name: MAINLOOP

EZB2081I Dispatch *handler name (event handler address)* SDA *session data area address*

Explanation: This message is displayed when tracing is on. The X25 server scans for posted event control blocks and calls an MCH event handler.

System action: The event handler is called.

Operator response: None.

System programmer response: Use the dispatch trace in problem determination.

Module: XNX25IPI

Procedure name: MCHEVENT

EZB2082I Main wait: *number of ECBS* ECBS

Explanation: This debug message displays the number of event control blocks (ECB) in the main wait list.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: Use the event count in problem determination.

Module: XNX25IPI

Procedure name: MAINLOOP

EZB2083I Call caller's name (caller's address) from previous caller in previous caller's name (previous caller's address)

Explanation: This debug message displays the name of the current subroutine and the calling subroutine.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: Use the trace in problem determination.

Module: XNX25IPI

Procedure name: FOLLOW

EZB2084E Posted ECB at address had no handler

Explanation: The X25IPI event control block at this address did not specify an event handler routine.

System action: TCPIP continues.

Operator response: Tell the system programmer about the error.

System programmer response: If the error recurs, obtain a dump of the X25IPI address space to make sure that the correct event handler is loaded.

Module: XNX25IPI

Procedure name: None.

EZB2085E ECB address being added twice to wait list

Explanation: The X25IPI routine that adds elements to the ECB wait list detected an attempt to add an ECB twice.

System action: TCPIP continues.

Operator response: Notify the system programmer about the error

System programmer response: Determine the external event that caused this condition. Re-create it with an X25 internal trace running. Obtain a dump of the X25 region and submit the dump to IBM software support services

Module: XNX25IPI

Procedure name: None.

EZB2090I Terminating

Explanation: X25IPI is terminating its execution and shutting down.

System action: The VTAM ACB is closed.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2091I HALT notice accepted type type

Explanation: X25IPI received a VTAM HALT notification or a HALT console command and is shutting down execution.

System action: VTAM LU sessions are closed, and the IUCV connection to the TCPIP address space is severed.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2092T • EZB2099I

EZB2092T Stack overflow at *address*

Explanation: X25IPI encountered a stack overflow at the indicated address. ABEND message X'091' is displayed.

System action: X25IPI abends.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the cause of overflow, and submit the ABEND dump to IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2093T Buffer released twice at *address* in routine (*address*)

Explanation: X25IPI encountered a consistency error in its buffer allocation pool. A buffer was released twice. This indicates a programming error. Return code X'92'. is displayed.

System action: X25IPI abends.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the cause of the consistency error, and submit the ABEND dump to IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2094S NPSI SEND completion, pending packet = *packet number*

Explanation: A program flag indicating a deferred control packet to be sent has an unacceptable value. The pending condition is reset.

System action: TCPIP continues.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2095T WTO text overflow

Explanation: XNX25IPI encountered an overflow in the Write To Operator (WTO) area, which is used to display informational and error messages. ABEND message X'099' is displayed.

System action: The program abends.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the cause of the overflow, and submit the ABEND dump to IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2099I Ended

Explanation: X25IPI has finished processing.

System action: The X25IPI program exits.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2100I *configuration dataset record*

Explanation: This debug message displays a record that was read from the configuration data set.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: X25IPI1

EZB2101E *Unable to open configuration file, DDNAME=X25IPI*

Explanation: X25IPI encountered an error opening its X25IPI configuration data set.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the DD for the X25IPI configuration data set.

Module: XNX25IPI

Procedure name: None.

EZB2102E *Unrecognized configuration entry: keyword*

Explanation: X25IPI encountered an unrecognized entry in its X25IPI configuration data set. This configuration record is skipped; further configuration errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the entry in the X25IPI configuration data set.

Module: XNX25IPI

Procedure name: None.

EZB2103E *Missing configuration entry: keyword*

Explanation: X25IPI could not find the indicated keyword in its configuration data set. You should have at least one entry defining a link in the file.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Add a Link definition to the X25IPI configuration data set for each indicated keyword to be used for TCPIP traffic.

Module: XNX25IPI

Procedure name: None.

EZB2104E *Buffer storage not available (bytes bytes required)*

Explanation: X25IPI could not allocate sufficient storage during initialization.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

EZB2106E • EZB2110E

System programmer response: Increase the X25IPI region or address space storage size to the indicated number of bytes.

Module: XNX25IPI

Procedure name: None.

EZB2106E DLC Init function X25IPI failed R15=*value*

Explanation: X25IPI encountered an error issuing a DLC Init call.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Verify that the X25IPI procedure is in the PROCLIB.

Module: XNX25IPI

Procedure name: None.

EZB2107T Programming error: not enough buffers allocated

Explanation: The calculation of the number of buffers to allocate was incorrect.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2108I Unable to obtain TCPIPJobname from TCPIP.DATA, default TCPIP job name used

Explanation: X25IPI encountered an error obtaining the TCP/IP stack name from the TCPIP.DATA file. The default job name of TCPIP is being used.

System action: TCPIP continues.

Operator response: If TCP connections cannot be made, notify the system programmer.

System programmer response: If the job name of the TCPIP stack to be used by X25 is not TCPIP use the TCPIP.DATA TCPIPJOBNAME statement to specify the correct name. See z/OS Communications Server: IP Configuration Guide for how TCPIP.DATA statements are searched for.

Module: XNX25IPI

Procedure name: None.

EZB2110E Unrecognized trace level: *level*

Explanation: The trace level, specified in either the X25IPI configuration data set or the TRACE command, is not correct. The trace level is set to "off".

System action: TCPIP continues.

Operator response: Reissue the TRACE command with valid trace level.

System programmer response: Correct the Trace entry in the X25IPI configuration data set.

Module: XNX25IPI

Procedure name: None.

EZB2111I VTAM ACB *IPI_APPN* opened successfully

Explanation: The virtual transmission access method (VTAM) address space successfully opened an activity control block (ACB) for the indicated application.

System action: The application begins processing. TCPIP continues.

Operator response: None.

System programmer response: None.

Module: xnx25ipi

Procedure name: main

EZB2112E Repeated VTAM record ignored: *record*

Explanation: X25IPI encountered more than one VTAM entry in the X25IPI configuration data set. The repeated VTAM record is skipped.

System action: Initialization continues.

Operator response: Tell the system programmer about the error.

System programmer response: Remove the repeated VTAM record.

Module: XNX25IPI

Procedure name: None.

EZB2113E VTAM application name missing

Explanation: The VTAM application ID is missing on the VTAM entry in the X25IPI configuration data set.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Specify the VTAM application ID and password on the VTAM entry.

Module: XNX25IPI

Procedure name: None.

EZB2114E VTAM application password missing

Explanation: The VTAM application password is missing on the VTAM entry in the X25IPI configuration data set.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Specify the VTAM application password on the VTAM entry.

Module: XNX25IPI

Procedure name: None.

EZB2115E VTAM ACB *application* open failed

Explanation: X25IPI encountered an error opening the VTAM ACB. This message is preceded by a EZB2401E or EZB2402E message reporting the VTAM error code.

System action: X25IPI does not start.

Operator response: Activate the X25IPI application in VTAM.

System programmer response: Use the VTAM error code from the message EZB2401E or EZB2402E to determine why the VTAM ACB OPEN macro was unsuccessful.

Module: XNX25IPI

EZB2121E • EZB2124E

Procedure name: None.

EZB2121E DDN and non-DDN links cannot be mixed

Explanation: X25IPI encountered Link statements in its X25IPI configuration data set specifying both DDN and non-DDN links. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Separate DDN and non-DDN links into 2 X25IPI virtual machines.

Module: XNX25IPI

Procedure name: None.

EZB2122E Link LU name missing

Explanation: The NPSI MCH LU name is missing on the Link entry in the X25IPI configuration data set. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Link entry. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2123E Link DTE address missing

Explanation: X25IPI encountered a Link statement without a DTE address specified. This field is required for all non-DDN links. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Link entry. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2124E Link window size missing or not numeric

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that had a missing or nonnumeric default window size specification. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the window size. See z/OS Communications Server: IP Configuration Reference for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2125E Link window size not in range 1..7 or 1..127

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set with an incorrect default window size specification. The window size should be in the range 1–7 or 1–127. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the window size.

Module: XNX25IPI

Procedure name: None.

EZB2126E Link packet size missing or not numeric

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that had a missing or nonnumeric default packet size. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the packet size. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2127E Link packet size unacceptable

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set with an incorrect default packet size specification. The size should be 32, 64, 128, 256, 512, 1024, 2048, or 4096. The Link entry is discarded; further errors can result.

System action: The link entry is discarded. Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the packet size.

Module: XNX25IPI

Procedure name: None.

EZB2128E Link logical channel count missing or not numeric

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that had a missing or nonnumeric logical channel count field. The Link entry is discarded; further errors can result.

System action: The Link entry is discarded. Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the channel count. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2129E Link logical channel count not in range 1..1023

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set with an incorrect logical channel count field. The count should be in the range 1–1023. The Link entry is discarded; further errors can result.

System action: The Link entry is discarded. Processing continues.

EZB2130E • EZB2133E

Operator response: Tell the system programmer about the error.

System programmer response: Correct the channel count.

Module: XNX25IPI

Procedure name: None.

EZB2130E Link reserved channel count missing or not numeric

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that had a missing or nonnumeric reserved channel count. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the reserved channel count. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2131E Link reserved channel count not in range 1..LCC

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set with an incorrect reserved channel count. The count should be between 1 and the number of logical channels that have been defined. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the reserved channel count. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2132E Link data network code missing

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that omitted a data network identifier code (DNIC). DNICs should be specified for all networks (use DDN for DDN nets). The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Link entry. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2133E Data network identifier code not decimal

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that specified a nondecimal data network identifier code (DNIC). The DNIC should be decimal. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the DNIC number. See z/OS Communications Server: IP Configuration Guide for the format of the Link definition.

Module: XNX25IPI

Procedure name: None.

EZB2134E Link DTE address not decimal

Explanation: X25IPI encountered a Link statement in its X25IPI configuration data set that contained a nondecimal DTE address. The Link entry is discarded; further errors can result.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the DTE address.

Module: XNX25IPI

Procedure name: None.

EZB2135E Altlink record not preceded by a Link record

Explanation: The X25 server is processing an ALTLINK record that was not preceded by a LINK record in the configuration data set.

System action: X25 ignores the ALTLINK configuration record.

Operator response: Correct the configuration data set by either removing the ALTLINK statement or adding the correct LINK statement preceding the ALTLINK statement. For more information about the ALTLINK and LINK statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTALTL

EZB2140E Dest record not preceded by Link record

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set before any Link record. The Dest record should follow the corresponding Link record in the X25IPI configuration data set. The Dest entry is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Move the Dest record after the corresponding Link record.

Module: XNX25IPI

Procedure name: None.

EZB2141E Dest IP address missing

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set that did not specify an IP address. The Dest entry is discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Dest entry. See z/OS Communications Server: IP Configuration Guide for the format of the Dest record.

Module: XNX25IPI

Procedure name: None.

EZB2142E • EZB2146E

EZB2142E Dest IP address must be decimal

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set specifying a nondecimal destination address. The destination address should be in dotted-decimal form. The Dest entry is discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the IP address. See z/OS Communications Server: IP Configuration Guide for the format of the Dest record.

Module: XNX25IPI

Procedure name: None.

EZB2143E Dest DTE address missing

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set, which omitted the destination X.25 DTE address specification. The destination X.25 DTE address specification is required on non-DDN networks. The Dest entry is discarded.

System action:

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Dest record with the X.25 DTE address. See z/OS Communications Server: IP Configuration Guide for the format of the Dest record.

Module: XNX25IPI

Procedure name: None.

EZB2144E Dest DTE address must be decimal

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set that had a nondecimal destination X.25 DTE address specified. The destination X.25 DTE address should be decimal. The Dest entry is discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the DTE address.

Module: XNX25IPI

Procedure name: None.

EZB2145E Dest call user data must be hexadecimal

Explanation: X25IPI encountered a Dest record in its X25IPI configuration data set specifying nonhexadecimal call user data (CUD) protocol ID. The CUD should be hexadecimal. The Dest entry is discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the call user data.

Module: XNX25IPI

Procedure name: None.

EZB2146E Dest facilities data must be hexadecimal

Explanation: The X25 server is processing the facilities field on a DEST statement. The field contained a non-hexadecimal character.

System action: X25 discards this record and continues.

Operator response: Correct the configuration data set by correcting the DEST facilities field. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Reference.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTDEST

EZB2150E Datagram size limit missing or not numeric

Explanation: X25IPI encountered a Buffers record in its X25IPI configuration data set that had a missing or nonnumeric buffer size specification. The Buffers record is ignored. The default values are applied.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Buffers record with the datagram size limit. See z/OS Communications Server: IP Configuration Guide for the format of the Dest record.

Module: XNX25IPI

Procedure name: None.

EZB2151E Datagram size limit not in range 576...2048

Explanation: X25IPI encountered a Buffers record in its X25IPI configuration data set with an incorrect buffer size specification. The buffer size should be in the range 576–2048. The Buffers record is ignored. The default values are applied.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the datagram size limit.

Module: XNX25IPI

Procedure name: None.

EZB2152E Extra buffer count missing or not numeric

Explanation: X25IPI encountered a Buffers record in its X25IPI configuration data set that had a missing or nonnumeric buffer count field. The extra buffer count is ignored.

System action: The extra buffer count is ignored. Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the buffer count.

Module: XNX25IPI

Procedure name: None.

EZB2153E VC send queue limit missing or not numeric

Explanation: X25IPI encountered a Buffers record in its X25IPI configuration data set that had a missing or nonnumeric send queue limit. The send queue limit defaults to 8.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the queue limit.

Module: XNX25IPI

Procedure name: None.

EZB2155E • EZB2162E

EZB2155E Inactivity timeout missing or not numeric

Explanation: X25IPI encountered a Timers record in its X25IPI configuration data set that had a missing or nonnumeric inactivity time-out value. The Timers record is ignored. The default values are applied.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Complete the Timers record with the inactivity time-out. See z/OS Communications Server: IP Configuration Reference for the format of the Dest record.

Module: XNX25IPI

Procedure name: None.

EZB2156E Minimum call timer missing or not numeric

Explanation: X25IPI encountered a Timer record in its X25IPI configuration data set that had a missing or nonnumeric minimum time field. This Timer record is ignored. The minimum call time defaults to 60 seconds.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the minimum call time.

Module: XNX25IPI

Procedure name: None.

EZB2160E Options record not preceded by Link record

Explanation: X25IPI encountered an Options record in its X25IPI configuration data set before any Link record. The Options record should follow the associated Link record. The Options record is ignored.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Move the Options record after the corresponding Link record.

Module: XNX25IPI

Procedure name: None.

EZB2161E Option name not recognized *name*

Explanation: X25IPI encountered an Options record in its X25IPI configuration data set with an unrecognized option name. The remainder of the Options record is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the option name. See z/OS Communications Server: IP Configuration Guide for the format of the Options record.

Module: XNX25IPI

Procedure name: None.

EZB2162E Option packet size missing or not numeric

Explanation: X25IPI has encountered an Options statement in its X25IPI configuration data set (DD statement X25IPI) that has a missing or nonnumeric packet size specification. The remainder of the Options record is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the packet size.

Module: XNX25IPI

Procedure name: None.

EZB2163E Option packet size unacceptable

Explanation: X25IPI encountered an Options record in its X25IPI configuration data set that specified an unacceptable packet size. The size should be 32, 64, 128, 256, 512, 1024, 2048, or 4096. The remainder of the Options record is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the packet size.

Module: XNX25IPI

Procedure name: None.

EZB2164E Option window size missing or not numeric

Explanation: XNX25IPI encountered an Options statement in its X25IPI configuration data set that had a missing or nonnumeric window size. The remainder of the Options record is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the window size.

Module: XNX25IPI

Procedure name: None.

EZB2165E Option window size not in range 1..7 or 1..127

Explanation: XNX25IPI encountered an Options statement in its X25IPI configuration data set that specified an incorrect window size. The window size should be in the range 1–7 or 1–127. The remainder of the Options record is skipped.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the window size.

Module: XNX25IPI

Procedure name: None.

EZB2166E Option call user data missing or not hexadecimal

Explanation: The X25 server is processing an OPTION CALldata statement. The statement is missing the call user data, or the call user data specified was not hexadecimal.

System action: X25 discards this record and continues.

Operator response: Correct the configuration data set by correcting the CALldata option. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTOPTN

EZB2167E • EZB2182E

EZB2167E Option facilities data must be hexadecimal

Explanation: The X25 server is processing an OPTION FACILITIES statement. The statement is missing the facilities data, or the facilities data specified was not hexadecimal.

System action: X25 discards this record and continues.

Operator response: Correct the configuration data set by correcting the FACILITIES option. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Reference.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTOPTN

EZB2180E FAST record not preceded by a Link record

Explanation: The X25 server is processing the FAST statement in the configuration data set. The FAST statement was not preceded by a LINK statement.

System action: XNX25IPI ignores the FAST statement.

Operator response: Correct the configuration data set by either removing the FAST statement or preceding the FAST statement with a LINK statement. Rerun the TCPIP25 catalog procedure. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTFAST

EZB2181E FAST connect LU name prefix missing

Explanation: The X25 server is processing the FAST statement in the configuration data set. The FAST statement did not contain a VC LU prefix.

System action: XNX25IPI ignores the FAST statement.

Operator response: Correct the configuration data set by adding the prefix to the FAST statement. Rerun the TCPIP25 catalog procedure. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTFAST

EZB2182E FAST connect LU name too long

Explanation: The X25 server is processing the FAST statement in the configuration data set. The FAST statement contained a VC LU prefix that exceeded eight characters.

System action: XNX25IPI ignores the FAST statement.

Operator response: Correct the configuration data set by correcting the prefix in the FAST statement. Rerun the TCPIP25 catalog procedure. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTFAST

EZB2183E FAST connect LU name suffix unacceptable

Explanation: The X25 server is processing the FAST statement in the configuration data set. The FAST statement contained a suffix that had an incorrect character. The suffix should be decimal or hexadecimal, as appropriate to the specified FAST connect numbering scheme.

System action: Remaining fast-connect LU names will not be generated.

Operator response: Correct the configuration data set by correcting the suffix in the FAST statement. Rerun the TCPIPX25 catalog procedure. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTFAST

EZB2184E FAST connect LU name suffix overflow

Explanation: The X25 server is processing the FAST statement in the configuration data set. The FAST statement contains a suffix that has too many characters. The LU name suffix generated for a fast-connect virtual circuit exceeds the available field width.

System action: Remaining fast-connect LU names will not be generated.

Operator response: Correct the configuration data set by correcting the suffix in the FAST statement. Rerun the TCPIPX25 catalog procedure. For more information about the configuration data set statements, see z/OS Communications Server: IP Configuration Guide.

System programmer response: None.

Module: XNX25IPI

Procedure name: STRTFAST

EZB2201I MCH *luname* OPNDST complete

Explanation: X25IPI has successfully established a VTAM session with the NPSI MCH LU.

System action: The X25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: MCHOPNDC

EZB2202I MCH *luname* restart packet sent

Explanation: The X25 server has sent a restart packet to a multichannel link (MCH).

System action: The contents of the restart packet are displayed in subsequent messages.

Operator response: None.

System programmer response: Use the data in problem determination.

Module: XNX25IPI

Procedure name: MCHOPNDC

EZB2203I MCH *lu* restarting

Explanation: An X.25 restart exchange was started on the NPSI MCH.

System action: Processing continues.

Operator response: None.

EZB2205E • EZB2211I

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2205E MCH *lu* open failed

Explanation: X25IPI encountered an error opening the indicated NPSI MCH. This message is preceded by the message EZB2407E or EZB2411E reporting a VTAM error code. The MCH LU is enabled for automatic recovery by LOGAPPL, or for manual restart.

System action: Processing continues.

Operator response: Activate the NPSI MCH in VTAM, and use the X25IPI RESTART command to reacquire the MCH.

System programmer response: Use the VTAM error code from the EZB2407E or EZB2411E message to determine why the MCH OPNDST was unsuccessful.

Module: XNX25IPI

Procedure name: None.

EZB2206E MCH *lu* OPNDST did not complete

Explanation: A VTAM OPNDST request on a NPSI MCH LU was posted complete, but the NIB is not marked open. The contents of the session data area (SDA) for this MCH are dumped. The MCH LU is enabled for automatic recovery by LOGAPPL, or for manual restart.

System action: Processing continues.

Operator response: Activate the NPSI MCH in VTAM, and use the X25IPI RESTART command to reacquire the MCH.

System programmer response: Determine the state of the NPSI MCH LU using the VTAM DISPLAY command.

Module: XNX25IPI

Procedure name: None.

EZB2210I MCH *luname* packet level ready

Explanation: The X25 server has made a multichannel link (MCH) available for virtual circuit connections.

System action: XNX25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: MCHOPNDC

EZB2211I MCH *luname* packet received

Explanation: The X25 server has received a packet from a multichannel link (MCH).

System action: The contents of the packet are displayed in subsequent messages.

Operator response: None.

System programmer response: Use the data in problem determination.

Module: XNX25IPI

Procedure name: MCHRSTIP

EZB2212I MCH lu discarded packet during restart

Explanation: X25IPI received an incorrect packet while restarting this MCH. The incorrect packet is dumped and discarded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2213I MCH lu restart indication, cause=*value* diagnostic=*value*

Explanation: X25IPI received an X.25 restart indication for this MCH during the restart procedure with the indicated cause and diagnostic bytes. The X.25 network interface has been reinitialized. Virtual circuit connections on the MCH are closed, and the X.25 restart procedure is used to place the MCH back in operation. See *X.25 Network Control Program Packet Switching Interface Diagnosis, Customization, and Tuning* for a list of X.25 cause and diagnostic codes. See the provider of the X.25 network service for documentation that lists additional diagnostic codes.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2214I MCH lu restart confirmation

Explanation: X25IPI received a restart confirmation for this MCH. The MCH is marked ready for new connections.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2215I MCH lu restart complete

Explanation: X25IPI has completed terminating virtual circuits on an MCH undergoing restart. An X.25 restart confirmation is sent to complete the restart procedure.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2221I MCH lu restart indication, cause=*cause*, diagnostic=*diagnostic*

Explanation: X25IPI received a restart indication on this MCH with the indicated cause and diagnostic bytes. The X.25 network interface has been reinitialized. Virtual circuit connections on the MCH are closed, and the X.25 restart procedure is used to place the MCH back in operation. See *X.25 Network Control Program Packet Switching Interface Diagnosis, Customization, and Tuning* for a list of X.25 cause and diagnostic codes. See the provider of the X.25 network service for documentation that lists additional diagnostic codes.

EZB2222I • EZB2230I

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2222I MCH *lu* restart confirm packet sent

Explanation: X25IPI transmitted a restart confirmation packet for this MCH. The restart confirmation packet is dumped.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2223I MCH *luname* request packet sent

Explanation: The X25 server has sent a request packet from a multichannel link (MCH).

System action: The contents of the restart packet are displayed in subsequent messages.

Operator response: None.

System programmer response: Use the data in problem determination.

Module: XNX25IPI

Procedure name: MCSTSRSR

EZB2224I MCH *lu* restarting

Explanation: X25IPI is restarting the indicated MCH.

System action: X25IPI waits to receive a restart confirmation on the MCH.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2230I MCH *luname* packet received

Explanation: The X25 server has received a packet from a multichannel link (MCH).

System action: The contents of the restart packet are displayed in subsequent messages.

Operator response: None.

System programmer response: Use the data in problem determination.

Module: XNX25IPI

Procedure name: MCHRDYIP

EZB2231I MCH *lu* orphan packet received

Explanation: X25IPI received a packet for which it could find no associated connection. An X.25 clear request is sent on the virtual circuit.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2232I MCH *lu* diagnostic packet

Explanation: X25IPI received an X.25 diagnostic packet on this MCH. The diagnostic packet is dumped and discarded.

System action: Processing continues.

Operator response: None.

System programmer response: Use the diagnostic packet to obtain additional information about X.25 network errors.

Module: XNX25IPI

Procedure name: None.

EZB2233I MCH *lu* clear request sent

Explanation: X25IPI sent a clear request on the indicated MCH to recover from an error situation.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2234E MCH *lu* no free path available for incoming call MCH *lu* check number of logical channels on Link record

Explanation: X25IPI received an incoming call, but has no session areas available to handle it. This indicates that there are more virtual circuits subscribed than were specified on the LINK record in the X25IPI configuration data set. The incoming call is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Increase the virtual circuit count on the Link record to match the number of virtual circuits defined in the NPSI configuration.

Module: XNX25IPI

Procedure name: None.

EZB2235W MCH *lu* orphan packet discarded

Explanation: X25IPI received a packet that it could not associate with any connection. The packet is dumped and discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

EZB2236E • EZB2252I

System programmer response: Determine the type of X.25 packet from the dump. A clear confirmation (X'17') can be discarded harmlessly.

Module: XNX25IPI

Procedure name: None.

EZB2236E MCH *lu* unrecognized packet received

Explanation: X25IPI did not recognize the type code in a packet received from NPSI. The unrecognized packet is dumped and discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the packet type from the dump; contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2250I MCH *lu* terminating

Explanation: X25IPI is terminating this MCH session in response to an error condition or a HALT command.

System action: Connections on virtual circuits associated with the MCH are terminated, and the MCH session is closed.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2251I MCH *lu* closed

Explanation: X25IPI received a CLSDST completion indication for this MCH, indicating that this MCH has closed.

System action: The MCH LU is enabled for automatic recovery by LOGAPPL, or for manual restart.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2252I MCH *luname* logon

Explanation: The multichannel link (MCH) was inactive and a logon notification was received. XNX25IPI opens a VTAM session.

System action: XNX25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: MCHRDYIP

EZB2280E MCH *lu* session loss code *code*

Explanation: X25IPI received the indicated MCH status change code while the MCH was not operational. See message EZB2285E for the loss codes.

System action: The MCH LU is enabled for automatic recovery by LOGAPPL, or for manual restart.

Operator response: Notify the system programmer of the error.

System programmer response: Manually restart X25IPI, if necessary.

Module: XNX25IPI

Procedure name: None.

EZB2281I VC *vc* packet discarded on failed session

Explanation: X25IPI discarded a packet received after a session was closed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2282E MCH *lu* unexpected request completion

Explanation: X25IPI received a VTAM request completion notification for this MCH. This indicates a program error, because MCH sends are done synchronously. The notification is ignored.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2283I MCH *lu* DATE error report command=*command* error=*error*

Explanation: X25IPI received a NPSI Dedicated Access to X.25 Transport Extension (DATE) error report for the indicated command and error. See *X.25 Network Control Program Packet Switching Interface Host Programming* for the error codes.

System action: X25IPI attempts to recover from the error.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2284E MCH *lu* DATE error report command=*command* error=*error*

Explanation: X25IPI encountered a DATE error because of an incorrect logical channel number. X25IPI discards the error indication. See *X.25 Network Control Program Packet Switching Interface Host Programming* for the error codes.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

EZB2285E • EZB2304W

Procedure name: None.

EZB2285E MCH lu session loss code code

Explanation: X25IPI received a session status notification with the indicated session loss code for this MCH.

Code Description

Less than 50

VTAM LOSTERM exit codes

50 VTAM SCIP exit UNBIND

64000 VTAM NS exit CLEANUP

64001 VTAM NS exit session initiation failure

64002 VTAM NS exit session initiation negative response

The MCH LU is enabled for automatic recovery by LOGAPPL, or for manual restart.

System action: Processing continues.

Operator response: Reactivate the NPSI MCH in VTAM. Use the X25IPI RESTART command to reacquire the MCH LU.

System programmer response: Use the VTAM error code to determine the reason why the session was unsuccessful.

Module: XNX25IPI

Procedure name: None.

EZB2301I VC ID incoming call from address user data value

Explanation: X25IPI has received an incoming call on this virtual circuit from the indicated address with the indicated user data (protocol ID). The call is accepted or refused.

System action: Processing continues.

Operator response: None.

System programmer response: Use the address to determine the source of the connection.

Module: XNX25IPI

Procedure name: None.

EZB2302I VC vc call accept packet sent

Explanation: X25IPI accepted an incoming call on this virtual circuit.

System action: The contents of the X.25 call accept packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCINCOM

EZB2304W VC vc incoming call cleared: caller not known

Explanation: X25IPI received a call on this virtual circuit from an address not present in the Dest entries for the associated MCH. The incoming call is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the identity of the remote system initiating the call request, and add the

address to the Dest list if the connection is authorized. The X.25 address of the calling system was noted in the preceding EZB2301I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2305W VC *vc* incoming call cleared: draining

Explanation: X25IPI cleared an incoming call because a VTAM HALT request has been issued to end communication. Incoming calls are refused once the VTAM HALT command is issued.

System action: Processing continues.

Operator response: Shutdown and restart X25IPI when VTAM is restarted.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2306E VC *vc* incoming call cleared: *reason*

Explanation: X25IPI cleared an incoming call on this virtual circuit because of an error in the format of the X.25 call request packet:

- Called address is not decimal.
- Calling address is not decimal.
- CUD field is too long.
- CUD field not acceptable.
- Duplicate address.
- Facilities not acceptable.
- Reverse charging has not been enabled on the associated link.
- Reverse charging refused.
- Reverse charging was specified in the call.
- Reverse charging has not been enabled on the associated link.
- The address duplicated that of another connection.

The incoming call is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the remote system that is generating the incorrect calls. The X.25 address of the calling system was noted in the preceding EZB2301I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2307I VC *vc* clear request packet sent

Explanation: X25IPI refused an incoming call on this virtual circuit.

System action: The contents of the X.25 clear request packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCINCOM

EZB2308I • EZB2313W

EZB2308I VC *vc* finished sending call confirm

Explanation: A VTAM OPNDST call was accepted and the NPSI SEND completed.

System action: XNX25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCACPTSC

EZB2310I VC *vc* outgoing call to *address*

Explanation: X25IPI is placing an outgoing call to this indicated address on this virtual circuit. Queued datagrams are sent on the connection after the call is accepted by the remote system.

System action: Processing continues.

Operator response: None.

System programmer response: Use the address to determine the destination of the connection.

Module: XNX25IPI

Procedure name: None.

EZB2311I VC *vc* call request packet sent

Explanation: X25IPI placed an outgoing call on this virtual circuit.

System action: The contents of the X.25 call request packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLLFCL

EZB2312I VC *vc* call request sent

Explanation: X25IPI placed an outgoing call request on this virtual circuit. The X.25 NCP Packet Switching Interface (NPSI) SEND is complete.

System action: XNX25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCALLSC

EZB2313W VC *vc* call timer expired

Explanation: The remote system has not responded to a call request in 200 seconds. The call is ended, and queued datagrams are discarded.

System action: Processing continues.

Operator response: Check the status of the remote system and the X.25 network. The X.25 address of the calling system was noted in the preceding EZB2310I message for the VC ID.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2314I VC vc call accepted by address user data value

Explanation: An outgoing call on this virtual circuit was accepted by the remote system at the indicated address with the indicated user data (protocol specifier). Queued datagrams are sent.

System action: Processing continues.

Operator response: None.

System programmer response: Use the address to determine the destination of the connection.

Module: XNX25IPI

Procedure name: None.

EZB2315I VC vc retrying call with packet size size

Explanation: The packet size for this virtual circuit was reduced by the network or responder. NPSI DATE cannot handle this negotiation, thus the call is cleared and placed again with the smaller packet size.

System action: Processing continues.

Operator response: Tell the system programmer if this message recurs frequently.

System programmer response: Add or change an OPTIONS PACKETSIZE entry on the associated Link specifying the smallest packet size used by other systems on the X.25 network. Consider using the NPSI GATE facility rather than DATE. GATE can handle the reduced packet size without the call to be repeated.

Module: XNX25IPI

Procedure name: None.

EZB2316E VC vc outgoing call cleared: reason

Explanation: X25IPI cleared an outgoing call on this virtual circuit because of an error in one of the following formats:

- The X.25 call accept packet.
- Accepting user data is too long.
- Called address is not decimal.
- Calling address is not decimal.
- Facilities not acceptable.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the remote system that is generating the incorrect calls. The X.25 address of the called system was noted in the preceding EZB2310I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2317I VC vc call to address refused, cause=cause diagnostic=diagnostic

Explanation: An outgoing call on this virtual circuit to the indicated address was refused by the X.25 network, with the indicated cause and diagnostic bytes. Datagrams queued for the remote system are discarded. A new call is attempted when the TCP acknowledgment timer expires, or when a new connection is requested to the destination. TCP connections to the destinations handled by the remote system are unsuccessful if calls are not accepted in the initial connection time-out. See *X.25 Network Control Program Packet Switching Interface Diagnosis, Customization, and Tuning* for X.25 cause and diagnostic codes. See the X.25 network service provider for documentation about additional diagnostic codes.

System action: Processing continues.

EZB2320I • EZB2323E

Operator response: Verify that the remote system and the X.25 network are operational.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2320I VC vc NPSI logon LU lu

Explanation: NPSI generated a VTAM session logon from the indicated LU for the virtual circuit. The NPSI LU logon is accepted.

System action: Processing continues.

Operator response: None.

System programmer response: Use the LU name for NPSI problem determination.

Module: XNX25IPI

Procedure name: None.

EZB2321E VC vc session loss code

Explanation: X25IPI received the indicated virtual circuit (VC) status change code while the virtual circuit (VC) was not operational.

System action: The virtual circuit (VC) LU is enabled for automatic recovery by LOGAPPL or for manual restart.

Operator response: Notify the system programmer of the error.

System programmer response: Restart XNX25IPI if necessary.

Module: XNX25IPI

Procedure name: VCLOGON

EZB2322I VC vc OPNDST complete

Explanation: A VTAM OPNDST request on a NPSI virtual circuit (VC) LU was posted complete.

System action: X25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCOPENC

EZB2323E VC vc OPNDST did not complete

Explanation: A VTAM OPNDST request on a NPSI VC LU was posted complete, but the NIB is not marked open. The contents of the session data area (SDA) for this VC are dumped. The virtual circuit call is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the state of the NPSI VC LU using the VTAM DISPLAY command.

Module: XNX25IPI

Procedure name: None.

EZB2324I VC vc LU lu ready

Explanation: The virtual circuit LU session is ready for data transfer.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2325I VC vc facilities: facilities

Explanation: A list of facilities for this virtual circuit follows. The following are the facilities codes that can be noted:

Codes	Description
-------	-------------

pktpacket

The noted packet size is used

precedencepreced

The noted DDN precedence is applied

priority

Priority handling and charging is applied

revchg Reverse charging is applied

standard

DDN standard service is used

wdwwindow

The noted window size is used

The noted facilities are applied to the connection.

System action: Processing continues.

Operator response: None.

System programmer response: Use the information to determine the X.25 network facilities being used on the connection.

Module: XNX25IPI

Procedure name: None.

EZB2326E VC vc facilities field unacceptable at offset offset

Explanation: X25IPI encountered an incorrect X.25 call facilities field from a remote system for this virtual circuit. The X.25 call facilities field is dumped, and the call is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the remote system that is generating the incorrect facilities. The X.25 address of the remote system was noted in the preceding EZB2301I or EZB2310I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2330I • EZB2334E

EZB2330I VC *vc* call complete

Explanation: A VTAM OPNDST request on a NPSI virtual circuit (VC) LU was posted complete.

System action: X25IPI continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: MCHRDYIP

EZB2331I VC *vc* data sent

Explanation: X25IPI has sent a datagram to the X.25 NCP Packet Switching Interface (NPSI).

System action: The contents of the X.25 data packet sequence are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCLOGON

EZB2332I VC *vc* data received

Explanation: X25IPI has received a data packet that contained an IP datagram.

System action: The contents of the X.25 data packet sequence are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCRIPDT

EZB2333I VC *vc* packet received

Explanation: X25IPI has received a General Access To X.25 Transport Extension (GATE) control packet on this virtual circuit (VC).

System action: The contents of the control packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCRIPDT

EZB2334E VC *vc* oversize data packet received, length=*length*

Explanation: A datagram was received on this virtual circuit that had a length exceeding the buffer size specified in the X25IPI configuration data set. Either the local or remote system is misconfigured. The packet is dumped, and the connection is cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Check the buffer size on the Buffers record in the X25IPI configuration data set. The buffer size should be large enough to hold the maximum IP datagram permitted by the usage agreements of the X.25 network. The X.25 address of the remote system was noted in the preceding EZB2301I or EZB2310I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2335E VC vc unrecognized packet received

Explanation: X25IPI did not recognize the type code in a packet received from NPSI GATE. The unrecognized packet is dumped and discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the packet type from the dump; contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2336I VC vc inactivity timer expired

Explanation: The inactivity time for this virtual circuit passed with no data transferred. The virtual circuit connection is closed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2340I VC vc call reset, cause=cause diagnostic=diagnostic

Explanation: A call reset was received for this virtual circuit with the indicated cause and diagnostic bytes. The reset is confirmed, and data transfer continues. See *X.25 Network Control Program Packet Switching Interface Diagnosis, Customization, and Tuning* for a list of X.25 cause and diagnostic codes. See the provider of the X.25 network service for documentation that lists additional diagnostic codes.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2341I VC vc reset collision

Explanation: A reset collision occurred on this virtual circuit. Data transfer resumes.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2342I • EZB2346I

EZB2342I VC vc reset confirmed

Explanation: A reset on this virtual circuit was confirmed by the remote system. Data transfer resumes on the virtual circuit.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2343W VC vc qualified data packet discarded

Explanation: A qualified data packet was received on an IP connection. Qualified data packets are not specified for use on IP connections. The qualified data packet is dumped and discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the remote system that is sending qualified data packets. The X.25 address of the remote system was noted in the preceding EZB2301I or EZB2310I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2344W VC vc interrupt indication received

Explanation: An interrupt indication was received for this virtual circuit. Interrupt packets are not specified for use on IP connections. The interrupt packet is dumped, and an interrupt response is sent.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Correct the remote system that is sending interrupt packets. The X.25 address of the remote system was noted in the preceding EZB2301I or EZB2310I message for the VC ID.

Module: XNX25IPI

Procedure name: None.

EZB2345E VC vc interrupt confirmed

Explanation: An interrupt was confirmed for this virtual circuit. Interrupt packets are not specified for use on IP connections. The virtual circuit is reset, and data transfer continues.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2346I VC vc reset confirmation packet sent

Explanation: A reset packet was received and X25IPI has sent a reset confirmation packet on this virtual circuit (VC).

System action: The contents of the X.25 reset confirmation packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCRIPDT

EZB2347I VC vc interrupt confirm packet sent

Explanation: An interrupt packet was received and X25IPI has sent an interrupt confirmation packet on this virtual circuit (VC).

System action: The contents of the X.25 interrupt confirmation packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCONFI

EZB2348I VC vc reset request packet sent

Explanation: X25IPI has sent a reset packet on this virtual circuit (VC) to reset the connection.

System action: The contents of the X.25 reset request packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCONFI

EZB2350I VC vc call cleared, cause=cause diagnostic=diagnostic

Explanation: A call was cleared on this virtual circuit with the indicated cause and diagnostic bytes. A clear confirmation is sent, and the virtual circuit connection is closed. See *X.25 Network Control Program Packet Switching Interface Diagnosis, Customization, and Tuning* for a list of X.25 cause and diagnostic codes. See the provider of the X.25 network service for documentation that lists additional diagnostic codes.

System action: Processing continues.

Operator response: None.

System programmer response: Use the cause and diagnostic codes to determine the reason the call was cleared.

Module: XNX25IPI

Procedure name: None.

EZB2351I VC vc connection terminated for address: sent count received count dropped count

Explanation: The number of datagrams sent, received, and dropped on the virtual circuit to the remote system with the indicated X.25 address is shown when the connection is ended.

System action: The VC LU session is closed.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2352I • EZB2356W

EZB2352I VC *vc* closed

Explanation: The call on the virtual circuit was ended. The virtual circuit is reused for new calls.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2353I VC *vc* clear request packet sent

Explanation: X25IPI has sent a clear packet on this virtual circuit (VC) to clear the connection. XNX25IPI is in the process of closing the connection.

System action: The contents of the X.25 clear request packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLROUT

EZB2354I VC *vc* clear confirm packet sent

Explanation: X25IPI has sent a clear confirmation packet on this virtual circuit (VC) for the clear request. XNX25IPI is in the process of closing the connection.

System action: The contents of the X.25 clear request packet are displayed in subsequent messages.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLROUT

EZB2355I VC *vc* close pending

Explanation: A close of this virtual circuit is partially completed.

System action: X25IPI waits for the remaining close events to occur.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2356W VC *vc* unable to clear GATE call in state P2

Explanation: X25IPI needed to clear a NPSI GATE call while the call was pending. The NPSI GATE programming interface does not allow a call to be cleared in this state.

System action: X25IPI waits for action by the X.25 network.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the reason the X.25 network or remote system did not respond to the call request.

Module: XNX25IPI

Procedure name: None.

EZB2357E VC *vc* clearing limit exceeded

Explanation: No clear response was received from the remote system after four clear requests. The virtual circuit is marked as cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the reason the X.25 network or remote system did not respond to the clear request.

Module: XNX25IPI

Procedure name: None.

EZB2358I VC *vc* clear confirmed

Explanation: The remote system responded to a clear request on this virtual circuit. Virtual circuit termination continues; message EZB2352I should follow.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2360I VC *vc* closed LU

Explanation: X25IPI has completed a VTAM CLSDST for a virtual circuit (VC) LU session.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLOSRC

EZB2361W VC *vc* clearing timer expired

Explanation: The remote system did not respond to a clear request in 180 seconds. The clear request is retried 4 times.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the reason the remote system did not respond to the clear request.

Module: XNX25IPI

Procedure name: None.

EZB2362I VC *vc* clear request packet sent

Explanation: X25IPI has sent a clear packet on this virtual circuit (VC) to clear the connection. XNX25IPI is in the process of closing the connection.

System action: The contents of the X.25 clear request packet are displayed in subsequent messages.

Operator response: None.

EZB2363E • EZB2366I

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLRTMR

EZB2363E VC vc clearing limit exceeded

Explanation: No clear response was received from the remote system after four clear requests. The virtual circuit is marked as cleared.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the reason the X.25 network or remote system did not respond to the clear request.

Module: XNX25IPI

Procedure name: None.

EZB2364I VC vc clear confirmation sent

Explanation: A clear request from the remote system was confirmed on this virtual circuit. Virtual circuit termination continues; message EZB2352I should follow.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2365I VC vc clear sent

Explanation: A clear request was sent on this virtual circuit. Virtual circuit termination continues; message EZB2352I should follow.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2366I VC vc finished lu luname activity

Explanation: X25IPI reports the completion of a pending VTAM request during virtual circuit (VC) closing.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VCCLWTRC

EZB2367I VC *vc* reuse delay ended

Explanation: The timer expired for NPSI cleanup for this virtual circuit. A new call can now be made on this virtual circuit.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2368I VC *vc* retry busy call

Explanation: X25IPI tries a call again that previously received a busy indication from NPSI.

System action: Processing continues.

Operator response: If the error recurs, tell the system programmer about the error.

System programmer response: If the error recurs, check the number of virtual circuits specified on the Link record in the X25IPI configuration data set against the number defined in the NPSI configuration. Use the VTAM DISPLAY command to determine the state of the NPSI switched VC LUs.

Module: XNX25IPI

Procedure name: None.

EZB2370E VC *vc* inactive: VTAM request completion REQ=*request*

Explanation: A VTAM request has completed for this virtual circuit after the connection has ended.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2371E VC *vc* inactive: session loss code *code*

Explanation: X25IPI received a session status notification with the indicated session loss code for this virtual circuit after the connection was ended. The notification is ignored. See message EZB2383I for the loss codes.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2372I VC *vc* inactive: session cleanup

Explanation: Session cleanup is in progress for this inactive virtual circuit. The VC LU session is closed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

EZB2373E • EZB2383E

Procedure name: None.

EZB2373E VC vc inactive: VTAM logon refused

Explanation: A late logon from a NPSI VC LU was refused after a call was cleared. The logon is rejected.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2374I VC vc packet discarded on dead connection

Explanation: A packet was received on this virtual circuit after the connection was ended. The packet is discarded.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2381E VC vc DATE error report command=command error=error

Explanation: X25IPI received a NPSI DATE error report for the indicated command and error. See *X.25 Network Control Program Packet Switching Interface Host Programming* for the error codes.

System action: X25IPI attempts to recover from the error.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2382E VC vc GATE error report command=command error=error

Explanation: X25IPI received a NPSI GATE error report for the indicated command and error. See *X.25 Network Control Program Packet Switching Interface Host Programming* for the error codes.

System action: X25IPI attempts to recover from the error.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2383E VC vc session loss code value on LU lu

Explanation: A session loss status notification was received for this virtual circuit with the indicated loss code.

Code Description

Less than 50

VTAM LOSTERM exit codes

50 VTAM SCIP exit UNBIND

64000 VTAM NS exit CLEANUP

64001 VTAM NS exit session initiation failure

64002 VTAM NS exit session initiation negative response

The virtual circuit connection is closed.

System action: Processing continues.

Operator response: None.

System programmer response: Use the VTAM error code to determine why the session was unsuccessful.

Module: XNX25IPI

Procedure name: None.

EZB2384I VC *vc* discarded packet *packet* in state *state*

Explanation: The indicated packet was discarded on this virtual circuit to accomplish error recovery. Virtual circuit error recovery is completed.

System action: Processing continues.

Operator response: See message EZB2021I VC for the call state codes.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2385E VC *vc* received packet *packet* invalid in state *state*

Explanation: The indicated received packet was incorrect for the current virtual circuit state. The virtual circuit is reset or cleared.

System action: Processing continues.

Operator response: See message EZB2021I VC for the call state codes. Tell the system programmer about the error.

System programmer response: Determine the reason the X.25 network or remote system sent the incorrect packet.

Module: XNX25IPI

Procedure name: None.

EZB2386E VC *vc* discarded packet *packet* in state *state*

Explanation: The indicated packet for VC was discarded because the state was not valid for the current virtual circuit state. The virtual circuit *vc* is cleared.

System action: Processing continues.

Operator response: None.

System programmer response: Determine the reason the remote X.25 network sent the incorrect *state* value for the circuit.

Module: XNX25IPI

Procedure name: None.

EZB2401E VTAM GENCB failed, R15=*value* R0=*value*

Explanation: A VTAM GENCB call was unsuccessful with the indicated R15 and R0 values.

System action: X25IPI does not start.

Operator response: Tell the system programmer about the error.

System programmer response: Reassemble X25IPI with the most recent VTAM macro library.

EZB2402E • EZB2406E

Module: XNX25IPI

Procedure name: None.

EZB2402E VTAM ACB OPEN failed, R15=*value* ACBERFLG=*value*

Explanation: A VTAM OPEN request failed with the indicated R15 and ACBERFLG values.

System action: X25IPI does not start.

Operator response: Activate the X25IPI application in VTAM.

System programmer response: Use the VTAM error codes to determine why the VTAM ACB OPEN macro was unsuccessful. See z/OS Communications Server: SNA Programming where codes can be found.

Module: XNX25IPI

Procedure name: None.

EZB2403E VTAM SETLOGON failed, RTNCD=*rc* FDB2=*value*

Explanation: A VTAM SETLOGON request failed with the indicated return code and FDB2 values.

System action: Processing continues, but virtual circuit (VC) LU logons will fail.

Operator response: None.

System programmer response: Use the VTAM error code to determine the reason for the failure of the VTAM SETLOGON request.

Module: XNX25IPI

Procedure name: VTAMENAB

EZB2404E VTAM SETLOGON QUIESCE failed, RTNCD=*rc* FDB2=*value*

Explanation: A VTAM SETLOGON QUIESCE request failed with the indicated return code and FDB2 values.

System action: X25IPI termination continues.

Operator response: Tell the system programmer about the error.

System programmer response: Use the VTAM error codes to determine why the VTAM SETLOGON macro. See the z/OS Communications Server: SNA Programming where codes can be found.

Module: XNX25IPI

Procedure name: None.

EZB2405E VTAM ACB CLOSE failed, R15=*value* ACBERFLG=*value*

Explanation: A VTAM CLOSE request failed with the indicated return values.

System action: X25IPI termination continues.

Operator response: Tell the system programmer about the error.

System programmer response: Use the VTAM error codes to determine why the VTAM CLOSE macro was unsuccessful. See the z/OS Communications Server: SNA Programming where codes can be found.

Module: XNX25IPI

Procedure name: None.

EZB2406E VTAM GENCB failed, R15=*value* R0=*value*

Explanation: A VTAM GENCB call failed with the indicated R15 and R0 values.

System action: The X.25 server continues processing.

Operator response: Tell the system programmer about the error.

System programmer response: Reassemble X25IPI with the most recent VTAM macro library.

Module: XNX25IPI

Procedure name: VTAMSIN

EZB2407E VTAM VTAM request lu failed, RTNCD=rc FDB2=value

Explanation: The indicated VTAM request was unsuccessful with the indicated return code and FDB2 values. The virtual circuit can become unusable.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Use the VTAM error codes to determine why the VTAM request was unsuccessful. See the z/OS Communications Server: SNA Programming where codes can be found. Determine the state of the NPSI LU using the VTAM DISPLAY command. If all virtual circuits become unusable, HALT and restart the X25IPI application.

Module: XNX25IPI

Procedure name: None.

EZB2410I VTAM request complete for luname REQ=value

Explanation: X25IPI completed a VTAM request. See message EZB2411E for the request codes.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: VTAMCHK

EZB2411E VTAM request failed for lu REQ=request RNTCD=rc FDB2=value sense=value (caller)

Explanation: The indicated VTAM request was unsuccessful with the indicated return code, FDB2, and sense values. The caller field specifies the routine that issued the request. The following are the request codes:

Request Code	Description
X'17'	OPNDST
X'1F'	CLSDST
X'22'	SEND
X'23'	RECEIVE

System action: If the error occurred on a NPSI MCH session, the MCH is shut down. If the error occurred on a VC session, the connection is closed.

Operator response: If the error occurred on a NPSI MCH session, activate the NPSI MCH in VTAM and use the X25IPI RESTART command to reacquire the MCH.

System programmer response: Use the VTAM error codes to determine why the VTAM ACB OPEN macro was unsuccessful. See the z/OS Communications Server: SNA Programming where codes can be found.

Module: XNX25IPI

Procedure name: None.

EZB2420I Logon exit refusing session

Explanation: XNX25IPI is refusing a logon session because:

- For an MCH with LOGAPPL coded, the MCH is not defined by a LINK entry, or the MCH is not in a state where a logon is expected
- The logon was not initiated by X.25 NPSI
- A virtual circuit is not in a state where a logon is expected, possibly because a call request was unsuccessful.

The NPSI LU session logon is refused.

System action: Processing continues.

Operator response: Notify the system programmer if the message is issued frequently, and connections are failing.

System programmer response: Check the source of the logons; determine why the call request was unsuccessful.

Module: XNX25IPI

Procedure name: None.

EZB2421E Network services exit: Unrecognized request type

Explanation: XNX25IPI received an unrecognized Network Services RU from VTAM. The following are the supported RU:

- Cleanup Session (X'810629')
- Notify (X'810620')
- NS Procedure Error (X'010604')

VTAM is notified that the NS RU was not handled.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Obtain a VTAM buffer trace to determine the Network Services RU type.

Module: XNX25IPI

Procedure name: None.

EZB2422I Network services exit: Cleanup session notification posted

Explanation: A VTAM Cleanup Session RU was received. The VTAM session is ended. A failure message for the MCH or virtual circuit (VC) session follows.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2423W Network services exit: Session initiation failure notification posted

Explanation: A VTAM Session initiation failure RU was received. The VTAM session is ended. A failure message for the MCH or VC session can follow.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2424T Session control exit: Unrecognized or unexpected request type

Explanation: An unexpected VTAM Session Control RU was received. ABEND code X'941' is displayed with this message.

System action: X25IPI abends.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the source of VTAM session control request. Submit the ABEND dump to IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2425I Session control exit: UNBIND notification posted

Explanation: A VTAM Session Control RU of type UNBIND was received. The VTAM session is ended. A failure message for the MCH or VC session can follow.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2431E VTAM terminating, reason unknown

Explanation: A VTAM Shutdown notification was received. The cause is unknown. This rules out a standard shutdown, HALT QUICK, INACT, or HALT CANCEL reason codes.

System action: X25IPI ends.

Operator response: Tell the system programmer about the error.

System programmer response: Determine the source of the Shutdown notification.

Module: NX25IPI

Procedure name: None.

EZB2432I VTAM HALT issued, drain flag set

Explanation: A VTAM HALT request was issued.

System action: X25IPI ends after current connections are closed. New connections are refused.

Operator response: Restart X25IPI, if appropriate, after VTAM resumes.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2433I VTAM HALT QUICK or VARY INACT, application issued

Explanation: A VTAM HALT QUICK or VARY INACT request was issued.

System action: X25IPI ends.

Operator response: Restart X25IPI, if appropriate, after VTAM resumes.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

EZB2434I • EZB2480I

Procedure name: None.

EZB2434I VTAM HALT CANCEL issued

Explanation: A VTAM HALT CANCEL request was issued.

System action: X25IPI ends.

Operator response: Restart X25IPI, if appropriate, after VTAM resumes.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2453I IP AS_userid path refused for userid userid, draining

Explanation: A DLC connection from the TCPIP address space was refused because a VTAM HALT command had been issued.

System action: Processing continues.

Operator response: HALT and restart the X25IPI application when VTAM is restarted.

System programmer response: Assist the user as necessary.

Module: XNX25IPI

Procedure name: None.

EZB2460E Destination address address not configured

Explanation: An IP datagram was received from TCPIP for transmission to the indicated address, which is not listed in the Dest entries in the X25IPI configuration data set. The IP datagram is discarded.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

| **System programmer response:** Add a Dest record to the X25IPI configuration data set for the IP address or network. Check the BEGINROUTES entries in *hlq.PROFILE.TCP/IP* for a misrouted network number.

Module: XNX25IPI

Procedure name: None.

EZB2462E IP AS_userid rejected message: too long IP AS_userid rejected message: too short

Explanation: A DLC message was received from the TCPIP address space which was too long or too short. The message is rejected.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

EZB2480I IP AS_id disconnected: sent count received count dropped count

Explanation: The number of datagrams sent, received, and dropped on the DLC connection to the TCPIP address space are shown when the connection is terminated.

System action: X25IPI ends.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2491I DLC AS *asname* path severed

Explanation: The DLC connection to TCPIP has been severed, most likely because TCPIP is being terminated or the X25NPSI device has been STOPped.

System action: X25IPI exits.

Operator response: Restart X25IPI, if appropriate, after TCPIP is restarted.

System programmer response: None.

Module: XNX25IPI

Procedure name: IPRDYPN

EZB2492I DLC AS_*path* accepted for userid *userid*

Explanation: A DLC connection from the TCPIP address space was accepted. IP datagrams are transferred.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: None.

EZB2493I DLC received data

Explanation: X25IPI displays the contents of an IP datagram received from TCPIP in subsequent messages.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: IPRDYPN

EZB2494I DLC send datagram length *length* next offset *offset*

Explanation: X25IPI displays the length of the datagram to be sent to TCPIP.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

Module: XNX25IPI

Procedure name: IPSENDDG

EZB2495I DLC send total length *length*

Explanation: X25IPI displays the total length of IP datagrams to be sent to TCPIP.

System action: The X.25 server continues processing.

Operator response: None.

System programmer response: None.

EZB2496E • EZB2498E

Module: XNX25IPI

Procedure name: IPSENDDG

EZB2496E XNX25IUT failed: CSM storage problem

Explanation: XNX25IUT interface returned a return code of 4. This indicates an error with CSM storage.

System action: X25IPI closes connection with TCPIP.

Operator response: Tell the system programmer about the error.

System programmer response: Check for correct installation of the MVS TCPIP product.

Module: XNX25IPI

Procedure name: None.

EZB2497E DLC function failed: STAFD= *reason*

Explanation: XNX25IUT interface returned a return code of 8. The indicated DLC function, issued by XNX25IPI, failed for the reason indicated in the STAFD reason field.

- 1 INIT
- 2 SEND
- 3 RECV
- 4 CLEAR
- 5 TERM

System action: The DLC connection is severed.

Operator response: Tell the system programmer.

System programmer response: Perform the action described in z/OS Communications Server: IP and SNA Codes for the indicated status code.

Module: XNX25IPI

Procedure name: None.

EZB2498E XNX25IUT failed: Unexpected return code

Explanation: XNX25IUT interface returned a return code other than 0, 4, or 8.

System action: Processing continues.

Operator response: Tell the system programmer about the error.

System programmer response: Contact IBM software support services.

Module: XNX25IPI

Procedure name: None.

Chapter 5. EZB3xxxx messages

EZB3001 * Can't find initialize address for server *server: return_code***

Explanation: The local host was unable to find the address of the Domain Name Server. Without the Domain Name Server, the local host is unable to determine the addresses of other hosts on the network.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Add the address of the Domain Name Server (NSINTERADDR) to the *hlq.TCPIP.DATA* data set. For more information about the *hlq.TCPIP.DATA* data set, see z/OS Communications Server: IP Configuration Reference for more information.

Module: NSLOOKUP

Procedure name: main

EZB3001I Usage:

EZB3002I nslookup [-opt ...] # interactive mode using default server

EZB3003I nslookup [-opt ...] - server #interactive mode using default server

EZB3004I nslookup [-opt ...] host #just look up 'host' using default server

EZB3005I nslookup [-opt ...] host #just look up 'host' using 'server'

Explanation: These messages give the format and usage for the NSLOOKUP command. For more information about the NSLOOKUP command, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSLOOKUP

Procedure name: Usage

EZB3006I SetDefaultServer: invalid name: *name*

Explanation: The name specified for the default Domain Name Server does not correspond to a local host. The Domain Name Server is not initialized.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Correct the default Domain Name Server name (NSINTERADDR) in the *hlq.TCPIP.DATA* data set. For more information about configuring the Domain Name Server, see z/OS Communications Server: IP Configuration Reference.

Module: NSLOOKUP

Procedure name: SetDefaultServer

EZB3007I • EZB3011E

EZB3007I * Can't find address for server *server*: *reason***

Explanation: TCPIP was unable to change to another Domain Name Server because it could not find an address for the new Domain Name Server. The reason it could not find the address is displayed in the message.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Respond as indicated by the *reason* portion of this message.

Module: NSLOOKUP

Procedure name: SetDefaultServer

EZB3008I * No *query_type* (*query_abbrev*) records available for *host***

Explanation: No information of the type requested is available for the indicated host.

System action: TCPIP continues.

Operator response: Send a PING to the indicated host to determine if it is reachable through the network. Check the SEZAINST data set to make sure that recursion has been requested. Recursion will allow the Domain Name Server for the local zone to communicate with other Domain Name Servers to determine the requested address. If the error persists, notify the system programmer. For more information about recursion, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Make sure that the Domain Name Server is started and online. If necessary, update the address tables for the Domain Name Server to include the indicated host.

Module: NSLOOKUP

Procedure name: DoLookup

EZB3009I * Request to *server* timed-out**

Explanation: A request to the indicated server reached the end of its time to live. The request is not answered.

System action: TCPIP continues.

Operator response: Resubmit the request. If the error persists, notify the system programmer.

System programmer response: Check the indicated server to determine why it is not answering requests.

Module: NSLOOKUP

Procedure name: DoLookup

EZB3010I * Server can't find *host*: *reason***

Explanation: The Domain Name Server is unable to find an address for the indicated host. The reason is displayed in the message.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Respond as indicated by the *reason* portion of the message.

Module: NSLOOKUP

Procedure name: DoLookup

EZB3011E * Can't open *file* for writing**

Explanation: The Domain Name Server is unable to open a file to write the answer to a request. The request is not answered.

System action: TCPIP continues.

Operator response: Notify the system programmer of the error.

System programmer response: Make sure that the Domain Name Server has the correct write authority.

Module: NSLOOKUP

Procedure name: LookupHost, LookupHostWithServer

EZB3012I > *request*

Explanation: This message is written to the output file. It echoes the request to the Domain Name Server that produced the output file.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSLOOKUP

Procedure name: LookupHost, LookupHostWithServer

EZB3013W *** Can't find address for server *server*: *reason*

Explanation: The default Domain Name Server was unable to get information about the requested Domain Name Server. The reason for the error is displayed in the message. The request is not answered.

System action: TCPIP continues.

Operator response: Notify the system programmer of the error.

System programmer response: Respond as indicated by the *reason* portion of this message.

Module: NSLOOKUP

Procedure name: LookupHostWithServer

EZB3014E *** Invalid set command

Explanation: The SET subcommand, which is used to set or change the options for the NSLOOKUP command, was submitted with no associated option. The SET subcommand is not accepted.

System action: TCPIP continues.

Operator response: If the NSLOOKUP command was submitted in interactive mode, resubmit the command specifying a valid option after the SET subcommand. To accept the current options to the NSLOOKUP command, omit the SET subcommand. If the NSLOOKUP command was submitted from the *user_id.NSLOOKUP.ENV* data set, edit the data set, including a valid option after the SET subcommand to change the NSLOOKUP options, or deleting the SET subcommand to accept the current option settings. For more information about the SET subcommand, the options to the NSLOOKUP command, and the *user_id.NSLOOKUP.ENV* data set, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOption

EZB3015I d2 mode disabled; still in debug mode

Explanation: The NO D2 option has been accepted, disabling the high-level tracing for the Domain Name Server. The server is still in debug mode.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSLOOKUP

Procedure name: SetOption

EZB3016E invalid port value: *port*

Explanation: The PORT option to the SET subcommand, which specifies the port to use when contacting the Domain Name Server, was submitted with an incorrect value for the port. The given value was either out of the range of valid ports, or the value of a port that is already assigned. The PORT option is not accepted.

System action: TCPIP continues.

Operator response: Resubmit the NSLOOKUP command, specifying a valid port in the PORT option to the SET subcommand. The Domain Name Server is a well-known service, and is allocated port 53. For more information about the NSLOOKUP command, its subcommands and options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOption

EZB3017E invalid retry value: *value*

Explanation: The RETRY option to the SET subcommand of the NSLOOKUP command was submitted with an incorrect value. The NSLOOKUP command is not accepted. The RETRY option specifies the number of times a request is resent. If the RETRY option is set to 0, no requests are sent, resulting in the error message "no response from server".

System action: TCPIP continues.

Operator response: Resubmit the NSLOOKUP command with a valid value for the RETRY option of the SET subcommand. For more information about the NSLOOKUP command and its subcommands and options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOption

EZB3018E invalid timeout value: *value*

Explanation: The TIMEOUT option to the SET subcommand of the NSLOOKUP command was submitted with an incorrect value. The NSLOOKUP command is not accepted. The TIMEOUT option specifies the number of seconds to wait before canceling a request. If the TIMEOUT option is set to 0, requests are canceled immediately and are never answered.

System action: TCPIP continues.

Operator response: Resubmit the NSLOOKUP command with a valid value for the RETRY option of the SET subcommand. For more information about the NSLOOKUP command and its subcommands and options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOption

EZB3019E * Invalid option: *option***

Explanation: The SET subcommand was submitted with an option that the Domain Name Server did not recognize. The command is not accepted.

System action: TCPIP continues.

Operator response: Check the spelling and syntax and resubmit the command. For more information about valid options for the SET subcommand, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOption

EZB3020I Set options:

EZB3021I *nodebug nodefname nosearch norecurse*

EZB3025I *nod2 novc noignoretc port=port*

EZB3029I *querytype=type class=class timeout=number retry=number*

EZB3033I *root=server*

EZB3034I *domain=domain*

EZB3035I *nobrackets*

EZB3194I *diff/time/nostamp*

EZB3036I *srchlist=domain1/domain2/domain3*

Explanation: These messages display the state information used by the resolver library and other options set by the user. The prefix *no* to an option name indicates that the option is not selected. For more information about these options, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSLOOKUP

Procedure name: ShowOptions

EZB3038E * Can't initialize resolver.**

Explanation: The Domain Name Server was unable to initialize the resolver library routines, which are used by clients to request resolution by the Domain Name Server. This indicates that there was an error in specifying the configuration file for the resolver, the RESOLVER address space was not started, or the Domain Name Server was unable to allocate the configuration data set. See z/OS Communications Server: IP Configuration Reference for an explanation of the search order for the configuration data set.

System action: Initialization halts. TCPIP continues.

Operator response: Check the syntax of the configuration data set, start the RESOLVER address space, and resubmit the command. If the error persists, specify the configuration options using the NSLOOKUP command and its parameters. For more information about the configuration data set, see z/OS Communications Server: IP Configuration Reference. For more information about the NSLOOKUP command and its parameters, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Make more storage available to the Domain Name Server if necessary.

Module: NSLOOKUP

Procedure name: Main

EZB3039E • EZB3042I

EZB3039E * Can't find server address for 'server':**

Explanation: While initializing the resolver library used by the clients to request domain name resolution, the Domain Name Server was unable to find an IP address for the indicated server.

System action: Initialization halts. TCPIP continues.

Operator response: Correct the configuration data set to include an IP address for the default Domain Name Server. For more information about the domain name server configuration data set, see z/OS Communications Server: IP Configuration Reference.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: ReadRC

EZB3040E * Can't find server name for address *address: reason***

Explanation: While initializing the resolver library, which is used by the client to request domain name resolution, the Domain Name Server was unable to find a server name for the indicated address.

System action: Initialization halts. TCPIP continues.

Operator response: Correct the TCPIP.DATA data set to include a NSINTERADDR statement for the IP address of the Domain Name Server, or enter the NSLOOKUP command, using the *server_name* and *server_address* parameters to specify the default Domain Name Server. For more information about the Domain Name Server configuration and the steps involved, see z/OS Communications Server: IP Configuration Reference. For more information about the NSLOOKUP command and its parameters, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: Usage

EZB3041E * Default servers are not available**

Explanation: The Domain Name Servers specified as the default servers in the resolver library used by the client to request address resolution by the Domain Name Server are not available.

System action: Initialization halts. TCPIP continues.

Operator response: Use the NSLOOKUP command with the *server_name* and *server_address* parameters to specify a different default server. If the error persists, notify the system programmer.

System programmer response: Make sure that the indicated Domain Name Servers are started and online.

Module: NSLOOKUP

Procedure name: Usage

EZB3042I > command

Explanation: This message is the command prompt for interactive NSLOOKUP sessions. For more information about interactive sessions using NSLOOKUP, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSLOOKUP

Procedure name: Usage

EZB3071W (name truncated?)

Explanation: This message indicates a compression error in the resource records generated by a name server query.

System action: TCPIP continues.

Operator response: Notify the system programmer.

System programmer response: Check the indicated Domain Name Server to determine the cause of the compression error. For more information about resource records and the Domain Name Server, see z/OS Communications Server: IP Configuration Reference.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3078I address, class = number, len = length

Explanation: This message is sent to the trace file if the D2 option was specified for the NSLOOKUP command. It displays the class and length of an address type resource record generated by a name server query.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3089I origin = name

EZB3090I mail addr = name

EZB3091I serial = serial_number (name)

EZB3092I refresh = refresh_time (time)

EZB3093I retry = retry_time (time)

EZB3094I expire = time_to_live (time)

EZB3095I minimum ttl = min_time_to_live (time)

Explanation: These messages are sent to the trace file if the DEBUG option was specified. They give information about the options selected for the Domain Name Server. For more information about the Domain Name Server, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3097E • EZB3110I

EZB3097E errors = name

Explanation: This message indicates the host to which errors will be sent if they are encountered by the Domain Name Server.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3105I NULL (dlen length)

Explanation: This message is sent to the trace file if the DEBUG option was specified. It indicates that a resource record generated by a name server request has a type of null and the indicated length.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3106E ??? unknown type type ???

Explanation: This message is sent to the trace file if the DEBUG option was specified. It indicates that a resource record generated by a name server request has a type that the Domain Name Server does not recognize. The type is displayed in the message.

System action: TCPIP continues.

Operator response: None.

System programmer response: Check the indicated Domain Name Server to determine why it is generating incorrect resource records.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3108E * Error: record size incorrect (actual_record_size != stated_record_size)**

Explanation: This message is sent to the trace file if the DEBUG option was specified. It indicates that the Domain Name Server received a record that is not equal to the record size set in the *hlq.PROFILE.TCPIP* data set.

System action: TCPIP continues.

Operator response: None.

System programmer response: Change the record sizes in the *hlq.PROFILE.TCPIP* data set so that the stated record size matches the actual record size.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3110I Non-authoritative answer:

Explanation: The name for which the client requested resolution is outside the current Domain Name Server's zone of authority, and recursive resolution was not requested. The Domain Name Server returns the name of the name server most likely to be able to resolve the request. The client issues a request to this name server.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@GET

Procedure name: FreeHostInfoPtr

EZB3112I Authoritative answers can be found from: *server(s)*

Explanation: The addresses requested by the client are outside the current Domain name server's zone of authority, and no recursive resolution was requested. The current Domain Name Server returns the names of the servers most likely to have information about the names being requested.

System action: TCPIP continues.

Operator response: Query the indicated name servers for more information.

System programmer response: Assist the user as necessary.

Module: BD@GET

Procedure name: FreeHostInfoPointer

EZB3113I Aliased to *host*

Explanation: The address requested by the client is not in the zone of authority for the current Domain Name Server. The name server returns the name, or alias, of the name server most likely to have the address in its domain.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@GET

Procedure name: GetHostByName

EZB3116E * ls: invalid request *request***

Explanation: The Domain Name Server received a request it did not recognize. The Domain Name Server is unable to process this request. The request is displayed in this message.

System action: TCPIP continues.

Operator response: Check the syntax and resubmit the request.

System programmer response: Assist the user as necessary.

Module: BD@LIST

Procedure name: ListHostsByType

EZB3117I * Can't list domain *domain*: *reason***

Explanation: This message is sent to the trace file. The procedure ListHostsByType, which lists the hosts known to the Domain Name Server, was unsuccessful for the indicated reason.

System action: TCPIP continues.

Operator response: None.

System programmer response: Respond as indicated by the *reason* portion of this message.

Module: BD@LIST

Procedure name: ListHostsByType

EZB3119I • EZB3124I

EZB3119I [host]

Explanation: This message displays the name of the local host.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListHostsByType

EZB3120E * Can't open file for writing**

Explanation: The function OpenFile, which parses the command string for a file name and opens the file for writing, was unsuccessful, indicating an incorrect command string or an error opening the file. The data set is not opened.

System action: TCPIP continues.

Operator response: Check the syntax and resubmit the command. If the error persists, notify the system programmer.

System programmer response: Make sure that the user has the correct authority to write the indicated data set.

Module: BD@LIST

Procedure name: ListHosts

EZB3121I >command

Explanation: This message is written to a file opened by the function OpenFile. It echoes the last command submitted by the user.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListHosts

EZB3122I Alias

Explanation: This message precedes the alias of a host. Hosts can be addressed by their alias, their network address, or their canonical name. For more information about aliases, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListHosts

EZB3124I Received number records.

Explanation: The Domain Name Server received the indicated number of records in response to a query.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListHosts

EZB3125E * ls: error receiving zone transfer:**

EZB3126I result: *result*, answers = *number*, authority = *number*, additional = *number*

Explanation: The client was unable to read the response from an LS command, used to list the name servers in other domains known to the local Domain Name Server. The data from the LS command is not transferred.

System action: TCPIP continues.

Operator response: Notify the system programmer of the error.

System programmer response: Check the Domain Name Server to make sure that it is correctly configured to be compatible with the other Domain Name Servers on the system. For more information about configuring the Domain Name Server, see z/OS Communications Server: IP Configuration Reference.

Module: BD@LIST

Procedure name: ListHosts

EZB3127I domain_name

Explanation: This message displays the domain name for which an answer returned from the name server is valid.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3131I (address_protocol_identifiers

Explanation: This message indicates the IP address protocol being used by NSLOOKUP. For more information about IP address protocols, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3132I (dlen = *length?*)

Explanation: This message indicates the length of data in a response received by NSLOOKUP.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3133I • EZB3145I

EZB3133I ***

Explanation: This message precedes other informational messages.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3134I server, type class

Explanation: This message displays the name of the server being queried, the type of query, and the class of address being requested.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_cdname_sub

EZB3143I text data

Explanation: This is variable data which is displayed in response to the NSLOOKUP command. It is defined by the installation in the name server data base.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3144I number

Explanation: This message displays the user or group ID from a name server query.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3145I number

Explanation: This message displays the protocol value taken from a WKS resource record. For more information about resource records, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3146 *protocol*

Explanation: This message displays the mnemonic for the protocol value taken from a well known services (WKS) resource record. For more information about resource records, see the z/OS Communications Server: IP User's Guide and Commands.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: PrintListInfo

EZB3150E *** Can't open *data_set* for reading

Explanation: The Domain Name Server was unable to read from the indicated data set. The Domain Name Server query is not answered.

System action: TCPIP continues.

Operator response: Make sure the indicated data set is in storage accessible to the Domain Name Server.

System programmer response: Assist the user as necessary.

Module: BD@LIST

Procedure name: ViewList

EZB3151I *host*

Explanation: This message displays the output of the LS function.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ViewList

EZB3154I Finger: no current host defined.

Explanation: No host has been defined to the current finger server, which displays information about users of a remote host. The FINGER query is not answered.

System action: TCPIP continues.

Operator response: Resubmit the FINGER command, using the format FINGER@host to define the remote host to be used to complete the request.

System programmer response: Assist the user as necessary.

Module: BD@LIST

Procedure name: Finger

EZB3155I Finger: unknown service

Explanation: The finger server, which gives information about the users of a remote host, received a request for a service that it does not recognize. The request is not processed.

System action: TCPIP continues.

Operator response: Check the syntax and resubmit the command. For more information about the finger server, see the z/OS Communications Server: IP User's Guide and Commands.

EZB3156I • EZB3175I

System programmer response: Assist the user as necessary.

Module: BD@LIST

Procedure name: Finger

EZB3156I > data_set_name

Explanation: This message displays the name of the data set to which information returned by the finger server will be sent.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: Finger

EZB3169E * Can't allocate memory**

Explanation: The Domain Name Server was unable to allocate storage to hold lookup tables because no data set name was specified.

System action: TCPIP continues.

Operator response: Check the syntax and resubmit the command. If the error persists, notify the system programmer.

System programmer response: Make sure that sufficient storage is available for the tables needed by the Domain Name Server. If the error persists, check for allocation errors on the server.

Module: BD@SUBR

Procedure name: Malloc

EZB3170I Server: *server*

EZB3171I Addresses: *addresses*

EZB3172I Address: *address*

Explanation: These messages give the name and addresses of the server being queried.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@SUBR

Procedure name: PrintHostInfo

EZB3175I Aliases: *alias_names*

Explanation: This message is displayed with message EZB3170I and gives the alias names corresponding to the indicated addresses.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@SUBR

Procedure name: PrintHostInfo

EZB3176I Served by:

EZB3177I *servers*

EZB3178I , *internet_address*

Explanation: These messages are displayed with message EZB3170I. They list the name servers for the indicated addresses.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@SUBR

Procedure name: PrintHostInfo

EZB3181W unknown query class: *class*

Explanation: The Domain Name Server received a query of a class it does not recognize. Repeated queries of this class will tie up the name server, preventing it from replying to valid queries. The query is not processed.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Check the client to determine why it is sending incorrect queries. Take the client offline until the problem is solved.

Module: BD@SUBR

Procedure name: StringToClass

EZB3182W unknown query type: *type*

Explanation: The Domain Name Server received a query of a type it does not recognize. The query cannot be processed, and too many queries of this type will tie up the name server, preventing it from replying to valid queries. The query is not processed.

System action: TCPIP continues.

Operator response: Notify the system programmer of the problem.

System programmer response: Check the indicated client to determine why it is sending queries of an incorrect type. Take the client offline until the problem is corrected.

Module: BD@SUBR

Procedure name: StringToType

EZB3194I *timestamp*

Explanation: This message indicates the type of time stamping selected for the NSLOOKUP command. Possible values are:

Value Indicates

time The time is displayed before each output line.

diff The time is displayed before each output line only when the time changes.

no No time stamping is selected.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

EZB3195I • EZB3201I

Module: NSLOOKUP

Procedure name: ShowOptions

EZB3195I [host]

Explanation: This message displays the name of the local host.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListHostsByType

EZB3196W no DOMAIN is entered, using default

Explanation: The Domain Name Server received a command that does not specify a domain. The name server uses the default domain.

System action: TCPIP continues.

Operator response: Reenter the command, specifying the correct domain if necessary.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOptions

EZB3197W no ROOT is entered, using default

Explanation: The Domain Name Server received a command that did not specify the root name server to be used. The Domain Name Server uses the default server.

System action: TCPIP continues.

Operator response: Resubmit the command, specifying the root server if necessary.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOptions

EZB3198W no SRCHLIST is entered, using default

Explanation: The Domain Name Server received a command that did not specify the search list to be used. The Domain Name Server uses the default search list.

System action: TCPIP continues.

Operator response: Resubmit the command, specifying the search list if necessary.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: SetOptions

EZB3201I text = text

Explanation: This message displays the contents of a text type query.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: BD@DEBUG

Procedure name: Print_rr

EZB3202E * Syntax error in *option* option.**

Explanation: The indicated option of the NSLOOKUP command was submitted with incorrect syntax. The option is ignored.

System action: TCPIP continues.

Operator response: Resubmit the NSLOOKUP command with the correct syntax for all options. For more information about the NSLOOKUP command and the correct syntax for its options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: comml_option

EZB3203E * The '=' sign is missing in *option* option**

Explanation: The indicated option of the NSLOOKUP command was submitted without a '='. The option cannot be processed.

System action: TCPIP continues.

Operator response: Resubmit the NSLOOKUP command with the correct syntax for all options. For more information about the NSLOOKUP command and its options, see the z/OS Communications Server: IP User's Guide and Commands.

System programmer response: Assist the user as necessary.

Module: NSLOOKUP

Procedure name: comml_option

EZB3205I local host

Explanation: This is the name of the local host or the name of a server that knows about the local domain.

System action: NSLOOKUP continues.

Operator response: None.

System programmer response: None.

Module: BD@LIST

Procedure name: ListSubr

EZB3206I nslookup [-option ...] [host-to-find | - [server]]

EZB3207I Commands: (identifiers are shown in uppercase, <> means optional)

EZB3208I NAME - print info about the host/domain NAME using

EZB3209I default server

EZB3210I NAME1 NAME2 - as above, but use NAME2 as server

EZB3211I • EZB3232I

EZB3211I help or ? - print info on common commands;

EZB3212I use TSO's help nslookup for more details

EZB3213I set OPTION - set an option

EZB3214I all - print options, current server and host

EZB3215I <no>debug - print debugging information

EZB3216I <no>d2 - print exhaustive debugging information

EZB3217I <no>defname - append domain name to each query

EZB3218I <no>recurse - ask for recursive answer to each query

EZB3219I <no>vc - always use a virtual circuit

EZB3220I domain=NAME - set default domain name to NAME

EZB3221I srchlist=N1</N2/.../N6> - set domain to N1 and search

EZB3222I list to N1,N2, etc.

EZB3223I root=NAME - set root server to NAME

EZB3224I retry=X - set number of retries to X

EZB3225I timeout=X - set initial time-out interval to X seconds

EZB3226I querytype=X - set query type, e.g.,

EZB3227I A,ANY,CNAME,HINFO,MC,NS,PTR,SOA,WKS

EZB3228I type=X - synonym for querytype

EZB3229I class=X - set query class to one of IN (Internet),

EZB3230I CHAOS, HESIOD or ANY

EZB3231I server NAME - set default server to NAME, using current

EZB3232I default server

EZB3233I lserver NAME - set default server to NAME, using initial server

EZB3234I finger <USER> - finger the optional NAME at the current

EZB3235I default host

EZB3236I root - set current default server to the root

EZB3237I ls <opt> DOMAIN [> DATASET] - list addresses in DOMAIN

EZB3238I (optional: output to DATASET)

EZB3239I -a - list canonical names and aliases

EZB3240I -h - list HINFO (CPU type and operating system)

EZB3241I -s - list well-known services

EZB3242I -d - list all records

EZB3243I -t TYPE - list records of the given type

EZB3244I (e.g., A, CNAME, MX, etc.)

EZB3245I view DATASET - sort an 'ls' output file and view it with more

EZB3246I exit - exit the program

Explanation: This is the summary of available commands and options that you can review by typing help or ? at the > prompt (see message EZB3042I), once you have entered the NSLOOKUP interactive session. For details about any of these commands or options, see z/OS Communications Server: IP User's Guide and Commands.

System action: The name server continues until you type exit at the > prompt (see message EZB3042I).

Operator response: Use these help messages as a guide for entering subsequent NSLOOKUP commands.

System programmer response: None.

Module: NSLOOKUP

Procedure name: PrintHelp()

EZB3250I invalid dig option *option*

Explanation: The option indicated was entered at the command line and is not a valid DIG option.

System action: TCPIP continues.

Operator response: Enter a valid DIG option. z/OS Communications Server: IP User's Guide and Commands contains the DIG command syntax and the valid options.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3251I • EZB3255I

EZB3251I no dig -T value specified

Explanation: No wait time (-T value) was specified. Wait time is the time to wait between successive queries when operating in batch mode. The default wait time is 0, which indicates no wait time.

System action: TCPIP continues.

Operator response: If you wish to specify a wait time other than 0, issue the DIG command with the -T option. See z/OS Communications Server: IP User's Guide and Commands for the syntax of the DIG command. Otherwise, no action is necessary.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3252I invalid dig -T value *tvalue*

Explanation: The -T value specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a -T value in seconds. 0 is the default.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3253I ; invalid class specified

Explanation: The network class specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a valid network class on the DIG command. DIG recognizes only the IN, CHAOS, HESIOD, and ANY network classes.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3254I ; invalid type specified

Explanation: The query type specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a valid query type, *qtype* on the DIG command. See z/OS Communications Server: IP User's Guide and Commands for information about the DIG command and valid query types.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3255I Missing batch file name

Explanation: The -f option was specified on the DIG command with no data set name.

System action: TCPIP continues.

Operator response: Specify a batch data set name on the -f option of the DIG command and reissue the command. z/OS Communications Server: IP User's Guide and Commands contains information about the DIG command and -f option.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3256I invalid dig -x option *option*

Explanation: The -x option specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a valid dotted decimal notation IP address. z/OS Communications Server: IP User's Guide and Commands describes the DIG command and the -x option.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3257I no dig -p value specified

Explanation: The DIG command -p option was specified with no value. The port number given when contacting the name server must be specified with the -p option.

System action: TCPIP continues.

Operator response: Specify the port number given when contacting the name server on the DIG command with the -p option. The default for the Domain Name Server is 53. The -p option allows you to override this default.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3258I invalid dig -p value *pvalue*

Explanation: The -p value specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a valid port number on the DIG -p option and reissue the command. Use the decimal port number given when contacting the name server.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3259I ; invalid type/class specified

Explanation: The query type or query class specified on the DIG command is not valid.

System action: TCPIP continues.

Operator response: Specify a valid query class and query type on the DIG command. See z/OS Communications Server: IP User's Guide and Commands for information about valid classes and types.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3260I • EZB3265I

EZB3260I ; pflag: pfcode res: resvalue

Explanation: This message displays the print flag values and the resolver options that are set for the request.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3262I ; Bad server: *servername* -- using default server and timer opts

Explanation: The server specified is not a recognized server. DIG is using the default server and the associated timer options instead.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3263I ;; FROM: *hostname* to SERVER: *servername*

Explanation: Messages are being sent from the host indicated to the server indicated.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3264I ;; WHEN: *time*

Explanation: The day, date, and time of the DIG request is displayed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3265I ;; re_mkquery: buffer too small

Explanation: The storage buffer is too small to complete the query request.

System action: TCPIP continues.

Operator response: Define a larger buffer and reissue the DIG query request.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3271I ;; MSG SIZE sent *sendsize* rcvd: *recvsize*

Explanation: The size of the message when sent from the host and as received by the server is displayed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3280I ; Matching SOA found

Explanation: The authority record being searched for was located.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@LIST

Procedure name: do_zone

EZB3281I ; ListHosts: error receiving zone transfer:

Explanation: An error occurred during a zone transfer between a primary and a secondary name server.

System action: TCPIP continues.

Operator response: None.

System programmer response: Contact IBM software support services to report this error.

Module: DIG@LIST

Procedure name: do_zone

EZB3282I ; result: *text, answers = value, authority = value*

Explanation: This message displays with message EZB3281I and indicates the result of the zone transfer attempt, information from the answer section of the response, and the address of the authoritative name server for the response.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@LIST

Procedure name: do_zone

EZB3283X additional= *number*

Explanation: This message appears with message EZB3282I. Additional resources records that have not been requested, but might be useful, are displayed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@LIST

Procedure name: do_zone

EZB3284I • EZB3289I

EZB3284I ; *Error during listing of *domain***

Explanation: An error occurred during the listing of information about the domain name indicated in the message.

System action: TCPIP continues.

Operator response: None.

System programmer response: Contact IBM software support services to report this error.

Module: DIG@LIST

Procedure name: do_zone

EZB3286I ;* Invalid option: *option***

Explanation: A DIG command option that was specified is not valid.

System action: TCPIP continues.

Operator response: Check the command you entered to be sure you specified the command with the correct syntax.
z/OS Communications Server: IP User's Guide and Commands describes the DIG command and its syntax.

System programmer response: None.

Module: DIG@OPT

Procedure name: SetOption

EZB3287I invalid timeout value: *value*

Explanation: The time-out value specified on the DIG command is not a valid value. The time-out value specifies the number of seconds to wait before timing out of a request.

System action: TCPIP continues.

Operator response: Specify a decimal digit value for the time-out value using the DIG command.

System programmer response: None.

Module: DIG@OPT

Procedure name: SetOption

EZB3288I invalid retry value: *limit*

Explanation: The retry limit specified on the DIG command is not valid. The retry value specifies the number of times a request is sent.

System action: TCPIP continues.

Operator response: Specify a decimal digit value for the retry limit using the DIG command.

System programmer response: None.

Module: DIG@OPT

Procedure name: SetOption

EZB3289I ; *Bad char in numeric string -- ignored**

Explanation: DIG found a nonnumeric character in a numeric string. DIG is ignoring the character.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@OPT

Procedure name: SetOption

EZB3314X *service_name*

Explanation: This message displays the service name. This message is issued for debugging purposes.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3316I *cms;; ->>HEADER<<-*

EZB3317X **opcode:** *code*

EZB3318X , **status** *status*

EZB3319X , **id:** *idname*

Explanation: These messages display in response to a DIG command. They indicate the operation type, for example, QUERY; the status of the request, for example, noerror, which says that the request was made correctly; and the ID of the queried Domain Name Server. If the DIG command is issued with no other parameters, this information is returned about the default server.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3320I ;; **flags:**

EZB3321X qr

EZB3322X aa

EZB3323X tc

EZB3324X rd

EZB3325X ra

EZB3326X pr

EZB3327X **res_opts:** *options*

Explanation: Some combination of the above flags are displayed to indicate which options are set on. The flags and their meanings are as follows:

Flag	Meaning
-------------	----------------

qr Prints the outgoing query.

aa Accepts only authoritative responses to queries.

EZB3328I • EZB3335X

tc Truncated.
rd Recursion required.
ra Recursion available.
pr Uses only the primary name server for the zone.

res_opts
resolver options

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3328I ;; **Ques:** *value*,

EZB3329I **Ans:** *value*,

EZB3330I **Auth:** *value*,

EZB3331I **Addit:** *value*,

Explanation: This message displays the values of the question, answer, authoritative, and additional sections of the response. The question section contains the original query; the answer section contains the set of all resource records from the name server database that satisfy the query; the authoritative section contains resource records that specify the address of an authoritative name server for the query; and the additional section contains resource records that have not been explicitly requested, but could be useful.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3332I ;; **QUESTIONS:**

EZB3333X ;;

EZB3334X , **type** = *type*

EZB3335X , **class** = *class*

Explanation: These messages print the question records as well as the type of query requested and the network class requested.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3336X *timetolive*

Explanation: This is the time-to-live (TTL) value for the resource record. TTL is the number of seconds that a record is valid in a cache.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3337I *class type*

Explanation: This is the network class requested in the query and the type of query to be performed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3338X *type*

Explanation: This is the type of query to be performed.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3339I *;# proto: number*

EZB3340X *, port: number*

Explanation: These messages indicate the network protocol and the port number for the domain name identified by the address record.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3341X *string*

EZB3342X *string*

Explanation: These messages indicate the central processing unit type and the operating system of a node. This information is part of the host information record.

System action: TCPIP continues.

Operator response: None.

EZB3343X • EZB3349X

System programmer response:

Module: DIG@DEBU

Procedure name: p_rr

EZB3343X (*serialvalue ;serial*

EZB3344X (*refreshvalue ;refresh*

EZB3345X (*retryvalue ;retry*

EZB3346X (*expirevalue ;expire*

EZB3347X (*minimvalue) ;minim*

Explanation: These messages are part of the authoritative section of the response to a DIG query that requested authority records. The following list defines each of the values:

- Serial is the serial number of the zone database.
- Refresh is the refresh interval, or the length of time, in seconds, you must allow between the refreshing of a database from a remote name server.
- Retry is the retry interval that indicates the length of time, in seconds, you must allow before trying a failed refresh again.
- Expire is the expiration time-to-live that indicates the maximum time for records to be valid in the zone database.
- Minim is the minimum time-to-live that indicates the minimum time for records to be valid in the zone database.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3348X (*term*

Explanation: This message identifies a host that can act as a mail exchange for the domain specified in the domain name field. A mail exchange runs a mail agent that delivers or forwards mail for the domain name specified in the first field of the resource record.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3349X (*term*

Explanation: This message displays the group ID associated with the resource record.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3350X *string string* (**Explanation:** This message indicates the IP address and protocol names for the resource record.**System action:** TCPIP continues.**Operator response:** None.**System programmer response:** None.**Module:** DIG@DEBU**Procedure name:** p_rr

EZB3351X *string number* (**Explanation:** This message indicates the protocol name and number for the resource record.**System action:** TCPIP continues.**Operator response:** None.**System programmer response:** None.**Module:** DIG@DEBU**Procedure name:** p_rr

EZB3352I *number***Explanation:** This message indicates the number of protocol numbers for services stored in the well-known services record.**System action:** TCPIP continues.**Operator response:** None.**System programmer response:** None.**Module:** DIG@DEBU**Procedure name:** p_rr

EZB3353X *First number bytes of hex data:***Explanation:** This message displays the number of bytes that are displayed following this message. This message is issued when debugging is requested.**System action:** TCPIP continues.**Operator response:** None.**System programmer response:** None.**Module:** DIG@DEBU**Procedure name:** p_rr

EZB3354I *data***Explanation:** This is the data in a resource record that appears in an unspecified format (binary format). Message EZB3353X tells the number of bytes of the data that are displayed.**System action:** TCPIP continues.**Operator response:** None.**System programmer response:** None.**Module:** DIG@DEBU**Procedure name:** p_rr

EZB3355X • EZB3361I

EZB3355X ; deftimetolive

Explanation: This is the default time-to-live (TTL) value. TTL is the number of seconds that a record is valid in a cache.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3356I ;; packet size error

Explanation: The query packet is not the standard size.

System action: TCPIP continues.

Operator response: Resubmit the query request.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3359I ;; ANSWERS:

Explanation: This message precedes the display of records in the answers section of a query response.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3360I ;; AUTHORITY RECORDS:

Explanation: This message precedes the display of records in the authoritative section. These resource records specify the address of an authoritative name server for the query.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3361I ;; ADDITIONAL RECORDS:

Explanation: This message precedes the display of records in the additional section of a query response.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: fp_query

EZB3362I ; <>>DiG version <>>

Explanation: This message displays the version of the Domain Information Groper (DIG) currently in use on the system.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: main

EZB3363X defwell-known-service

Explanation: The service displayed is the default well-known-service name.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG@DEBU

Procedure name: p_rr

EZB3364I dig.help

Explanation: The help command has been issued and the DIG.HELP data set is being opened.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp

EZB3365I file open

Explanation: The help data set is now open.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: main

EZB3366I - August 30, 1990

EZB3367I - dig @server domain query-type query-class

EZB3368I +query-option -dig-option comment

EZB3369I • EZB3390I

EZB3369I server - a domain name or a dot-notation Internet address

EZB3370I default: nsinteraddr parm address defined in

EZB3371I dataset TCPIP.DATA

EZB3372I DiG Defaults: Name server address in DIG.ENV dataset

EZB3373I domain - request domain information for domain name

EZB3374I query-type - a, any, cname, hinfo, mx, ns, ptr, soa, wks

EZB3375I query-class - IN (Internet), CHAOS(obsolete), HESIOD

EZB3376I +query option

EZB3377I <no>debug (deb) turn on/off debugging mode <deb>

EZB3378I <no>d2 turn on/off extra debugging mode <nod2>

EZB3379I <no>recurse (rec) use/don't use recursive lookup <rec>

EZB3380I retry=# (ret) set number of retries to # <4>

EZB3381I time=# (ti) set timeout length to # seconds <4>

EZB3382I <no>ko keep open option (implies vc) <noko>

EZB3383I <no>vc use/don't use virtual circuit <novc>

EZB3384I <no>defname use/don't use default domain name <novc>

EZB3385I <no>search (sea) use/don't use domain search list <sea>

EZB3386I domain=NAME (do) set default domain name to NAME

EZB3387I <no>ignore (i) ignore/don't ignore trunc. errors <noi>

EZB3388I <no>primary (pr) use/don't use primary server <nopr>

EZB3389I <no>aaonly (aa) authoritative query only flag <noaa>

EZB3390I <no>sort (sor) sort resource records <nosor>

EZB3391I <no>cmd echo parsed arguments <cmd>

EZB3392I <no>stats (st) print query statistics (RTT,etc) <st>

EZB3393I <no>Header (H) print basic header <H>

EZB3394I <no>header (he) print header flags <he>

EZB3395I <no>ttlid (tt) print TTLs <tt>

EZB3396I <no>cl print class info <nocl>

EZB3397I <no>qr print outgoing query <noqr>

EZB3398I <no>reply (rep) print reply <rep>

EZB3399I <no>ques (qu) print question section <qu>

EZB3400I <no>answer (an) print answer section <an>

EZB3401I <no>author (au) print authoritative section <au>

EZB3402I <no>addit (ad) print additional section <ad>

EZB3403I pfdef set to default print flags

EZB3404I pfmin set to minimal default print flags

EZB3405I pfset=# set print flags to #

EZB3406I (# can be hex/octal/decimal)

EZB3407I pfand=# bitwise and print flags with #

EZB3408I pfor=# bitwise or print flags with #

EZB3409I - dig option

EZB3410I -x dot-notation-address

EZB3411I -f file for dig batch mode

EZB3412I -T Time in seconds between start of successive queries

EZB3413I • EZB3433I

EZB3413I -p Port number

EZB3414I -P ping-string

EZB3415I -t query-type

EZB3416I -c query-class

EZB3417I -envsav This flag specifies that the dig environment

EZB3418I (defaults, print options, etc.), after all of

EZB3419I the arguments are parsed, should be saved to a

EZB3420I file to become the default environment. DiG.env

EZB3421I is created in the current working directory.

EZB3422I -envset This flag only affects batch query runs. When

EZB3423I -envset is specified on a line in a dig batch file

EZB3424I the dig environment after the arguments are parsed,

EZB3425I becomes the default environment for the duration of

EZB3426I the batch file, or until the next line which

EZB3427I specifies -envset.

EZB3428I -<no>stick This flag only affects batch query runs. It

EZB3429I specifies that the dig environment (as read

EZB3430I initially or set by -envset switch) is to be

EZB3431I restored before each query (line) in a dig

EZB3432I batch file.

EZB3433I %comment - included argument that is not parsed

Explanation: Messages EZB3364I - EZB3433I appear in response to the HELP DIG command. See z/OS Communications Server: IP User's Guide and Commands for more information about the DIG command.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: DIG

Procedure name: PrintHelp()

EZB3434I Can not read DIG environmental data set. Defaults used.

Explanation: This message is displayed if a DIG command was invoked with the -envsav option from an unsupported release of Communications Server. This option is not compatible with the current supported releases of Communications Server.

System action: No query options saved from the DIG command prior to Communications Server for V1R2 are restored to a Communications Server for V1R2 or later release of the DIG command.

Operator response: To create an environmental data set in a Communications Server for V1R2 or later format, use the -envsav option with any DIG command that has the query options required. See z/OS Communications Server: IP User's Guide and Commands for information about the TSO DIG command.

System programmer response: none

Module: DIG

Procedure name: main

EZB3483E Couldn't open output file

Explanation: NSDBLOAD encountered an error opening its output file. The program ends with exit code 99.

System action: The name server exits.

Operator response: Verify that the name server has read/write access to the file.

System programmer response: None.

Module: NSDBLOAD

Procedure name: main

EZB3484E Error(s) occurred reading master datafile.

Explanation: NSDBLOADz encountered an error while processing the master data file.

System action: The name server ends.

Operator response: Check the data syntax of the master data file.

System programmer response: Contact IBM software support services.

Module: NSDBLOAD

Procedure name: main

EZB3487I Error occurred deleting table info.

Explanation: NSDBLOADz encountered an error deleting SQL table information.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: main

EZB3489I *sql statement sqlcode sqlcode*

Explanation: NSDBLOAD was unable to process the indicated SQL command.

System action: NSDBLOAD continues.

Operator response: Use the *sqlcode* that is displayed in this message and <http://www-01.ibm.com/support/knowledgecenter/SSEPH2/welcome> to determine the cause of the error and respond as indicated.

EZB3490I • EZB3496W

System programmer response: None.

Module: NSDBLOAD

Procedure name:

EZB3490I time: Delete all data from *name* table

Explanation: NSDBLOADz is deleting all data from the indicated table.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: deleteinfo

EZB3491I time: Deleted all data in sql table *name*

Explanation: NSDBLOADz has deleted all data in the indicated SQL table.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: deleteinfo

EZB3493E Couldn't read output resource record file

Explanation: NSDBLOADz encountered an error opening its output file. The program ends with exit code 99.

System action: The NSDBLOAD program ends.

Operator response: Check for the name server's access to the file.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3495W error invalid class *class*

Explanation: The NSDBLOAD program encountered an incorrect class specification in an input record. The record is ignored.

System action: TCPIP continues.

Operator response: Check for the correct CLASS of the defined resource record.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3496W error invalid type *type*

Explanation: The NSDBLOAD program encountered an incorrect type specification in an input record.

System action: The record is ignored.

Operator response: Check for the correct TYPE of the defined resource record.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3497I time: Finished adding data to table

Explanation: The NSDBLOAD program has finished adding data to its SQL table.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3498I time: Update statistics on the name table

Explanation: The NSDBLOAD program updates the statistics on this table.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3499I time: Data base update completed.

Explanation: The NSDBLOAD program has completed the database update.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3501E Couldn't read input master file

Explanation: The NSDBLOAD program encountered an error opening the resource record file previously generated. The program ends with exit code 99.

System action: The name server ends.

Operator response: Check the read/write access on the input file for the current user ID.

System programmer response: Check for the existence of a resource record file.

Module: NSDBLOAD

Procedure name: insertsql

EZB3503E Origin definition error

Explanation: The NSDBLOAD program encountered a \$ORIGIN statement in the input file without an accompanying definition.

System action: TCPIP continues.

Operator response: Correct the \$ORIGIN input statement to NSDBLOAD.

System programmer response: None.

EZB3504I • EZB3510W

Module: NSDBLOAD

Procedure name: readmaster

EZB3504I *time: New origin origin*

Explanation: The NSDBLOAD program encountered a \$ORIGIN statement with the specified origin in its input file.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3505I *time: @ - current origin origin*

Explanation: The NSDBLOAD program is using the specified origin.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3506E **Origin has not been defined**

Explanation: A relative domain name defined in a master file requires a domain origin suffix.

System action: TCPIP continues.

Operator response: Correct the master file to include a \$ORIGIN *domain* statement.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3509W **Format error 1: *line***

Explanation: The NSDBLOAD program encountered a syntax error in the input file. The line causing the error is displayed and ignored.

System action: TCPIP continues.

Operator response: Check the TYPE field in the defined resource record.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readMaster

EZB3510W **Format error 2: *line***

Explanation: The NSDBLOAD program encountered a syntax error in the input file. The line causing the error is displayed and ignored.

System action: TCPIP continues.

Operator response: The required TYPE field is missing from the resource record.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readMaster

EZB3511W Format error 3: *line*

Explanation: The NSDBLOAD program encountered a syntax error in the input file. The line causing the error is displayed and ignored.

System action: TCPIP continues.

Operator response: The required TYPE field is missing from the resource record.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readMaster

EZB3512W Obsolete root definition replace with ‘.’

Explanation: The NSDBLOAD program encountered an obsolete root definition (..) in the input file. The NSDBLOAD program ignores this error.

System action: TCPIP continues.

Operator response: Change the root definition from '..' to '.'.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3513W Invalid wild card definition

Explanation: The NSDBLOAD program encountered an incorrect wildcard definition in the input file.

System action: TCPIP continues.

Operator response: Correct the input file. See RFC 1035 for the correct wild card entry. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3514W Mailbox in SOA data field is specified incorrectly.

Explanation: The NSDBLOAD program encountered an incorrectly specified RNAME field in an SOA RR RDATA field while reading the master data file.

System action: TCPIP continues.

Operator response: See RFC 1034 for the correct specification of the RNAME field. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

System programmer response: None.

Module: NSDBLOAD

Procedure name: readmaster

EZB3515I • EZB3520I

EZB3515I Drop index *sql table*

Explanation: NSDBLOAD will perform an SQL drop index command against the table displayed in the message.

System action: NSDBLOAD performs the SQL drop index command and continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: dropindex

EZB3516I SQLcommand

Explanation: The name server will perform a create index SQL command against the SQL table displayed in the message.

System action: The NSDBLOAD performs the create index command and continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: creatindex

EZB3517I * WARNING: OWNER of SQL table is not NAMESEV. ****

EZB3518I * Ensure view exists on *owner.nstable*. ****

Explanation: The current name server SQL table is not owned by NAMESRV.

System action: NSDBLOAD continues.

Operator response: Make sure that the owner specified in the message has view authority for the table.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3519I Select tcurrent

Explanation: NSDBLOAD is selecting a table to receive SQL data.

System action: NSDBLOAD continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3520I PREPARE SQL error: *sqlcode*

Explanation: NSDBLOAD did a PREPARE of the SQL DB2® table, and SQL returned the code that is displayed in the message.

System action: NSDBLOAD continues.

Operator response: Use the *sqlcode* that is displayed in this message and <http://www-01.ibm.com/support/knowledgecenter/SSEPH2/welcome> to determine the cause of the error and respond as indicated.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3521I Declare SQL error: *sqlcode*

Explanation: NSDBLOAD did a DECLARE of the SQL DB2 table and received the return code that is displayed in the message.

System action: NSDBLOAD continues.

Operator response: Use the *sqlcode* that is displayed in this message and <http://www-01.ibm.com/support/knowledgecenter/SSEPH2/welcome> to determine the cause of the error and respond as indicated.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3522I Open SQL error: *sqlcode*

Explanation: NSDBLOAD did an OPEN of the SQL DB2 table and received the return code that is displayed in the message.

System action: NSDBLOAD continues.

Operator response: Use the *sqlcode* that is displayed in this message and *SGL/DS Messages and Codes* to determine the cause of the error and respond as indicated.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3523I Table *ttable* not defined in *nstable*.

EZB3524I using default table *sqltable*

Explanation: NSDBLOAD performed an SQL FETCH command. The table displayed in the message was not defined in the *nstable*.

System action: NSDBLOAD uses the default table and continues.

Operator response: Verify that the table specified in the NSDBLOAD command was valid and it has been defined in the DNSTABLE data set.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3525I Using sql table *table*

Explanation: The table displayed is being used by NSDBLOAD.

System action: NSDBLOAD continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: whichtable

EZB3534I

EZB3535I NSDBLOAD reads a master dataset, as defined in RFC1034,

EZB3536I generates resource records, and inserts them into an SQL

EZB3537I table. Multiple name servers can execute simultaneously

EZB3538I on the same system assuming they are using separate ports

EZB3539I or are executing on different TCPIP service machines.

EZB3540I When inserting data into an SQL table owned by NAMESRV the

EZB3541I above SQL names are permitted. When inserting into an SQL

EZB3542I table NOT owned by namesrv, the SQL tablename must be fully

EZB3543I qualified. If a view is defined on nstable, NSDBLOAD will

EZB3544I determine from the status field which table is current (0|1)

EZB3545I Format: nsdbload [db2-subsystem sqltable input-dataset

EZB3546I output-dataset]

EZB3547I where: db2name – SQL subsystem name

EZB3548I sqltable – the table owner defaults to NAMESRV.

EZB3549I Any of the following forms are permitted:

EZB3550I cache, namesrv.cache, or namesrv.cache0.

EZB3551I input-dataset – master data dataset

EZB3552I output-dataset – resource record dataset

Explanation: NSDBLOAD displays this help text if you specified a question mark as the only command line parameter.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: makelower

EZB3560I time: Do you want to create resource records from a master file (y/n)?

Explanation: The NSDBLOAD command is prompting you to determine whether the resource records should be created from a master file or the program should end now.

System action: TCPIP continues.

Operator response: Enter Y or N.

System programmer response: None.

Module: NSDBLOAD

Procedure name: main

EZB3561I time: Do you want to delete all resource records from db(y/n)?

Explanation: The NSDBLOAD command is prompting you to determine whether all resource records should be deleted from the database.

System action: TCPIP continues.

Operator response: Enter Y or N.

System programmer response: None.

Module: NSDBLOAD

Procedure name: main

EZB3562I time: Do you want to insert the RR in the sqltable now(y/n)?

Explanation: The NSDBLOAD command is prompting you to determine whether the resource records defined in the input parameters should be inserted into the SQL tables now.

System action: TCPIP continues.

Operator response: Enter Y or N.

System programmer response: None.

Module: NSDBLOAD

Procedure name: main

EZB3563I time: Do you want translate all data to lower case?(y/n)

Explanation: The NSDBLOAD command is prompting you to determine whether all input data should be converted to lowercase.

System action: TCPIP continues.

Operator response: Enter Y or N.

System programmer response: None.

Module: NSDBLOAD

Procedure name: insertsql

EZB3564I time: Do you want translate all data to upper case?(y/n)

Explanation: NSDBLOAD is prompting you to determine whether all input data should be translated to uppercase.

System action: TCPIP continues.

Operator response: Enter Y or N.

System programmer response: None.

Module: NSDBLOAD

EZB3565I • EZB3826I

Procedure name: insertsql

EZB3565I time: Drop index table

Explanation: NSDBLOAD is issuing an SQL DROP INDEX command for this table.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

Module: NSDBLOAD

Procedure name: dropindex

EZB3566I RDATA Error: resource record

Explanation: The resource record displayed is missing the RDATA field.

System action: NLDBLOAD increments an error counter and continues.

Operator response: Correct the resource record of the name server SQL table.

System programmer response: None.

Module: NSDBLOAD

Procedure name:

EZB3825T name/udp: unknown service

Explanation: A UDP port number for the service *name* was not assigned in the tcpip.v3r1.ETC.SERVICES data set.

System action: NCPROUTE exits.

Operator response: None.

System programmer response: Verify that the tcpip.v3r1.ETC.SERVICES data set has two entries in the form:

ncproute

port/udp

router *port/udp*

The entries must start in column 1 and be in lowercase. Verify that the NCPROUTE service port number is the port being used by the NCP clients. The port value defined in the UDPPORT= keyword on the IPOWNER statement in the NCP generation definition must match the NCPROUTE service port. The default is UDP port 580.

The reserved router service port number is 520 and is required for the NCPROUTE transport of RIP packets to NCP clients, which are responsible for broadcasting the packets to other RIP routers. The router service port number cannot be overridden as a result of an NCP restriction.

Also, verify that port 580 has been reserved for NCPROUTE under the PORT statement in the tcpip.v3r1.PROFILE.TCPIP data set.

Module: NRMAIN

Procedure name: main

EZB3826I Port *port* assigned to *name*

Explanation: NCPROUTE will listen for traffic from NCP clients on the specified port *port* assigned to service *name*.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If communications cannot be established with a client, compare NCPROUTE's port number with the value specified in the client's NCP generation definition. The port value defined in the UDPPORT=

keyword on the IPOWNER statement in the NCP generation definition must match.

Module: NRMAIN

Procedure name: main

EZB3827T Terminating since clients require the socket

Explanation: NCPROUTE attempted to open a socket on a well known or user-defined port but the open was not successful, or the socket could not be bound to an IP address and port number. Clients will not be able to communicate with NCPROUTE because a socket is not available.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Examine previous messages to determine the nature of the error as indicated by a detailed tc perror() library message. Correct the problem as indicated by error. See the z/OS XL C/C++ Runtime Library Reference for more information about socket() function errors.

Module: NRMAIN

Procedure name: Main

EZB3828T Usage: NCPROUTE parameters

Explanation: Incorrect parameters were passed to NCPROUTE.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Verify that the parameters are correct. The parameters are case-sensitive and must be separated by spaces. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRMAIN

Procedure name: main

EZB3829I Waiting for incoming packets

Explanation: NCPROUTE is waiting for datagrams from NCP clients. Each time at which NCPROUTE finishes processing an event, such as an incoming datagram or a timer that expires, NCPROUTE issues this message and waits for the next event. These messages should occur at least once every 30 seconds, but will increase in frequency as the server performs more work.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Check to see if the assigned port number for NCPROUTE matches the NCP clients' generation definitions.

If six or more of these messages occur consecutively, NCPROUTE is not receiving any datagrams from NCP clients. Verify that a client has an established session with NCPROUTE, and if one exists, examine the status of the client's interfaces.

Module: NRMAIN

Procedure name: main

EZB3830E The main select was interrupted:

Explanation: An error occurred while NCPROUTE was waiting for an event to occur. A more detailed tc perror() library message follows.

System action: NCPROUTE continues, unless an IUCV error occurred.

Operator response: None.

EZB3831I • EZB3834I

System programmer response: Verify that TCPIP is running.

Module: NRMAIN

Procedure name: Main

EZB3831I Send delayed dynamic update

Explanation: A routing update, which had been delayed to prevent packet storms, has been transmitted. This occurs 2–5 seconds after a dynamic update has been issued.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: Main

EZB3832E While receiving a packet from a client:

Explanation: An error occurred while attempting to receive a packet from a client. A more detailed tcperror() library message follows.

System action: NCPROUTE continues, and the incoming packet is discarded. If an IUCV error occurs, NCPROUTE will end.

Operator response: None.

System programmer response: See the next generated error message and correct the error.

Module: NRMAIN

Procedure name: process

EZB3833E While receiving a packet from the SNMP agent: *agent*

Explanation: An error occurred while attempting to read a packet from the SNMP agent. A more detailed tcperror() library message follows. If the connection with the Agent has been reset, the SNMP agent will be terminated and incoming SNMP requests will be ignored.

System action: NCPROUTE continues. The SNMP packet is discarded. If an IUCV error occurs, NCPROUTE will end.

Operator response: None.

System programmer response: If the connection with the SNMP agent has been reset, restart the SNMP daemon (OSNMPD).

Module: NRMAIN

Procedure name: read_dpi

EZB3834I *****

Explanation: Two of these banners enclose a message that may need attention. when viewing the output. The severity of the enclosed message is indicated.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Read the enclosed message and, if necessary, resolve the indicated situation.

Module: *various*.

Procedure name: *various*.

EZB3835T Invalid parameter: *parameter*

Explanation: An incorrect parameter was passed from the tcPIP.v3r1.SEZAINST(NCPROUT) start proc JCL. The parameter could be passed from the command line parameters or from the default parameter list in the start proc JCL.

System action: NCPROUTE exits.

Operator response: None.

System programmer response: Correct the parameter from the command line parameters or in the default parameter list of the start proc JCL.

Module: NRMAIN

Procedure name: main

EZB3836W The SNMP agent has terminated

Explanation: The socket used to communicate with the SNMP agent has been reset. This implies that the SNMP agent has ended. Without this socket, SNMP requests are not processed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If the SNMP agent (OSNMPD) is not running, restart the agent. NCPROUTE will attempt to reestablish communications with the agent after each new SNMP request is received, so no further action is required. If the agent is running, contact IBM software support services.

Module: NRMAIN

Procedure name: read_dpi

EZB3837W SNMP requests will be ignored until it is restarted.

Explanation: Because communication with the SNMP agent is not possible, incoming SNMP requests are ignored until a connection has been established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Start the SNMP agent (OSNMPD). NCPROUTE will attempt to establish communication with the agent for each SNMP packet received until a connection is established.

Module: NRMAIN

Procedure name: read_dpi

EZB3838W An SNMP DPI packet arrived from a non-internet machine

Explanation: An SNMP DPI packet was received from a non-Internet network. SNMP DPI traffic is only accepted from machines running TCPIP. The incoming packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the machine generating the SNMP DPI packet and have it stopped. Ignore these messages.

Module: NRMAIN

Procedure name: read_dpi

EZB3839T • EZB3842W

EZB3839T A socket could not be created:

Explanation: NCPROUTE could not open a new socket. With the socket unavailable, the NCP clients will not be able to establish communications with NCPROUTE. A more detailed `tcperror()` library message follows.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Verify that TCPIP is active, that another program is not using NCPROUTE's port, that the well-known port has been reserved in the PORT statement of *hlq.PROFILE.TCPIP* data set, and that the user-defined port has been specified in *hlq.ETC.SERVICES* data set. Correct the problem as indicated by the error in the detailed `tcperror()` library message. See the z/OS XL C/C++ Runtime Library Reference for more information about `socket()` function errors.

Module: NRMAIN

Procedure name: `getsocket`

EZB3840T Broadcasting cannot be enabled on the socket:

Explanation: NCPROUTE cannot enable the socket for broadcasting. NCPROUTE must be able to broadcast over interfaces which support broadcasting in order to communicate with the NCP clients. A more detailed `tcperror()` library message follows.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRMAIN

Procedure name: `getsocket`

EZB3841T The socket bind failed

Explanation: NCPROUTE was unable to associate an IP address and port number to the newly created socket. Another application could be using the port. A more detailed `tcperror()` library message follows.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Use the NETSTAT ALLCONN command to verify that there is no other application using the NCPROUTE port number. Look for a port in the "Local Socket" column which matches NCPROUTE's port in the *hlq.ETC.SERVICES* data set. You should reserve this port for NCPROUTE's exclusive use by adding an entry to the PORT statement in the *hlq.PROFILE.TCPIP* data set.

Module: NRMAIN

Procedure name: `Getsocket`

EZB3842W Hello from existing client *client*

Explanation: An NCP client with a current session has entered a reset state and has started to send Hello packets in an attempt to establish a session with NCPROUTE. This client might have been shut down and restarted. The current session ends and a new one is started.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: `Pdu_in`

EZB3843W Status from a session-less client *client*

Explanation: A client has transmitted an interface status change PDU without first establishing a session with NCPROUTE. This is a protocol violation. The PDU is discarded. Also, the client is added to a "Client Protocol Violation List" and no further error messages will be issued for this client until it successfully establishes a session. At that point, NCPROUTE will accept the client, and the client's name will be removed from the list.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Restart the client NCP. If the problem persists, contact IBM software support services.

Module: NRPDUS

Procedure name: pdu_in

EZB3844W This datagram is being ignored

Explanation: A datagram was received and some outstanding error prevents NCPROUTE from operating on the packet. The most likely cause is that a protocol error occurred between the client and NCPROUTE. The datagram is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Identify the cause of the error from a previous error message and correct the problem. The client must be reset so that a new session is established.

Module: NRPDUS

Procedure name: pdu_in

EZB3845W Transport from session-less client *client*

Explanation: A client NCP has transmitted a Transport PDU without first establishing a session with NCPROUTE. This is a protocol violation. The PDU is discarded. Also, the client is added to a "Client Protocol Violation List" and no further error messages will be issued for this client until it successfully establishes a session. At that point, NCPROUTE will accept the client and the client's name will be removed from the list.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Restart the client NCP. If the problem persists, contact IBM software support services.

Module: NRPDUS

Procedure name: pdu_in

EZB3846W InactList from session-less client *client*

Explanation: A client NCP has transmitted an inactive interface PDU without first establishing a session with NCPROUTE. This is a protocol violation. The PDU is discarded. Also, the client is added to a "Client Protocol Violation List" and no further error messages will be issued for this client until it successfully establishes a session. At that point, NCPROUTE will accept the client and the client's name will be removed from the list.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Restart the client NCP. If the problem persists, contact IBM software support services.

Module: NRPDUS

Procedure name: pdu_in

EZB3847W • EZB3851I

EZB3847W Protocol Violation: client *client* sent

Explanation: A foreign machine sent a packet to the NCPROUTE port that does not contain a valid type field in the packet header. This is probably not an NCP, but another machine on the network. The PDU is discarded. Also, the client is added to a "Client Protocol Violation List" and no further error messages will be issued for this client until it successfully establishes a session. At that point, NCPROUTE will accept the client and the client's name will be removed from the list.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Identify the source of the packet from the displayed IP address and correct the problem. If the machine in question is an NCP, verify that it is loaded with the correct software and reset it. If the machine is an NCP and resetting it does not correct the problem, contact IBM software support services.

Module: NRPDUS

Procedure name: pdu_in

EZB3848W An excessive number of clients (#) have been issued protocol violations. Further warning messages will be suppressed.

Explanation: A large number of clients have committed protocol violations and have not subsequently established sessions with NCPROUTE. No further "Warning" messages are issued. NCPROUTE assumes that the problems have been noticed by this point and that steps are being taken to correct them.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the most recent versions of NCPROUTE and the NCP drivers are installed. Verify that previous protocol errors on individual client NCPs were investigated and corrective actions were taken. Contact IBM software support services if the protocol violations continue.

Module: NRPDUS

Procedure name: bad_client

EZB3850E Status change for unknown interface *interface*

Explanation: NCPROUTE received a status change request PDU from the NCP client for an interface that was unknown. Either NCPROUTE did not completely read in the NCP client's Routing Information Table (RIT), or the RIT was not built correctly during NCP generation. Another possible cause is that the NCP client dynamically added the interface to its tables. Dynamically-added interfaces are not currently supported by NCPROUTE. The Status PDU is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Check the interface configuration messages created in the console log at install time to verify that the interfaces defined in the NCP client's generation match the interfaces processed by NCPROUTE. If a mismatch is found, verify that the RIT is built correctly. If the problem cannot be corrected, contact IBM software support services.

Module: NRPDUS

Procedure name: recv_status

EZB3851I Accepting bad client *client*

Explanation: A client that committed a protocol violation earlier has successfully established a session and any new protocol violations are reported.

System action: The client is removed the "Client Protocol Violation List". With the client removed from this list, NCPROUTE resumes reporting any new protocol violation errors.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: forgive

EZB3855I NCP_Add out to client Route to address1 via interface interface to address2 Metric: metric, Type type, Subnetmask mask

Explanation: An "Add" PDU is being sent to a client, which causes a route to be added to its IP route tables. *address1* is the destination IP address of the route.

The *interface* is the name given to the interface during NCP generation.

address2 is the IP address of an intermediate router or zero if the destination is directly connected.

The *metric* is the relative cost of using this route as opposed to another route.

The *type* is either Host, Subnet, or Network and indicates the route type being added.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: nr_do_add

EZB3856I Pending delete for interface interface

Explanation: NCPROUTE received a status change request from the NCP client to delete the specified interface from its interface tables. The NCP client had deleted the interface from its configuration as a result of dynamic reconfiguration. NCPROUTE puts the interface in pending delete state so that routing outages can be reported to other interfaces and the incorrect addition of routes in routing responses can be prevented. NCPROUTE will continue to remove the specified interface from its tables until either the routes are timed out or a status change request to add a new interface with the same IP address is received.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_status

EZB3857I Adding new interface interface

Explanation: NCPROUTE received a status change request from the NCP client to add a new interface to its interface tables. The NCP client had added the interface to its configuration as a result of dynamic reconfiguration. NCPROUTE will manage routes for the new interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_status

EZB3858E • EZB3862I

EZB3858E Unknown status change request

Explanation: NCPROUTE received an invalid status change request from the NCP client. The Status PDU is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: recv_status

EZB3859I Deleting interface *interface*

Explanation: NCPROUTE is deleting the specified interface from its interface tables. The interface was previously in pending delete state so that routing outages could be reported to other interfaces and the incorrect addition of routes in routing responses could be prevented. The deletion occurs when either the routes attached to the interface have timed out or a status change request to add a new interface with the same IP address is received.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_status

EZB3860E The transmission of an 'Add' to client *client* failed

Explanation: TCPIP detected that the "Add" PDU could not be delivered successfully. The add request, for adding a route to the NCP client's routing table, is not performed. A more detailed tc perror() library message follows.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the error message that follows and proceed according to the recommendations.

Module: NRPDUS

Procedure name: nr_do_add

EZB3862I NCP_Add out to *client* Route to *address1* via interface *interface* to *address2* Metric: *metric*, Type *type*, Subnetmask *mask*

Explanation: A "Delete" PDU is being sent to the named client. The *address* is the destination of the route to be deleted, and the *type* is either Host, Subnet or Network and is used by the client to locate the correct route table from which to delete the route.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: nr_do_delete

EZB3863S RIP2 authentication key exceeds maximum allowed or contains unsupported characters

Explanation: The RIP Version 2 authentication key, specified on the RIP2_AUTHENTICATION_KEY entry in the NCPROUTE profile data set, or on the options statement entry in the NCP client's gateways data set for an interface, is invalid. The authentication key may have contained unsupported characters or have exceeded the maximum 16 characters allowed. The authentication key is ignored and no authentication check is performed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the NCPROUTE profile or the NCP client's GATEWAYS data set.

Module: NRMAIN, NRSTART

Procedure name: read_profile, ParseOptions

EZB3864E The transmission of a 'Delete' to client *client* failed

Explanation: TCPIP detected that the "Delete" PDU could not be delivered to an NCP client. The delete request, for deleting a route from the NCP client's routing table, is not performed. A more detailed tcprror() library message follows.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the error message that follows and proceed according to the recommendations.

Module: NRPDUS

Procedure name: nr_do_delete

EZB3865T Out of memory during transport

Explanation: NCPROUTE has used all available storage while attempting to send a "Transport" PDU to a client. In this condition, NCPROUTE can no longer communicate with its clients.

System action: NCPROUTE exits.

Operator response: None.

System programmer response: Increase NCPROUTE's region size and restart. Take into consideration that storage requirements are based on the number of clients being served and the number of routes being managed. If the problem still cannot be resolved, contact IBM software support services.

Module: NRPDUS

Procedure name: nr_do_transport

EZB3866E The transmission of a 'Transport' to client *client* failed

Explanation: TCPIP detected that it would be unable to deliver the "Transport" PDU to a client. The "Transport" PDU is discarded. A more detailed tcprror() library message follows.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the error message that follows and proceed according to the recommendations.

Module: NRPDUS

Procedure name: nr_do_transport

EZB3867I • EZB3870E

EZB3867I Acknowledge to *client*: Hello Received

Explanation: A client has attempted to establish a session with the server and is being updated on the status of the request. The "Hello" PDU was received and is sent immediately to quiet the client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_hello

EZB3868I Acknowledge to *client*: RIT Loaded OK

Explanation: A client has attempted to establish a session with the server, and is being updated on the status of the request. The Routing Information Table (RIT) was loaded and appears usable.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_hello

EZB3869E Acknowledge to *client*: RIT Load Failed

Explanation: A client has attempted to establish a session with the server and is being updated on the status of the request. An abend occurred during the load of the Routing Information Table (RIT). The session with the server is not established. A previous message explains the cause of the abend.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the abnormal end code in a previous message and correct the error. If the problem cannot be corrected, contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3870E Acknowledge to *client*: RIT ID Bad

Explanation: A client has attempted to establish a session with the server and is being updated on the status of the request. An error was detected in the correlation string of the Routing Information Table (RIT). The string does not match the one in the received "Hello" PDU. Most likely the NCP client has been reconfigured after a new NCP load and, as a result, the RIT ID was updated. The session with the server is not established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the correct RIT was installed and that another data set was not inadvertently loaded earlier. The RIT should be referenced in the operating system's link list or in the DD:STEPLIB statement of the NCPROUTE catalogued procedure. If the problem cannot be corrected, contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3871E Acknowledge to *client*: RIT Bad

Explanation: A client has attempted to establish a session with the server and is being updated on the status of the request. An error was detected in the Routing Information Table (RIT) data. The session with the server is not established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the correct RIT was installed and that another data set was not inadvertently loaded earlier. The RIT should be referenced in the operating system's link list or in the DD:STEPLIB statement of the NCPROUTE catalogued procedure. If the problem cannot be corrected, contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3872E Acknowledge to *client*: RIT Not Found

Explanation: A client has attempted to establish a session with the server and is being updated on the status of the request. The Routing Information Table (RIT) could not be found matching the NCP name in the received "Hello" PDU. The session with the server is not established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the RIT built during NCP generation has been installed into a partitioned data set and referenced by the DD:STEPLIB statement of NCPROUTE catalogued procedure. If the problem cannot be corrected, contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3873E Acknowledge to *client*: Unsupported Ack Type

Explanation: A client has attempted to establish a session with the server, and is being updated on the status of the request. An unknown Acknowledgement type was received. The session with the server is not established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3875W Variable subnetting not supported by client *client*

Explanation: Variable subnetting is not supported by the *client* and the RIP supply/receive control setting may have been set in the NCPROUTE configuration such that RIP Version 2 packets are to be sent or received over interface(s). NCPROUTE will override the control settings to RIP1 for compatibility with the NCP client configuration.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify the NCP software level for variable subnetting support in the NCP client. If RIP Version 2 packets are not to be used, correct the NCPROUTE profile data set or the NCP client's gateways data set to use RIP Version 1 packets.

Module: various

Procedure name: various

EZB3876I • EZB3879E

EZB3876I Hello from new client *client*

Explanation: An NCP client is attempting to establish a session with NCPROUTE. This is done by sending a "Hello" PDU containing the NCP name and correlation string used to verify that the correct Routing Information Table (RIT) is loaded.

Note: The NCP client will issue many "Hello" PDUs up to the maximum specified in the NCP gen until it successfully establishes a session with the server. Once the maximum is reached, the NCP client will repeat the cycle again after a 9-minute delay timer has expired. The delay timer is used to prevent NCP alert flooding. The NCP client's issuance of "Hello" PDUs can happen even after the server has established a session with the NCP client. For example, the NCP client could have been restarted. An attempt will be made to establish a new session.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_hello

EZB3877I RIT dataset name: *ritdsname*

Explanation: The specified Routing Information Table (RIT) data set name, as supplied in the Hello PDU, is loaded and processed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_hello

EZB3878I RIT ID: *table_id*

Explanation: The specified ID string is used as a correlation string to verify that the correct Routing Information Table (RIT) has been loaded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None., however, if this ID appears unusual, determine if the correlation string was overridden during NCP load.

Module: NRPDUS

Procedure name: recv_hello

EZB3879E *timestamp*

Explanation: An error occurred and a full time stamp is written showing the date and time when the error occurred. While each message is timestamped, date information is omitted, and this message is issued to help those running for long periods of time.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: Recv_hello

EZB3880E Error opening RIT *client1* for client *client2*

Explanation: The Routing Information Table (RIT), which was created during NCP generation, could not be opened. *client1* is the name of the member on which the load was attempted, *client2* is the IP address of the client that is attempting to establish a session with NCPROUTE. NCPROUTE does not establish the session.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the abend code and reason code in the following EZB3881E message for the specific cause of the error. In the event of an 804 abend, verify that the RIT exists and is accessible to NCPROUTE.

Module: NRPDUS

Procedure name: recv_hello

EZB3881E Abend code: *abend*, Reason: *reason*

Explanation: An abend occurred during an attempt to load the Routing Information Table (RIT) into memory with the LOAD macro. The abend and reason code returned are displayed. The session with the server is not established.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: See z/OS MVS System Codes for an explanation of the abend and reason codes, and further instructions.

Module: NRPDUS

Procedure name: recv_hello

EZB3882E A session will not be established

Explanation: An error occurred during an attempt to establish a session with a client, and the session cannot be established at this time.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the errors described in previous messages.

Module: NRPDUS

Procedure name: recv_hello

EZB3883E Client: *client*

Explanation: An error occurred during a transaction with the client. The client is the IP address of the client. This message is used to identify the failing client, and is followed by additional messages.

System action: NCPROUTE issues additional messages.

Operator response: None.

System programmer response: Examine the messages that follow for a description of the error.

Module: NRPDUS

Procedure name: recv_hello

EZB3884E The RIT ID field does not match the one in the Hello. RIT *idfield*, Hello: *correlfield*

Explanation: The ID field in the Routing Information Table (RIT) does not match the correlation field passed from the client NCP in the hello datagram. The mismatched ID and correlation fields are displayed. This indicates that the client is using a generation that is different from the one that built the RIT. A session is not established.

System action: NCPROUTE continues.

EZB3885I • EZB3888E

Operator response: None.

System programmer response: Generally, the RIT used by NCPROUTE should be the RIT that was generated during the generation of the current NCP load. In this case, an older RIT with the same name is probably being loaded. Locate and remove the old RIT. In some cases, multiple machines might want to own a single NCP and use the same NCP generation, but would require a unique RIT to run correctly. See the NCP documentation for instructions about how to set the correlation string in your generations and during NCP load.

Module: NRPDUS

Procedure name: recv_hello

EZB3885I Input parameters: *parms*

Explanation: This message lists the string of input parameters passed to NCPROUTE from tcip.v3r1.SEZAINST(NCPROUT) start proc JCL. The parameters could either be passed from the command line parameters or from the defined parameter list in the start proc JCL. If no parameters are specified, "None." will appear in the string.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: main

EZB3886E An error occurred while loading the RIT for client *client*.

Explanation: An internal error occurred. As a result of the error, the information in the Routing Information Table (RIT) is not available but an error condition was not indicated on return from the load. The new session ends.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3887E An internal error occurred, terminating session.

Explanation: Because a session was established, but is unusable, the new session ends and this message is displayed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: recv_hello

EZB3888E An error occurred during interface initialization.

Explanation: An error occurred during processing of the Routing Information Table (RIT) interface list. Previous messages should describe the nature of the error. The new session ends.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous messages and follow recommendations for the error that occurred.

Module: NRPDUS

Procedure name: recv_hello

EZB3889E The session will be terminated

Explanation: An error occurred that makes one of NCPROUTE's sessions unusable. The session ends, and the client NCP goes into a reset state in three minutes. At that point, the NCP client attempts to reestablish a session.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous messages to determine what error occurred and correct the problem. If the error takes a while to correct, renaming the Routing Information Table (RIT) causes future attempts at establishing a session to be unsuccessful.

Module: NRPDUS

Procedure name: recv_hello

EZB3890I Recv: status from *client*

Explanation: A client's interface has changed state and the client has reported this by an interface status change PDU.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_status

EZB3891I Interface *ip_addr* is now *status* - *interface_name*

Explanation: The client's interface name having an IP address of *ip_addr* has changed state and is currently set to either "up" or "down".

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If the status change is not expected, examine the client NCP to determine the reason for the change. See the NCP documentation for more information.

Module: NRPDUS

Procedure name: recv_status

EZB3894I Transport from *client*: *count* bytes of RIP data.

Explanation: Client *client* has received a packet addressed to UDP port 520 and has forwarded this packet to NCPROUTE in a Transport PDU.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_transport

EZB3895I • EZB3899I

EZB3895I Transport from *client*: *count* bytes of SNMP data.

Explanation: The *client* has received a packet addressed to UDP port 161 and has forwarded this to NCPROUTE in a transport PDU.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_transport

EZB3896E Transport for unsupported port *port number* bytes received and discarded

Explanation: The client NCP has sent NCPROUTE a Transport PDU containing a packet that was addressed to a port that NCPROUTE does not support. The transport is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: recv_transport

EZB3897I NCPROUTE Server started

Explanation: NCPROUTE has completed initialization and is waiting for incoming packets from NCP client(s) to initiate sessions.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: main

EZB3898I Recv: Inactive Interface List from *client number* interface(s) found:

Explanation: After a session is established, the client sends NCPROUTE a list containing the number of interfaces that are currently down. All other interfaces (listed in the Routing Information Table (RIT)) are assumed to be active. Following this message, the IP addresses and names of the inactive interfaces are displayed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_inactlist

EZB3899I *ipaddr - interface*

Explanation: The IP address and name of the inactive interface are displayed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_inactlist

EZB3900W Unable to open NCPROUTE profile *profile*

Explanation: A profile data set was not specified or could not be opened. This message indicates which data set the open was attempted on.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the profile data set is defined in //DD:NCPRPROF of the NCPROUTE start proc JCL and is accessible by NCPROUTE. If the data set is sequential, ensure that the FREE=CLOSE parameter is specified. Do not specify this parameter if the data set is partitioned.

Module: NRMAIN

Procedure name: read_profile

EZB3901W Ignoring route *destination*, supernetting not supported

Explanation: The route to *destination* received in the RIP packet happens to be a supernet type of route and is ignored since the supernetting feature is not supported by the NCP client. A supernet route is one where its subnet mask is less than the route's network class mask.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify the NCP software level for supernetting support in the NCP client.

Module: NRINPUT

Procedure name: rip_input

EZB3902W Address is experimental, or has non-zero port

Explanation: An incorrect IP address was encountered, which is either in an experimental address class, or is using an unusual port number (Routing Information Protocol (RIP) packets only). The address is being validated to make sure that a network user does not pretend to be a router to change the routing table of nearby routers (such as the client NCP). The address is not considered as a valid destination address for a route, and the route entry is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Identify the machine or user that generated the packet in question and correct the problem.

Module: NRAF

Procedure name: inet_checkhost

EZB3903W Invalid internet address

Explanation: An IP address in an incoming route is determined to not be a member of any defined IP address class. The route is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the router that originated this packet.

Module: NRAF

Procedure name: inet_checkhost

EZB3904W • EZB3908I

EZB3904W A must-be-zero field is non-zero

Explanation: An IP address in an incoming route contains a nonzero value in a field that must be 0. The incoming route is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the router that originated this packet.

Module: NRAF

Procedure name: inet_checkhost

EZB3905S function *function* client *client* unknown

Explanation: The function was unable to obtain a list of interfaces for the client with IP address *client*. If *client* is an actual client of NCPROUTE, the interface list has been lost, otherwise the function is using an incorrect address for its client. NCPROUTE indicates that the requested interface does not exist.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRIF

Procedure name: ifwithaddr

EZB3906S NULL interface list for client *client*

Explanation: A list of interfaces for client *client* exists, but is marked empty. Dynamic routing requires at least one interface. The requested interface is indicated as nonexistent.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the client NCP generation had at least one interface that did not have the RIPMGD=NO keyword coded. If none are found, correct the configuration and regenerate the client. Verify that EZB3956I messages are issued which correspond with the Routing Information Protocol (RIP)-managed interfaces in the generation. If none are found, attempt to reload the Routing Information Table (RIT). Contact IBM software support services if the problem persists.

Module: NRIF

Procedure name: ifwithaddr

EZB3908I Modify command is set for all clients

Explanation: NCPROUTE is configured to process MODIFY commands for all clients rather than for a specific client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: do_modify

EZB3910I Modify command is set for client *client*

Explanation: NCPROUTE is configured to process MODIFY commands for a targeted client rather than for all clients.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: do_modify

EZB3911S Function *function* address family out of range. The address is *address*.

Explanation: One of NCPROUTE's route entries has an unsupported address family. NCPROUTE cannot determine the network based on the address, therefore it cannot determine an interface that serves the logical network. The requested interface is indicated as nonexistent.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Noninternet addresses are not supported in this version of NCPROUTE. Either ignore the message, or have the router that originated this route stop sending noninternet routes to the client NCP. Look back through the output to find the last ADD or CHANGE for this destination to obtain the IP address of the router.

Module: NRIF

Procedure name: ifwithnet

EZB3912I ifwithnet: compare with *interface*

Explanation: The route's network address is being compared with one of NCPROUTE's interface entries for a network number match.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRIF

Procedure name: if_ifwithnet

EZB3913I ifwithnet: remote interface ignored

Explanation: One of NCPROUTE's interface entries is for a remote interface, which is ignored during the search for a network number match.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRIF

Procedure name: if_ifwithnet

EZB3914S ifwithnet: interface has bad address family

Explanation: One of NCPROUTE's interface entries has an incorrect address family. NCPROUTE cannot determine the network based on the address. Therefore, it cannot find an interface that serves the logical network.

System action: NCPROUTE continues.

EZB3915I • EZB3918I

Operator response: None.

System programmer response: Either ignore the message or correct the NCP client's interface that contains the incorrect address family. If the interface cannot be corrected, contact IBM software support services.

Module: NRIF

Procedure name: if_ifwithnet

EZB3915I netmatch *ipaddr1* and *ipaddr2*

Explanation: A network number match was found for the route's network address *ipaddr1* with one of NCROUTE's interface entries having a network address of *ipaddr2*.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRIF

Procedure name: if_ifwithnet

EZB3916I Blocking route for *destination*

Explanation: From a packet received over a particular interface, the route for *destination* is being blocked from being added to NCROUTE's routing table. This is the result of a RIP I/O filter option specified in the client's *hlq.ETC.GATEWAYS* data set. See z/OS Communications Server: IP Configuration Reference for more information.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3917I NCROUTE's internal *type table* for client *client*:

Explanation: NCROUTE's internal IP routing or interface table is displayed for diagnosis.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES, NRIF

Procedure name: dsp_rrtables, dsp_iftables

EZB3918I Modify parameters processed; see SYSPRINT or SYSERR output for results

Explanation: The MODIFY command with specified parameters has been processed. For results, see the SYSPRINT or SYSERR output.

System action: NCRoute continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: do_modify

EZB3921I Tracing debug packets *action timestamp*

Explanation: Debug packets tracing is enabled. The packets are displayed in data format.

System action: NCPRoute continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: modifydebuglevel

EZB3922S inet_makeaddr: no session with *client*

Explanation: The function `inet_makeaddr` was unable to obtain a list of interfaces for the client with IP address *client*. If *client* is an actual client of NCPROUTE, the interface list has been lost; otherwise, the function is using an incorrect address for its client. A NULL IP address is created.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRINET

Procedure name: `inet_makeaddr`

EZB3923S inet_netof: no session with *client*

Explanation: The function `inet_netof` was unable to obtain a list of interfaces for the client with IP address *client*. If *client* is an actual client of NCPROUTE, the interface list has been lost; otherwise, the function is using an incorrect address for its client. Because a subnetmask cannot be located, a network number is returned.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRINET

Procedure name: `inet_netof`

EZB3924I inet_netof: ignoring REMOTE interface

Explanation: One of NCPROUTE's interface entries is for a remote interface, which is ignored during the calculation for a (sub)network number from the interface's IP address.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINET

Procedure name: `inet_netof`

EZB3925S Inet_lnaof: no session with *client*

Explanation: The function `inet_lnaof` was unable to obtain a list of interfaces for the client with IP address *client*. If *client* is an actual client of NCPROUTE, the interface list has been lost; otherwise, the function is using an incorrect address for its client. Because subnetmask information is not available, the host part of the IP address is returned.

System action: NCPROUTE continues.

Operator response: None.

EZB3926S • EZB3929I

System programmer response: Contact IBM software support services. This might contain a subnet number if the interface is subnetted.

Module: NRINET

Procedure name: inet_lnaof

EZB3926S inet_rtflags: no session with *client*

Explanation: The function `inet_rtflags` was unable to obtain a list of interfaces for the client with IP address *client*. If *client* is an actual client of NCPROUTE, the interface list has been lost; otherwise, the function is using an incorrect address for its client. A determination is made to indicate either a network address or a host address assuming no subnetting has been done.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRINET

Procedure name: inet_rtflags

EZB3927E Packet from unsupported address family (*family*), cmd (*command*)

Explanation: A packet was received from a non-Internet network. RIP traffic is only accepted from machines running IP. The incoming packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the machine generating the RIP packet and have it stopped. These messages can also be ignored.

Module: NRINPUT

Procedure name: rip_input

EZB3928E RIP version 0 packet received from *ipaddr*

Explanation: A Routing Information Protocol (RIP) Version 0 packet was received from the specified address. This RIP version is obsolete. The incoming packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the router that is sending the Version 0 packets.

Module: NRINPUT

Procedure name: rip_input

EZB3929I Request: output routines removed

Explanation: NCPROUTE received a Routing Information Protocol (RIP) request packet for a specific set of routes rather than for a set of all routes. (A request for all routes is indicated by an address family of 0 and infinite metric of 16.) Since NCPROUTE does not support handling requests for a specific set of routes, the output routines in this case have been removed to prevent a response.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3930W Trace command from unknown router *ipaddr*

Explanation: A trace packet was received from a router that is either not directly connected to any of the client's Routing Information Protocol (RIP) managed interfaces, or is directly connected to an interface that is not capable of supporting RIP traffic. RIP requires that an interface be capable of supporting link-level broadcast traffic, be a point-to-point interface (such as NCST sessions), or have an active gateway defined. The incoming packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Determine where the packet originated from and correct the problem. Bridges can allow routers on logically disconnected networks to talk with each other even though the routers have no logical connection to each other's networks.

Module: NRINPUT

Procedure name: rip_input

EZB3931W Response from non-router *ipaddr*

Explanation: A Routing Information Protocol (RIP) response packet was received with an incorrect port number. All routers on a network must agree on the port number that is used to exchange routing information, and this port must be restricted so that other applications cannot generate routing updates. Either a router is configured using the wrong port number, or an application issues RIP routing updates. The RIP response is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Reconfigure the router to use a correct port number or locate the application that is generating the updates and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3932W Invalid packet from passive interface *interface*

Explanation: A Routing Information Protocol (RIP) response packet was received from a passive interface. Passive interfaces receive routing updates from the client, but cannot produce routing updates. The packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router that is producing the bogus packet and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3933W Packet from unknown router *ipaddress* (*reason*)

Explanation: A Routing Information Protocol (RIP) response was received from a router which is not directly connected via a broadcast network, a point-to-point (NCST) network, or an active gateway as defined in a GATEWAYS PDS member. The description of the reason for this warning is one of the following:

Reason Explanation**Interface in strange state**

The network does not support broadcast or point-to-point transmission.

Iflookup failed

Not directly connected.

Link is PASSIVE!

Cannot update.

EZB3937W • EZB3941I

The packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router that produced the packet and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3937W New route is in unsupported address family. client = *client*, route from *ipaddr*, new family = *family*

Explanation: An incoming router from another router is in an address family that is not supported by NCPROUTE. Currently, only Internet addresses are supported. The client is the IP address of the client NCP, the *ip addr* is the IP address of the router that originated the route that is not valid, and family is the address family that is not supported by NCPROUTE. The route that is not valid is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router that produced the route and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3939E Illegal address *hostaddr* in route from *ipaddr*

Explanation: An IP address that is not valid was received in an update from router *ipaddr*. A previous message indicates the nature of the problem with the address. The route that is not valid is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router that originated the route and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3940W Bad metric (*metric*) in route to destination from router *ipaddr*

Explanation: A route was received from *ipaddr* that contained a metric that was not in the range 1 - 16. The route is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router ip address and correct the problem.

Module: NRINPUT

Procedure name: rip_input

EZB3941I Adjusting large metric (*metric*) to infinity

Explanation: From the routing updates, a route contained a metric exceeding the maximum supported metric of 16. The metric is changed to infinite metric of 16, to indicate that the destination route is network unreachable.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3943I Send dynamic update

Explanation: Changes have occurred and an update has not been sent recently. Enough time has passed since the last update was sent so that it is safe to transmit again without risking an update storm. Also, no dynamic update was pending; otherwise, NCPROUTE would wait until that update occurred before sending the update.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3944I Delay dynamic update

Explanation: Changes have occurred in the network topology, but an update was recently made to adjacent routers. When the last update was made, a random delay time, 2-5 seconds from that point, was determined. This update is scheduled to occur at that time.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3945I Inhibit dynamic update for *seconds usec*

Explanation: A dynamic update has just been sent. Another dynamic update is prevented from occurring for the number of microseconds indicated in the message. A random time is chosen, 2-5 seconds from this time, and if another update is needed later, it will be delayed until this random time has passed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB3946S toall (STUB) -- this shouldn't be used anymore

Explanation: The routine (toall) called by NCPROUTE is no longer supported.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NROUTPUT

Procedure name: toall

EZB3947S toall: client *client unknown*

Explanation: Information about the client is not available, but NCPROUTE is attempting to send output over all of the client's interfaces. This is an internal error. No output is sent to the client.

System action: NCPROUTE continues.

EZB3948I • EZB3951I

Operator response: None.

System programmer response: None.

Module: NROUTPUT

Procedure name: toall_ifs

EZB3948I Interface *interface* not up

Explanation: The specified interface is detected to be inactive. No route will be added unless the interface is (re)activated.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3949I Interface *interface* is passive

Explanation: The *interface* is in a passive state, meaning that RIP traffic is disabled for the interface. Routing updates will not be broadcast to the interface and incoming routing updates are ignored. This may be the result of a RIP I/O filter option specified in the client's *hlq.ETC.GATEWAYS* data set. See z/OS Communications Server: IP Configuration Reference for more information.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NROUTPUT

Procedure name: toall

EZB3950I toall: requested to skip interface *interface*

Explanation: The interface *interface* is skipped because the interface has already received notification of a routing change. If a broadcast of the routing table has not been sent recently and a routing change has occurred, a dynamic routing update will be broadcasted to other interfaces to inform adjacent routers of the routing change.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NROUTPUT

Procedure name: toall

EZB3951I client *client*: supply *destaddress* -> *port* via *interfacename*

Explanation: NCPROUTE is directing the client to transmit a Routing Information Protocol (RIP) datagram to the destination address. This can be either a broadcast address or a host address. If the port is zero, the RouteD port will be used from *hlq.ETC.SERVICES*; otherwise, the datagram will be transmitted to the specified port. NCPROUTE will ask the client to use the specified interface name when sending the datagram.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NROUTPUT

Procedure name: supply

EZB3952E Unknown interface name (*interface*) and/or address (*ip_addr*)

Explanation: In the line entry for the client's *hlq.ETC.GATEWAYS* data set, the options definition contains interface information that is not in NCPROUTE's interface tables. Most likely, the interface name is misspelled or the interface's IP address is specified incorrectly. Although other options may be processed normally, the invalid option is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRSTART

Procedure name: gateways

EZB3953S NULL base

Explanation: NCPROUTE was unable to locate a base hash table for the client. Every active client should have this table, so its absence indicates an internal error. No output occurs.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NROUTPUT

Procedure name: supply

EZB3954W Invalid metric, changing to one

Explanation: In the line entry for the NCP client's *hlq.ETC.GATEWAYS* data set, the metric has an incorrect value. The metric is changed to 1.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the NCP client's *hlq.ETC.GATEWAYS* data set.

Module: NRSTART

Procedure name: gateways

EZB3955S Function function: out of memory

Explanation: NCPROUTE was unable to allocate memory because no more storage is available in the region. The following describe functional errors:

Function

Error Description

ifinit No storage available to add a client interface entry.

nradd No storage available to add a route table entry. Each route table entry requires 64 bytes.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Increase the region size in the startup procedure.

Module: various

Procedure name: various

EZB3956I • EZB3960I

EZB3956I Processing interface *interface*

Explanation: The indicated interface was found in the Routing Information Table (RIT) for the new client and is being added to NCPROUTE's tables.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: ifinit

EZB3957E Modify command ignored, invalid parm(s): *parms*

Explanation: Invalid parameters were passed to NCPROUTE from a MODIFY command.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the parameters from the MODIFY command.

Module: NRMAIN

Procedure name:

EZB3958E Modify command ignored, client 'c=' not specified

Explanation: The parameters specified in the MODIFY command requires the target client specification.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Specify the target client in the "c=" parameter of the MODIFY command.

Module: NRMAIN

Procedure name: parse_parms

EZB3959I point-to-point interface, using *addrtype*

Explanation: The new interface is point-to-point, and the destination address type, *addrtype*, can either be dstaddr or broadaddr. The address type is determined by the interface definition in the NCP generation. The destination address may be coded such that the network or subnetwork directed broadcast address is used or that the unicast or host address representing the other end of the point-to-point link is used. This address is used for sending routing information over an interface to the destination router or host. The exception is when the interface is multicast-capable; the multicast address is used.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3960I This interface is not point-to-point dstaddr

Explanation: The new interface is not point-to-point. A route is being added based on the interface definition, and the network or subnetwork route will be used as the route destination.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3961I not an internal interface

Explanation: The new interface does not appear to be associated with a real device, this interface is most likely a pseudo-interface created because of an external route in the GATEWAYS member for this client. No route is created for this interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3962I Adding *type* route for interface

Explanation: The route using the network, subnetwork or destination type is being added to the interface in NCPROUTE's routing table.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3963I Re-installing interface *interface*

Explanation: The previously deleted interface is being re-installed since traffic has been detected over this interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: addrouteforif

EZB3965I Route *seq; dest via gateway metric metric, supnetmask mask*

Explanation: A route is being added based on an IPROUTE statement coded during NCP generation. The *seq* is the position in the route table, *dest* is the destination IP address, *gateway* is the nexthop for the route, and *metric* is the cost of using this route, and *mask* is the subnet mask for the route.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: bld_rtbl

EZB3967W • EZB3971E

EZB3967W Unable to open a GATEWAYS dataset for client *client*. Attempt to open *dataset*

Explanation: A gateways data set was not specified, or could not be opened for the specified client. This message indicates which data set the open was attempted on.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If a gateways data set is being used, verify that the PDS member name is coded correctly in the *hlq.PROFILE.TCPIP* data set. Verify that the gateways member has the same name as the client NCP name. Verify that NCPROUTE has access to this data set member. Verify that NCPROUTE attempts to open the correct data set member. Correct the PROFILE and rename the PDS member, if needed. Contact IBM software support services if the problem persists.

Module: NRSTART

Procedure name: gateways

EZB3968I Start of GATEWAYS processing:

Explanation: The gateways data set member is about to be processed. Messages about data set processing might follow.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB3969E *statement*

Explanation: The statement shown is in error. A message describing the error will follow.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB3970E Invalid gateway address "gateway"

Explanation: This statement's gateway is neither a resolvable name nor a valid dot-notation IP address. The statement is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB3971E Zero metrics not allowed, changing to one

Explanation: This statement has a 0 metric, which is not valid. Metrics must be between 1 and 15. The metric is changed to 1.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the statement in the gateway member.

Module: NRSTART

Procedure name: gateways

EZB3972E Gateway type "passive" not valid for active gateway

Explanation: An active gateway entry is qualified as a passive route. Active is the only valid route type for this definition. The statement is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the statement in the gateway member.

Module: NRSTART

Procedure name: gateways

EZB3973I Opening GATEWAYS dataset for client *client.dataset*

Explanation: The gateways data set is being opened for the specified client. Entries in the data set are read in for input.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB3974E First two keywords must be 'active' for active gateway.

Explanation: A GATEWAYS entry for the gateway definition contains an active route type, but the first two keywords are not defined as active. These keywords are required for an active gateway definition. If this entry is not for an active gateway, correct the route type. Active gateway entries identify only a router and have no destination information. The GATEWAYS entry is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the GATEWAYS entry.

Module: NRSTART

Procedure name: gateways

EZB3975E Invalid gateway type *type*

Explanation: This statement does not end with a valid route type, either "active", "passive" or "external". The statement is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the statement in the gateways member.

Module: NRSTART

Procedure name: gateways

EZB3976S • EZB3980E

EZB3976S nr_exact_find: no session with *client*

Explanation: A route to a destination from a nonexistent client is being requested. This is an internal error. The route is reported as not existing.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_exact_find

EZB3977S nr_exact_find: no network hash table for client *client*

Explanation: Client *client* does not appear to have a required network hash table. This is an internal error.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_exact_find

EZB3978S nr_kernel_find: no host hash table for client *client*

Explanation: Client *client* appears to be missing a required host hash table. This is an internal error.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_kernel_find

EZB3979S nr_kernel_find: no network hash table for client *client*

Explanation: The session with *client* has been incorrectly initialized. A required network hash table is missing.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_kernel_find

EZB3980E nradd: invalid address family

Explanation: An attempt is being made to add a route which is to a destination in an unsupported address family. Currently, NCPROUTE only supports routes to Internet addresses. The add is not performed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Identify the machine that generated the route and correct the problem.

Module: NRTABLES

Procedure name: nradd

EZB3981S nradd: no host hash table for client *client*

Explanation: A host route is being added, but the client's host hash table cannot be located. This is an internal error. The route is not added.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nradd

EZB3982S nradd: no network hash table for client *client*

Explanation: A network or subnetwork route is being added, but the required network hash table for *client* cannot be located. This is an internal error. The route is not added.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nradd

EZB3983E Modify command ignored, type trace levels exceeded

Explanation: An incorrect number of trace levels (-t's) were passed from a MODIFY command.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Specify a correct number of -t's in the MODIFY command line parameters.

Module: NRMAIN

Procedure name:

EZB3984E error adding route to host/net destination through gateway

Explanation: The NCP client failed to add a route.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous error messages to determine the nature of nr_do_add's error.

Module: NRTABLES

Procedure name: nradd

EZB3989I changing/deleting route to interface *interface* (timed out?)

Explanation: Either traffic to a local interface is being routed through a remote gateway, or the metric on the interface has increased to infinity. Usually this indicates that the interface has timed out and is considered down.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If the interface is being assigned a new gateway, examine the contents of the last packet sent from the gateway. The gateway's address is found in an upcoming message. Look for a display of the local interface from the remote gateway. Correct the remote gateway if needed. If the interface is timing out, verify that no transmissions have been received over this interface for the last 3 minutes. If no transmissions are found, this

EZB3993E • EZB3997E

is correct behavior for NCPROUTE, and the physical lines or remote gateways should be examined to determine the cause of the problem.

Module: NRTABLES

Procedure name: nrchange

EZB3993E could not delete route to type destination via router

Explanation: The route to *destination* is being deleted (possibly because the route is changing, in which case an add will follow) and nr_do_delete returned an error. *type* is one of Host, Network, Subnet, or (bad_type). (bad_type) indicates an internal error and should be reported. Additional errors might follow because of the unsuccessful attempt to remove the route. These should be ignored until this problem is resolved. The route remains.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous messages to determine the error that occurred in nr_do_delete, contact IBM software support services with this information.

Module: NRTABLES

Procedure name: nrchange

EZB3994E Error adding route

Explanation: An error occurred while attempting to update a route. The route is not readded and the net effect is that the route is deleted.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous messages to determine the error that occurred in nr_do_add and contact IBM software support services with this information.

Module: NRTABLES

Procedure name: nrchange

EZB3996I deleting route to interface interface? (timed out?)

Explanation: A route to the indicated interface is being deleted and the metric is less than infinity.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: nrdelete

EZB3997E Error deleting route

Explanation: The NCP client failed to add a route. Additional errors might follow this one. Because the route was not deleted, these should be ignored until this problem is resolved.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine previous error messages to determine the error that occurred in nr_do_delete and contact IBM software support services with this information.

Module: NRTABLES

Procedure name: nrdelete

EZB3998S nr_client_init: no session established with *client*

Explanation: A session with the indicated client does not appear to have been initialized correctly.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_client_init

EZB3999I Establishing session with client *client*

Explanation: A session is being established with a NCP client. This is required before PDUs can be processed from the client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: nr_establish_session

Chapter 6. EZB4xxxx messages

EZB4001 Terminating session with client *client*

Explanation: The session with the indicated client ends. This is an orderly shutdown, and occurs in the following cases: upon receipt of a hello from an active client, if the load of the Routing Information Table (RIT) is unsuccessful, or if an error occurs when processing the RIT. Other messages occur earlier that explain which case caused the session to be brought down.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None. required. If the session is brought down in response to an error, examine previous messages to determine the nature of the error, and correct the problem.

Module: NRTABLES

Procedure name: nr_terminate_session

EZB4001S Terminate Session: no session with client *client*

Explanation: The NCP client failed to add a route. unacceptable client handle. The client cannot be located in the session table. No session ends.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: nr_terminate_session

EZB4002I Chain *chain_number*

Explanation: The session table is being displayed. Following this message is the contents of chain *chain_number*.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_sessions

EZB4003I Hosts:

Explanation: The session table is being displayed. Following this message is the contents of the host route table for the current session.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_sessions

EZB4004I • EZB4008I

EZB4004I Networks:

Explanation: The session table is being displayed. Following this message is the contents of the network route table for the current session.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_sessions

EZB4005I No Entries

Explanation: This particular route table is empty.

System action: NCPROUTE continues

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_rtbl

EZB4006I Subchain *subchain_number*

Explanation: A routing table is being displayed. The following messages contain the contents of the routing table chain *subchain_number*.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_rtbl

EZB4007I Entry empty

Explanation: The route table subchain currently being displayed is empty.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_rtbl

EZB4008I Entry: *entry*

Explanation: The route table subchain currently being displayed contains an entry.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: dsp_rtbl

EZB4009I client *client*: timer_value minute timer expired for route to *destination*

Explanation: No Routing Information Protocol (RIP) packets have been received from the NCP client to the destination *destination* in the last *timer_value* minutes. It is assumed that the destination route is no longer active. Depending upon the *timer_value*, one of the following actions is taken:

Value Action

- 3 The route will have its metric changed to infinity for the next 2 minutes. The metric change is necessary to alert adjacent routers that the route to this destination is unreachable. If NCROUTE receives any RIP packets for the NCP client from the destination router during the 2 minute time interval, NCROUTE will restore the route by changing the metric to a valid one based upon the received RIP packet. The route will be deleted from the NCP client's routing table.
- 5 The route will be deleted from NCROUTE's routing table for the NCP client.

System action: NCROUTE continues.

Operator response: None.

System programmer response: These actions require the following responses:

Value Action

- 3 If the route was broadcasted for a while, and then suddenly stopped, look for an adapter problem, or a problem with the physical line.
- 5 Examine the NCROUTE trace output and determine when the broadcasting has stopped for the route to the destination router. If the route to *destination* was only broadcast once in response to the NCROUTE's request for full route tables for the NCP client, then the problem may be with the way RIP packets are broadcasted.

In these cases, determine if NCROUTE is receiving the transport PDUs containing the RIP packets from the NCP client by obtaining a MORETRACE IPUP trace and look for "discarding broadcast" packet messages. This trace can confirm the lack of traffic on the interface used for the transport PDUs forwarded by the NCP client. If this is not the case, then determine if NCROUTE is receiving the RIP packets over the NCP client's routing interface by obtaining a NCP line trace. See the NCP documentation for instructions on obtaining a line trace.

Module: NRTIMER

Procedure name: client_timer

EZB4010I client *client*: 30 second timer expired (broadcast)

Explanation: Every 30 seconds, a timer expires that indicates that a client NCP must broadcast its routing tables to adjacent routers. NCROUTE will build Routing Information Protocol (RIP) response packets for each of the client's interfaces and send them to the client in a transport PDU. The client transmits them on the specified interface.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTIMER

Procedure name: client_timer

EZB4011E Invalid subnetwork mask *mask*

Explanation: In the line entry for the NCP client's gateways data set, the gateway definition has a subnetmask that is not valid. The subnetmask must be a resolvable subnetmask name, or a bit mask in dotted-decimal notation. The gateway entry is ignored.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Correct the NCP client's gateways data set.

EZB4012E • EZB4015I

Module: NRSTART

Procedure name: ParseOptions

EZB4012E Trace buffers not initialized for interface *interface* on client *client*

Explanation: One or both trace buffers could not be obtained for the specified interface during initialization. This is because of a lack of free storage in the region. Minimal tracing is performed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Increase the region size for NCPROUTE and restart NCPROUTE.

Module: NRTRACE

Procedure name: traceinit

EZB4013I Tracing *action* for client *client*

Explanation: Tracing is enabled or disabled for a client NCP.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: various

EZB4014W Unknown RIP *rip_control* control value (*value*)

Explanation: The RIP control values (supply or receive), specified on the RIP_SUPPLY_CONTROL or RIP_RECEIVE_CONTROL entry in the NCPROUTE profile data set, or specified on the options statement entry for a client for all interfaces or for an interface, contains an incorrect value. In case of incorrect values, NCPROUTE will default the RIP supply control to 'RIP1' and receive control to 'ANY' for the NCP client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the NCPROUTE profile or the NCP client's gateways data set by specifying a supported supply or receive control value.

Module: NRMAIN, NRSTART

Procedure name: read_profile, ParseOptions

EZB4015I Client tracing actions started

Explanation: The current tracing level has been advanced to the "actions" level, which causes messages to be issued for actions, such as adding, changing, or deleting routes. Additional messages for actions, such as waiting for incoming packets and dynamic updates, are also issued.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: trace_start

EZB4016I Client tracing packets started

Explanation: The current tracing level is advanced to the "packets" level, which displays the types of packets sent and received in addition to the output displayed at the "actions" level.

System action: NCPROUTE continues. Correct the *hlq.NSMAIN.DATA* data set to include a server name for the indicated address, or enter the NSLOOKUP command, using the *server_name* and *server_address* parameters to specify the default Domain Name Server. For more information about the *hlq.NSMAIN.DATA* data set, see the z/OS Communications Server: IP Configuration Reference.

System programmer response: None.

Module: NRTRACE

Procedure name: trace_start

EZB4017I Client tracing history started

Explanation: The current tracing level is advanced to the "history" level, which displays history tracing data for each line in addition to output displayed at the "packets" level. The history tracing data is displayed whenever an interface becomes inactive. It shows the latest traces of actions, packets and packet contents before the interface became inactive.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: trace_start

EZB4018I Client tracing packet contents started

Explanation: The current tracing level is advanced to the "packet contents" level, which displays the contents of packets sent or received in addition to output displayed at lower tracing levels. Additional messages, such as requests for full routing tables and unknown address family in routing information, are also issued.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: trace_start

EZB4029I timestamp:

Explanation: A full time stamp is issued showing the date and time so that traces that exceed one calendar day can be interpreted correctly.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: trace

EZB4030I • EZB4038I

EZB4030I *action destination destination router router, metric metric, flags flags*

Explanation: The route to the destination is being added, deleted, or changed depending on the action. The following action values are allowed:

Value Explanation

ADD The route to the destination is being added through the router at the specified metric.

CHANGE FROM

The route to the destination is being changed and the current values are displayed.

CHANGE TO

The route to the destination is being changed and the new values are displayed.

DELETE

The route to the destination is being deleted.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: trace

EZB4032E *Gateway address 'address' not an routing interface in network*

Explanation: The indicated passive gateway, defined in the NCP client's *hlq.ETC.GATEWAYS* data set, referenced an unknown routing interface based upon the gateway address. The passive route definition is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set. Verify that the gateway address is correct and a valid routing interface is defined. See z/OS Communications Server: IP Configuration Reference for more information about NCP Host Interface Definition.

Module: NRSTART

Procedure name: gateways

EZB4036I *CHANGE metric destination destination, router router, from old metric to new metric*

Explanation: The metric for the route to the destination is being changed from the old metric to the new metric. This is always based on a Routing Information Protocol (RIP) packet from the router:, which updates a previous route through the router.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: tracenewmetric

EZB4038I *** Packet history for interface *interface* ***

Explanation: Tracing is set at the history level, and the history trace data for the inactivated interface *interface* is displayed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumpif

EZB4039I * End packet history *****

Explanation: Tracing is set at the history level, and this message ends the history trace data for the deactivated interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumpif

EZB4043I direction: no packets

Explanation: Either the input or output trace buffer, depending on the direction value, is empty.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumptrace

EZB4044I direction trace:

Explanation: Tracing is currently at the packet history level. Either the input or output trace buffer is about to be displayed depending on the direction value.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumptrace

EZB4045I RIPcmd direction router -> port timestamp p

Explanation: A Routing Information Protocol (RIP) datagram has been received, or is about to be sent out of NCPROUTE depending on the direction value. A value of "to" indicates an outbound datagram, while a value of "from" indicates an inbound datagram. The type of the datagram is indicated by *RIPcmd*, and can be either RESPONSE or REQUEST. Responses are displays of routes from one router to another, requests are requests for individual routes or full tables. The value of *port* is either the port number which the packet came in on, the value 0, which indicates that the datagram will be sent to the default *RouteD* port as described in ETC.SERVICES, or in the case of outbound datagrams with a nonzero value the port which the datagram will be sent to.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumppacket

EZB4046S • EZB4050I

EZB4046S Bad cmd hex direction router -> port timestamp size=size cp=directino packet=addr time=timestamp

Explanation: A malformed packet has been encountered during trace. The source of the packet is either the router, if the value of *direction* is "from", or NCPROUTE if the value of *direction* is "to".

System action: NCPROUTE continues

Operator response: None.

System programmer response: If the source of the packet is NCPROUTE, contact IBM software support services. Otherwise locate the router and take corrective action.

Module: NRTRACE

Procedure name: dumppacket Routing Information Protocol (RIP)

EZB4048E (truncated record, len len)

Explanation: A Routing Information Protocol (RIP) datagram was received that did not end on a route boundary. Either the packet was too large, or it has been truncated.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the packet received was built correctly and can be processed with other routers. Contact IBM software support services if the problem appears to be with NCPROUTE.

Module: NRTRACE

Procedure name: dumppacket

EZB4049I destination destination metric metric

Explanation: A route to the destination at the indicated metric is being displayed from NCPROUTE or an adjacent router depending on the contents of the last EZB4045I message. The metrics displayed to NCPROUTE by other routers do not have the interface metrics added to them, this is done when the route is added to NCPROUTE's tables. Likewise, NCPROUTE displays routes at a metric which does not include the metric of the interface on which the route is being displayed. A route is never displayed on the interface from which it was received.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumppacket

EZB4050I (request for full tables)

Explanation: A request for a complete routing table is being sent, or has been received depending on the contents of the last EZB4045I message. This message is sent during session initialization by NCPROUTE. In addition to foreign routers making this request, application programs can ask a client for its tables by sending a Routing Information Protocol (RIP) request for a route with an address family of 0 and a metric of 16 to a client NCP at the current *RouteD* port (by default, 520).

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumppacket

EZB4051E unknown address family *family* metric *metric*

Explanation: A route in an unacceptable address family has been received, or is about to be sent depending on the contents of the last EZB4045I message. Currently, only AF_INET is supported, although AF_UNSPEC is allowed when making requests for full tables.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If the route is being sent from NCPROUTE, contact IBM software support services. Otherwise locate the router listed in the last EZB4045I message and correct it so that noninternet routes are not sent to the client NCP.

Module: NRTRACE

Procedure name: dumppacket

EZB4052I traceon file = *dataset*

Explanation: A TRACEON packet was received. Tracing is requested to go to the specified data set.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: dumppacket

EZB4055I attempting to (re)start SNMP connection

Explanation: NCPROUTE is attempting to establish a connection with the SNMP agent specified in the profile. This occurs during startup, and at any time when an SNMP request occurs and no connection exists with the agent.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4056W no response from agent on *host*

Explanation: NCPROUTE was unable to establish a connection with the SNMP agent on host *host*.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that an agent is running on *host*, and that IP routes exist between the local host and *host*. When tracing is activated on the SNMP agent, DPI requests should be seen coming from NCPROUTE.

Module: NRSNMP

Procedure name: init_snmp

EZB4057W Start the agent before issuing SNMP queries.

Explanation: A reminder that the SNMP agent should be running before NCPROUTE will be able to process SNMP queries for its clients.

System action: NCPROUTE continues.

Operator response: None.

EZB4058E • EZB4062I

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4058E An error occurred while opening the SNMP socket:

Explanation: An error occurred while attempting to open a socket for communicating with the SNMP agent. A more detailed tcperror() library message follows.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the problem as indicated by the error in the detailed tcperror() library message. See the z/OS XL C/C++ Runtime Library Reference for more information about socket() function errors.

Module: NRSNMP

Procedure name: init_snmp

EZB4059I Connecting to agent agent on DPI port port

Explanation: NCPROUTE is attempting to connect to the SNMP agent using the DPI port.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4060E An error occurred while connecting to the SNMP agent:

Explanation: NCPROUTE was unsuccessful in connecting to the SNMP agent. A more specific error message will follow.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services

Module: NRSNMP

Procedure name: init_snmp

EZB4061E A connection is required for processing SNMP requests.

Explanation: A reminder that the SNMP agent socket must be connected before SNMP queries are processed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4062I SNMP DPI connection established

Explanation: The connection with the SNMP agent is established and SNMP queries will now be processed as they arrive.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4063E *Unable to register root with SNMP agent.*

Explanation: NCPROUTE was unable to register the MIB extension root with the agent. An I/O error occurred while sending the registration to the agent. The connection to the agent is closed and will be reopened for the next query.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the agent is operating correctly and that the agent's host is currently reachable from the local host.

Module: NRSNMP

Procedure name: init_snmp

EZB4064I *root registered with SNMP agent*

Explanation: The MIB extension root has been registered with the SNMP agent.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: init_snmp

EZB4065E *Unable to establish a session with the SNMP agent.*

Explanation: An attempt to reestablish a connection with the SNMP agent has failed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the SNMP agent is running. Verify that the SNMP statements in the NCPROUTE.PROFILE are correct, and verify that the host running the SNMP agent can be reached from the local host.

Module: NRSNMP

Procedure name: snmp_input

EZB4066E *An incoming SNMP packet was discarded (noagent)*

Explanation: Because no connection exists with the SNMP agent, the SNMP packet that is being processed is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_input

EZB4067E • EZB4071I

EZB4067E Error while forwarding SNMP packet to agent:

Explanation: NCPROUTE was unable to forward the SNMP request up to the SNMP agent. A more specific error message follows. The SNMP packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify that the SNMP agent is running and that the host running the agent is reachable from the local host.

Module: NRSNMP

Procedure name: snmp_input

EZB4068I SNMP response from local agent

Explanation: The SNMP agent has responded to a forwarded request.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_response

EZB4069E Error while sending SNMP reply to client *client*

Explanation: NCPROUTE was unable to send the response to a SNMP query back to the client. The packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the following error message, and take whatever corrective action is recommended.

Module: NRSNMP

Procedure name: snmp_response

EZB4070S Couldn't parse incoming DPI packet! (dropping) This suggests a problem with the SNMP agent.

Explanation: NCPROUTE could not parse an incoming DPI packet from the SNMP agent. The packet is damaged or has not been built correctly. Either the SNMP agent or the SNMP dpi library is in error. Also, they may be at different maintenance levels.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRSNMP

Procedure name: dpi_in

EZB4071I rip_control rip_version packets on interface *interface* not allowed

Explanation: A RIP Version 1 or Version 2 packet is ignored depending upon the settings of the RIP supply or receive controls specified in the NCP client's gateways data set for an interface or in the NCPROUTE profile data set. If there are no RIP control settings for an interface, NCPROUTE will use the one from the profile settings.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT, NROUTPUT

Procedure name: rip_input, supply

EZB4072I SNMP: DPI GET request (*oid*) received.

Explanation: An SNMP DPI get request for the variable specified by the ASN.1 object identifier was received. The object identifier is a registered MIB extension, and if you remove the root of the object identifier (based on the contents of EZB4064I) you will have a client identifier followed by the original object identifier.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_in

EZB4073I SNMP sub-agent: DPI GET NEXT request (*oid*) received.

Explanation: An SNMP DPI get next request for the specified object identifier has been received.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_in

EZB4074I SNMP sub-agent: DPI SET request received

Explanation: An SNMP DPI set request was received. SNMP set commands are not supported in this release.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_in

EZB4075S Unexpected SNMP query type *type*; SNMP support appears incomplete in NCPROUTE.

Explanation: An unexpected SNMP DPI packet type has been received from the SNMP agent. The packet has already been validated by the DPI library routines, so this indicates an unsupported valid DPI packet type. An error is returned to the originator of the SNMP packet.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRSNMP

Procedure name: dpi_in

EZB4076I • EZB4080I

EZB4076I RIP2 packet from router *router* not authorized

Explanation: A RIP Version 2 packet, received from *router*, is ignored as a result of a authentication key mismatch. Authentication is enabled for RIP Version 2 packets according to the interface options in the NCP client's gateways data set or in the NCPROUTE profile data set. If there are no interface settings, NCPROUTE will use the one from the profile settings.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB4077S SNMP sub-agent: received DPI request outside tree

Explanation: The SNMP agent has requested information or action on a MIB variable that is outside of the tree that NCPROUTE manages. This indicates an error in the agent code, because NCPROUTE did not register this variable. NO_SUCH_NAME is returned.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Compare the object identifier for the current DPI packet with the region of the MIB tree that NCPROUTE manages. The object identifier can be found in the last EZB4072I, EZB4073I, or EZB4074I message issued. The registered region can be found in the last EZB4064I message issued.

Module: NRSNMP

Procedure name: dpi_in

EZB4078I SNMP sub-agent: received invalid DPI request outside tree

Explanation: The DPI packet from the agent refers to an OID which is not present in the managed tree.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_in

EZB4079I iproutedest.*instance*

Explanation: A request has been made for the destination of the specified route. Each route in the client's table is numbered starting with 0.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4080I iprouteifindex.destination

Explanation: A request has been made for the interface index associated with the route to *destination* for the client which forwarded this request to NCPROUTE.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4081I *iproutemetric1.destination*

Explanation: A request has been made for the metric associated with the route to the destination for the client that forwarded this request to NCPROUTE.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4082I *iproutemetric(2-4).destination (unsupported)*

Explanation: A request was made for one of the alternate route metrics that is not used under RIP. If a route to the specified destination exists, a value of '-1' is returned; otherwise, NO_SUCH_NAME will be returned.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4083I *iproutenexthop.instance*

Explanation: A request was made for the next hop for the specified route. Routes are specified by the instance number, which is the ordinal position in NCPROUTE's tables. If the specified instance exists, an IP address will be returned; otherwise, NO_SUCH_NAME will be returned.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4084I *iproutetype.instance*

Explanation: A request was made for the route type for the specified route. If the specified instance exists, one of three values will be returned depending on the route state:

Value Explanation

Direct The route is to a directly connected destination.

Invalid The route has an infinite metric.

Remote

The route is to an indirectly connected destination requiring one or more routers to reach.

System action: NCPROUTE continues.

Operator response: None.

EZB4085I • EZB4088E

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4085I *iprouteproto.instance*

Explanation: A request was made for the mechanism by which the route for the specified instance was determined. Values returned will be 'RIP' or 'Other' depending on whether the route was learned dynamically or was manually entered.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4086I *iprouteage.instance*

Explanation: A request was made for the age of the route of the specified instance. The value returned will be the length of time the route has been active.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4087I *iproutemask.instance*

Explanation: A request was made for the network or subnetwork mask of route of the specified instance. The value returned will be the network or subnetwork mask value in dotted-decimal notation.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4088E **A request was made for an unsupported MIB variable:** *variable*

Explanation: A request was made for an unsupported MIB variable. Only variables in the iproute group are returned. NO_SUCH_NAME will be returned for the unsupported MIB variable.

System action: NCPROUTE continues.

Operator response: Reissue the request with a valid MIB variable from the iproute group.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4089E An attempt was made to change a MIB variable. SNMP set request is not currently supported.

Explanation: An attempt was made to change a MIB variable. Variables in the iproute group may be queried but not changed. An SNMP_GEN_ERR is returned.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_set

EZB4090E SNMP buffer overrun: *number* bytes

Explanation: An SNMP request will exceed NCPROUTE's internal buffer size during an edit. This almost always indicates an incorrect request because no supported object identifier is large enough to cause this. The buffer is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify the object identifier being requested is for an iproute MIB variable. If it is, contact IBM software support services.

Module: NRSNMP

Procedure name: edit_obj

EZB4125I ASN.1 type at *count* bytes into packet: Class=*class* Field=*field*

Explanation: An ASN.1 object such as an object identifier or an integer was located in the SNMP packet being displayed. The count is the offset into the packet where the object was located. The object's tag's class bits are formatted and displayed as *class*. An object's class can be viewed as the scope of the object identifier. ASN.1 defines four values:

Value Explanation**Universal**

Well-known tags. NCPROUTE wants this type of tags.

Application-Wide

Tags local to the application. NCPROUTE does not have any of these.

Context-Specific

Used in ASN.1 constructors. Not applicable to NCPROUTE.

Private-Use

NCPROUTE does not use any private tags.

The object's tag's field bits are formatted and displayed as the field. The field is either primitive or constructed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4126E • EZB4130I

EZB4126E Modify command ignored, invalid client address

Explanation: The target client specified in the MODIFY command is not valid.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the address for the client target.

Module: NRMAIN

Procedure name: do_modify

EZB4127E Modify command ignored, no session with client *client*

Explanation: The target client specified in the MODIFY command is unknown. No session exists between NCPROUTE and the client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Wait for NCPROUTE to establish a session with the NCP client or respecify the target client using an address known by NCPROUTE.

Module: NRMAIN

Procedure name: do_modify

EZB4128I Reserved for addenda (*type*)

Explanation: The type value is not a known object tag type. It was described as reserved for addenda in RFC 1158. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4129I *type*

Explanation: The formatted ASN.1 object tag's number. NCPROUTE formats Universal tags as defined in RFC 1158. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4130I Misc type *type*

Explanation: This object's class indicates that it is not a well-known type. The unformatted object type is displayed, NCPROUTE only formats objects with a class of Universal.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4131I Encountered editable OID at offset *offset*

Explanation: An object identifier was located at the indicated offset into the packet. NCPROUTE will need to translate this OID to another region of the MIB tree so that the agent will recognize the request as being for one of NCPROUTE's clients and not for the host running the agent.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4132I Length = *length*

Explanation: The length of the decoded ASN.1 object is displayed.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: decode

EZB4133I Adding type route *route* destination via gateway *gateway*, metric *metric*

Explanation: The indicated route, defined in the client's *hlq.ETC.GATEWAYS* data set, is added to the NCP's IP routing table. The route to the gateway will not be replaced by a competing RIP route.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB4134W Subnetwork mask unknown for *destination*, using network route *route*

Explanation: The indicated subnetwork route, defined in the client's GATEWAYS data set, was explicitly coded as a "net" route type. Because the subnetwork mask for the destination subnetwork is unknown, NCPROUTE replaces the subnetwork route with a network route. NCPROUTE currently does not support variable subnetting.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTABLES

Procedure name: nradd

EZB4135E Invalid host or (sub)network address '*destination*'

Explanation: In the line entry for the client's *hlq.ETC.GATEWAYS* data set, the gateway definition has an incorrect destination address. The *destination* must be either a resolvable host name or an IP address in dotted notation. The gateway entry is ignored.

System action: NCPROUTE continues.

EZB4136W • EZB4141S

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set.

Module: NRSTART

Procedure name: gateways

EZB4136W Second element ignored, changing to 'active'

Explanation: The second element in the active gateway entry is detected to be incorrect. NCPROUTE will change the element to be ACTIVE since it is likely that the gateway entry is in error. With this change, the active gateway entry is processed normally.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set.

Module: NRSTART

Procedure name: gateways

EZB4138W Unknown next hop address *ipaddr* for route destination from router *router*

Explanation: An unknown next hop address *ipaddr* was received in a RIP packet for a route to *destination* from *router*. The route is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Locate the router that produced the packet and correct the problem. It may involve router reconfiguration.

Module: NRINPUT

Procedure name: rip_input

EZB4139S tblclr: no host hash table for client *client*

Explanation: A required host hash table could not be located for the client. NCPROUTE was attempting to remove all routes for the specified client from its tables. Any routes will be left in NCPROUTE's tables.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: tblclr

EZB4141S tblclr: no network hash table for client *client*

Explanation: A required network hash table could not be located for the client, but the host hash table has already been found and cleared. NCPROUTE was attempting to remove all network routes for the client from its tables. Any network routes for the client remain in NCPROUTE's tables.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRTABLES

Procedure name: tblclr

EZB4142E The transmission of an 'Ack' to client *client* failed.

Explanation: TCPIP detected that an “Acknowledge” PDU could not be delivered successfully before any transmission was performed. The PDU is discarded. A more specific error message will immediately follow.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Examine the following error message and follow the documented procedures.

Module: NRPDUS

Procedure name: send_ack

EZB4143S No SNMP_AGENT statement in profile

Explanation: A required SNMP_AGENT statement was missing from the NCPROUTE profile. This statement must identify the host which runs the SNMP agent which NCPROUTE will use to resolve queries. SNMP requests will not be honored by NCPROUTE (or its clients).

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the profile.

Module: NRMAIN

Procedure name: read_profile

EZB4144S SNMP requests will not be honored.

Explanation: One or more severe errors were encountered which will result in a connection with the SNMP agent not being established. Until these errors are resolved, and NCPROUTE is restarted, SNMP requests will not be honored by NCPROUTE and its clients in turn.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct any previously identified errors.

Module: NRMAIN

Procedure name: read_profile

EZB4145S * No SNMP_COMMUNITY statement in NCPROUTE profile

Explanation: A required SNMP_COMMUNITY statement is missing from the NCPROUTE profile. This statement identifies the SNMP community which will be used when forwarding SNMP requests to the agent. SNMP requests will not be honored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the profile and restart NCPROUTE.

Module: NRMAIN

Procedure name: read_profile

EZB4146W Required NCPROUTE profile dataset (*profile*) not found

Explanation: The optional profile configuration data set for NCPROUTE could not be opened successfully. This message indicates which data set the open was attempted on.

System action: NCPROUTE continues.

Operator response: None.

EZB4147S • EZB4150I

System programmer response: Verify that the profile data set is defined in //DD:NCPRPROF of the NCROUTE start proc JCL and is accessible by NCROUTE. If the data set is sequential, ensure that the FREE=CLOSE parameter is specified. Do not specify this parameter if the data set is partitioned.

Module: NRMAIN

Procedure name: read_profile

EZB4147S Unknown keyword (*keyword*) in PROFILE

Explanation: An unknown keyword *keyword* was used in a statement in the NCROUTE profile. The statement is ignored.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Correct the NCROUTE profile.

Module: NRMAIN

Procedure name: read_profile

EZB4148E client *client*: failed attempt to add route to *destination*.

Explanation: NCROUTE's attempt to add a route to the client was rejected by the client. Most likely the client's route tables are full so that it could not accept any more routes, or the NCP is attempting to add a route specified as PERM during generation.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Verify the routing table size values in the NUMROUTE keyword in the IPOWNER statement of the NCP generation. Increase the values, if necessary.

Module: NRPDUS

Procedure name: add_fail

EZB4149E client *client*: failed attempt to delete route to *destination*.

Explanation: Client *client* rejected NCROUTE's attempt to delete a route to *destination* from the client's tables. Most likely the route did not exist in the client's tables.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRPDUS

Procedure name: delete_fail

EZB4150I End of GATEWAYS processing

Explanation: Processing is completed for the GATEWAYS data set member.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB4151T Out of memory while processing GATEWAYS

Explanation: NCPROUTE has exhausted available storage while processing a client's GATEWAYS data set member.

System action: NCPROUTE ends abnormally.

Operator response: None.

System programmer response: Increase NCPROUTE's region size and restart. Take into consideration that storage requirements are based on the number of clients being served and the number of routes being managed. If the problem still cannot be resolved, contact IBM software support services.

Module: NRSTART

Procedure name: gateways

EZB4152I Adding active gateway *ip_addr*, metric *metric*

Explanation: The indicated active gateway, which is defined in the client's *hlq.ETC.GATEWAYS* data set, is added to NCPROUTE's routing table. The route to the active gateway will be treated as a network interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB4154E Invalid option: *option*

Explanation: In the line entry for the client's *hlq.ETC.GATEWAYS* data set, the NCPROUTE's server options definition has an incorrect option. Although other options may be processed normally, the incorrect option is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRSTART

Procedure name: gateways

EZB4155E Invalid default router value: *value*

Explanation: In the line entry for the client's *hlq.ETC.GATEWAYS* data set, the NCPROUTE's server options definition has an incorrect default router value. The incorrect default router value is ignored and the default value is used.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set by specifying a valid default router value. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRSTART

Procedure name: gateways

EZB4156E Invalid trace level: *level*

Explanation: In the line entry for the client's *hlq.ETC.GATEWAYS* data set, the NCPROUTE's server options definition has an incorrect trace level. The incorrect trace level is ignored and the default value is used.

System action: NCPROUTE continues.

EZB4157E • EZB4160I

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set by specifying a valid trace level value. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRSTART

Procedure name: gateways

EZB4157E Invalid type value: *value*

Explanation: In the line entry for a client's *hlq.ETC.GATEWAYS* data set, the options definition contains an invalid value. Although other options may be processed normally, the invalid option is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the client's *hlq.ETC.GATEWAYS* data set. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRSTART

Procedure name: gateways

EZB4158I Global tracing at all levels suppressed

Explanation: Trace levels for all NCP clients are not displayed. This includes the trace levels specified in the clients' *hlq.ETC.GATEWAYS* data set.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: global_trace_start

EZB4159I Global tracing actions started

Explanation: Trace levels for all NCP clients have been advanced to the "actions" level, which causes messages to be issued for actions such as adding, changing, or deleting a route. Additional messages for actions such as waiting for incoming packets and dynamic updates are also issued. The trace levels specified in the client's *hlq.ETC.GATEWAYS* data sets are also advanced to this level.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: global_trace_start

EZB4160I Global tracing packets started

Explanation: Trace levels for all NCP clients have been advanced to the "packets" level, which displays the types of packets sent and received in addition to the output displayed at the "actions" level. The trace levels specified in the client's *hlq.ETC.GATEWAYS* data sets are also advanced to this level.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRTRACE

Procedure name: global_trace_start

EZB4161T Global trace levels exceeded maximum of 2 -t's. For each client, use the MODIFY command or GATEWAYS dataset to specify additional tracing options.

Explanation: An incorrect number of trace levels (-t's) was passed from SEZAINST(NCPROUTE) start proc JCL. The parameter(s) could either be passed from the command line parameters or from the default parameter list in the start proc JCL.

System action: NCPROUTE exits.

Operator response: None.

System programmer response: Specify a correct number of -t's in the command line parameters or in the default parameter list of the start proc JCL. If a higher trace level is required, specify the trace level in the options statement of a client's *hlq.ETC.GATEWAYS* data set. Another option is to use the MODIFY command to increase the trace levels for the client after NCPROUTE has started and established a session with the client. See z/OS Communications Server: IP Configuration Reference for more information.

Module: NRMAIN

Procedure name: parse_parms

EZB4162I Deferring add route to destination

Explanation: The addition of a new route to the specified destination in the NCP client's routing table is deferred until after the NCP client has finished initialization. The new route is copied to a static buffer, which is used after the Inactive Interface List PDU has been received from the NCP client. NCPROUTE will perform the add from the static buffer.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: defer_add

EZB4163E Too many deferred routes

Explanation: The number of static buffers to hold the new routes for deferred addition to the NCP clients' routing tables has exceeded the maximum of 500. This may happen when multiple NCP clients have not completed their initialization processes at the same time. At this time, the new routes are not added to the NCP client's routing tables. The static buffers do not become available until after NCPROUTE has received the Inactive Interface List PDUs from the NCP clients. These PDUs tell NCPROUTE that the NCP clients have completed their initialization processes.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Allow sufficient time for the NCP clients to complete their initialization processes so that the new routes can be added to the client's routing tables. Contact IBM software support services if the problem persists.

Module: NRPDUS

Procedure name: defer_add

EZB4164I Init: compare with client

Explanation: The client's IP address is being compared with one of NCPROUTE's session table entries for an exact match.

System action: NCPROUTE continues.

Operator response: None.

EZB4165E • EZB4168I

System programmer response: None.

Module: NRPDUS

Procedure name: ncp_initialized

EZB4165E Client *client* not in session table

Explanation: The client's IP address was not found in the session table. This indicates that NCROUTE has not established a session with the NCP client. NCROUTE will not manage the routes for the client until a "Hello" PDU has been received for session establishment.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Allow sufficient time for the NCP client to issue the "Hello" PDUs so that a session can be established with NCROUTE. If a Hello PDU was received and the problem persists, contact IBM software support services.

Module: NRPDUS

Procedure name: ncp_initialized

EZB4166I Session with client *client* started

Explanation: NCROUTE has successfully established a session with the specified NCP client through the handshaking process and is waiting to receive an Inactive Interface List PDU from the client. This PDU indicates that the client has completed initialization and is ready for route table management by NCROUTE.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRPDUS

Procedure name: recv_hello

EZB4167E SNMP requester *requester* is not reachable by NCP client *client*

Explanation: NCROUTE was ready to transport the SNMP response packet to the NCP client to be forwarded to the SNMP requester, but the route to the SNMP requester was detected to be unavailable. A possible cause is that the NCP client's interface to the SNMP requester became inactive. The SNMP response packet is discarded.

System action: NCROUTE continues.

Operator response: None.

System programmer response: Verify the status of the NCP client's interface to the SNMP requester. If the interface was inactive, activate the interface so that a route can be created; otherwise, determine whether the route to the SNMP requester was timed out. If the problem cannot be corrected, contact IBM software support services.

Module: NRSNMP

Procedure name: snmp_response

EZB4168I SNMP lookup failed: *reason*

Explanation: NCROUTE could not obtain the routing information based upon the SNMP request packet sent by the SNMP requester. In this case, NO_SUCH_NAME is returned to the SNMP requester. Reasons for the failure are:

Reason Explanation

NO INSTANCES PROVIDED

The target route was not specified in the SNMP request; however, this is an exception to SNMP GET_NEXT requests.

ROUTE TABLE EMPTY

There were no routing table entries for this interface based upon the target route.

ROUTE NOT FOUND

The target route was not found in the routing table.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Verify the accuracy of the target route in the SNMP request. If the problem cannot be corrected, contact IBM software support services.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4172I SNMP reply sent to NCP client *client*

Explanation: NCPROUTE is sending the reply containing the SNMP response packet to the NCP client to be forwarded to the SNMP requester.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_response

EZB4173I SNMP get_next: no session with client *client*

Explanation: During processing of the SNMP GET_NEXT request, NCPROUTE has detected that there was no session with the NCP client. The SNMP request packet is discarded.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: If the session with the NCP client appears to have terminated, examine previous messages to determine the cause. When necessary, take corrective actions to allow NCPROUTE to process the SNMP requests for the NCP client.

Module: NRSNMP

Procedure name: get_next

EZB4174I SNMP get_next: searching for next route after *target*

Explanation: During processing of the SNMP GET_NEXT request, NCPROUTE is searching for the next route after the target route in the routing tables for the NCP client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: get_next

EZB4175I SNMP get_next: found next route *ip_addr*

Explanation: During processing of the SNMP GET_NEXT request, NCPROUTE has found the next route entry after the target route in the routing tables for the NCP client. The entry contains the next route's *ip_addr*.

System action: NCPROUTE continues.

EZB4176I • EZB4179E

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: get_next

EZB4176I SNMP get_next: compare with target

Explanation: The target route specified in the SNMP GET_NEXT request packet received by NCPROUTE from an NCP client is being compared with one of NCPROUTE's routing table entries for an exact match.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: get_next

EZB4177I SNMP get_next: addresses matched

Explanation: A match was found for the target route specified in the SNMP GET_NEXT request packet with one of NCPROUTE's routing table entries for an NCP client.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: get_next

EZB4178I RIP2 authentication action at level level (interface)

Explanation: RIP Version 2 authentication is enabled or disabled at the specified level for an interface for all interfaces in the NCP client, or for all NCP clients.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN, NRSTART

Procedure name: read_profile, ParseOptions

EZB4179E SNMP object length exceeded maximum 64K

Explanation: During the object data conversion process for an SNMP packet, NCPROUTE detected an incorrect length value in the header portion of the object data. NCPROUTE could not continue processing for the value has exceeded the maximum length of 64K. The SNMP packet may have been built incorrectly.

System action: NCPROUTE exits.

Operator response: None.

System programmer response: Contact IBM software support services.

Module: NRSNMP

Procedure name: store_int

EZB4180I Packet from router *router* ignored (filtered out)

Explanation: NCPROUTE is ignoring the RIP packet as a result of being filtered out according to a RIP input or output filter defined in the NCP clients's gateways data set.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRINPUT

Procedure name: rip_input

EZB4181I Interface *interface* skipped, interface is multicast-incapable

Explanation: The interface *interface* is skipped because the interface is not capable of multicasting RIP Version 2 packets. The RIP2 supply control has been configured for the interface and disallows the use of broadcasting RIP packets over the interface.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: When permitted, use the RIP2M supply control option to allow broadcasting RIP Version 1 packets over multicast-incapable interfaces and multicasting Version 2 packets over the multicast-capable interfaces.

Module: NROUTPUT

Procedure name: toall_ifs

EZB4182I SNMP request received from NCP client *client*

Explanation: An SNMP query request was received from an NCP client for processing. The NCP client had received the query request from its SNMP client or the SNMP requester.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: snmp_input

EZB4191I SNMP get-next: next route not found (*reason*)

Explanation: NCPROUTE is processing the SNMP GET_NEXT request but it could not obtain the routing information for the next route. In this case, NO_SUCH_NAME is returned to the SNMP requester. Reasons for the unavailable route are:

Reason Explanation**NOT IN TABLE**

The target route was not found in the routing table. This implies that the route entry for the next route cannot be determined.

END OF TABLE

The target route was found at the end of the routing table but there were no more route entries for the next route.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: These reasons require the following responses:

Reason Response

EZB4194I • EZB4197E

NOT IN TABLE

Verify the accuracy of the target route in the SNMP request.

END OF TABLE

None.

If the problem cannot be corrected, contact IBM software support services.

Module: NRSNMP

Procedure name: snmp_lookup

EZB4194I SNMP sub-agent received DPI request

Explanation: NCPROUTE is performing the role as an SNMP sub-agent and is in session with the SNMP agent over the Distributed Program Interface (DPI). NCPROUTE has received a DPI request from the SNMP agent for processing.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSNMP

Procedure name: dpi_in

EZB4195I Option(s): *options*

Explanation: Additional NCPROUTE options, specified in a client's *hlq.ETC.GATEWAYS* data set member, are being processed. Some options may be overridden by the parameter list in the SEZAINST(NCPROUT) start proc JCL. See z/OS Communications Server: IP Configuration Reference for more information.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

EZB4196I Opening NCPROUTE profile data set *datasetname*

Explanation: The specified NCPROUTE profile data set is being opened. Entries in the data set are read in for input.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRMAIN

Procedure name: read_profile

EZB4197E Invalid route type '*type*'

Explanation: In the line entry for the NCP client's *hlq.ETC.GATEWAYS* data set, the gateway definition has an incorrect route type. Allowable route types are HOST for host route, NET for network or subnetwork route, and ACTIVE for a route to be treated as a network interface. The gateway entry is ignored.

System action: NCPROUTE continues.

Operator response: None.

System programmer response: Correct the NCP client's *hlq.ETC.GATEWAYS* data set.

Module: NRSTART

Procedure name: gateways

EZB4198I (no etc.gateway definitions)

Explanation: The NCP client's *hlq.ETC.GATEWAYS* data set contains no optional gateway definitions.

System action: NCROUTE continues.

Operator response: None.

System programmer response: None.

Module: NRSTART

Procedure name: gateways

Chapter 7. EZB6xxxx messages

EZB6473I TCP/IP STACK FUNCTIONS INITIALIZATION COMPLETE.

Explanation: TCP/IP has been successfully initialized.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBTIINI

Chapter 8. EZB8xxxx messages

EZB8801I *probenm* ATTEMPTED, FFST NOT AVAILABLE.

Explanation: TCP/IP encountered an anomaly and attempted to execute a FFST™ probe. FFST was not available to service the request. The request was handled by furnishing the identification of the probe.

In the message text:

probenm

The probe identifier.

System action: TCP/IP continues.

Operator response: Determine why FFST is not available. Gather what probe documentation is available and contact IBM software support services.

System programmer response: Determine why FFST is not available. Gather what probe documentation is available and contact IBM software support services.

Module: EZBITZPF

Chapter 9. EZB9xxxx messages

Common messages

This section contains messages that are called by several application and function components. When these messages are called, only the message text will be appended to the message that called it. The message will inherit the prefix (EZA or EZB) of the message that called it. They are documented fully in z/OS Communications Server: IP Messages Volume 1 (EZA).

The following is a complete list of these common messages.

- EZB9395I
- EZB9396I
- EZB9397I
- EZB9398I
- EZB9399I
- EZB9400I
- EZB9401I
- EZB9402I
- EZB9403I
- EZB9404I
- EZB9405I
- EZB9406I
- EZB9407I
- EZB9408I
- EZB9409I
- EZB9410I
- EZB9411I
- EZB9412I
- EZB9413I
- EZB9414I
- EZB9415I
- EZB9416I
- EZB9417I
- EZB9418I
- EZB9419I
- EZB9420I
- EZB9421I
- EZB9422I
- EZB9423I
- EZB9424I
- EZB9428I

Chapter 10. EZBHxxxx messages

EZBH001I TCP/IP Event Trace (SYSTCPIP) is active with default options

Explanation: Check CSTCP_SYSTCPIP_CTRACE_*tcpipstackname* ran successfully and found no exceptions. The check determined that TCP/IP event trace (SYSTCPIP) is active on the stack with the default options.

The check name includes the job name of the TCP/IP stack as a suffix.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK1

Example: None.

EZBH002E TCP/IP Event Trace (SYSTCPIP) is active with non-default options

Explanation: Check CSTCP_SYSTCPIP_CTRACE_*tcpipstackname* determined that TCP/IP event trace (SYSTCPIP) is active on the stack with options other than the default options, which can result in performance degradation.

The check name includes the job name of the TCP/IP stack as a suffix.

System action: The system continues processing. However, eventual action might need to be taken to prevent performance degradation.

Operator response: Contact the system programmer.

System programmer response: Issue the DISPLAY TRACE,COMP=SYSTCPIPSUB=(*jobname*) command to display the active SYSTCPIP trace options. Deactivate any options that no longer need to be active. If problem documentation is not being gathered, only the default options (MINIMUM, INIT, OPCMDS, or OPMSG) should be active. See the information about displaying component trace status for information about displaying active trace options and the information about specifying trace options for information about modifying trace options in z/OS Communications Server: IP Diagnosis Guide.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK1

Example: None.

EZBH003E TCPMAXRCVBUFSIZE bufsize is less than the deftype specified minval

Explanation: Check CSTCP_TCPMAXRCVBUFSIZE_*tcpipstackname* determined that the configured TCP maximum receive buffer size is less than the minimum specified for the check.

If owner is specified in the message text, the configured value is not sufficient to provide optimal support to the z/OS Communications Server FTP Server.

The check name includes the jobname of the TCP/IP stack as a suffix.

In the message text:

EZBH004I

bufsize

The value specified for the TCPMAXRCVBUFSIZE parameter on the TCPCONFIG statement in the TCP/IP profile or modified using the VARY TCPIP,,OBEYFILE command.

deftype

Possible values are:

installation

The check parameters for this check have not been overridden.

owner The check parameters for this check have been overridden.

minval

The check parameter value against which the TCPMAXRCVBUFSIZE value is compared.

System action: The system continues processing. However, eventual action might need to be taken to provide optimal support to the z/OS Communications Server FTP server.

Operator response: Contact the system programmer.

System programmer response: Optimally, the z/OS Communications Server FTP server needs a buffer size of 180 KB for data connections. If z/OS Communications Server FTP server is being used on the stack reporting the problem, modify the TCPMAXRCVBUFSIZE parameter on the TCPCONFIG statement in your TCP/IP profile to specify a value of at least 180 KB. To make this change effective immediately, use the VARY TCPIP,,OBEYFILE command, specifying a profile containing the modified TCPCONFIG statement.

See the information about the TCPCONFIG statement in z/OS Communications Server: IP Configuration Reference for more information about the TCPMAXRCVBUFSIZE parameter.

See the information about the VARY TCPIP,,OBEYFILE command in z/OS Communications Server: IP System Administrator's Commands for more information about the VARY TCPIP,,OBEYFILE command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK1

Example: EZBH003E TCPMAXRCVBUFSIZE 120K is less than the owner specified 180K

EZBH004I TCPMAXRCVBUFSIZE *bufsize* satisfies the *deftype* limit of *minval*

Explanation: Check CSTCP_TCPMAXRCVBUFSIZE_tcpipstackname ran successfully and found no exceptions. The check determined that the value specified for the TCPMAXRCVBUFSIZE parameter on the TCPCONFIG statement in the TCP/IP profile is in the limit specified for this check.

If owner is specified in the message text, the configured value is sufficient to provide optimal support to the z/OS Communications Server FTP Server.

The check name includes the job name of the TCP/IP stack as a suffix.

In the message text:

bufsize

The value specified for the TCPMAXRCVBUFSIZE parameter on the TCPCONFIG statement in the TCP/IP profile or modified using the VARY TCPIP,,OBEYFILE command.

deftype

Possible values are:

owner The check parameters for this check have not been overridden.

installation

The check parameters for this check have been overridden.

minval

The check parameter value against which the TCPMAXRCVBUFSIZE value is compared.

System action: The specified check completes. System processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK1

Example: EZBH004I TCPMAXRCVBUFSIZE 190K satisfies the owner limit of 180K

EZBH005I GLOBALCONFIG SYSPLEXMONITOR RECOVERY is specified when IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF is configured

Explanation: Check CSTCP_SYSPLEXMON_RECov_*tcpipstackname* ran successfully and found no exceptions. The check determined that the SYSPLEXMONITOR RECOVERY parameter was specified when the DYNAMICXCF option was configured for this stack.

The check name includes the job name of the TCP/IP stack as a suffix.

System action: The system continues processing.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK1

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: Not applicable.

EZBH006E GLOBALCONFIG SYSPLEXMONITOR RECOVERY was not specified when IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF was configured

Explanation: Check CSTCP_SYSPLEXMON_RECov_*tcpipstackname* determined that the RECOVERY option was not specified for the GLOBALCONFIG SYSPLEXMONITOR parameter when IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF was specified in the TCP/IP profile.

IBM suggests that the SYSPLEXMONITOR RECOVERY option be specified when DYNAMICXCF is specified in the TCP/IP profile. Specifying this option allows a TCP/IP stack in a sysplex to perform internal checks and, if it is not healthy, remove itself from the sysplex, allowing a healthy backup TCP/IP stack to take over the ownership of the DVIPA interfaces to enable continued availability to applications.

The check name includes the job name of the TCP/IP stack as a suffix.

System action: The system continues processing.

Operator response: Contact the system programmer.

System programmer response: Change the GLOBALCONFIG SYSPLEXMONITOR parameter to specify RECOVERY when your TCP/IP profile specifies IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF. In z/OS Communications Server: IP Configuration Reference see the following information:

- The GLOBALCONFIG configuration statement for more information about the SYSPLEXMONITOR RECOVERY parameter.
- The IPCONFIG and IPCONFIG6 configuration statements for more information about the DYNAMICXCF parameter

User response: Not applicable.

EZBH007I • EZBH008E

Problem determination: Use the NETSTAT CONFIG/-f command to display the current configuration setting for DYNAMICXCF and SYSPLEXMONITOR RECOVERY.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC1

Routing code: Not applicable.

Descriptor code: 12

Example: Not applicable.

EZBH007I The port range defined for CINET use has been reserved for OMVS on this stack.

Explanation: Check CSTCP_CINET_PORTRNG_RSV_(tcpipstackname) ran successfully and found no exceptions. It determined that the range of ports defined for CINET use in the BPXPRMxx parmlib member has been reserved on this stack for OMVS, using the PORTRANGE TCP/IP profile statement.

The check name includes the jobname of the TCP/IP stack as a suffix.

System action: The system continues processing.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC1

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: Not applicable.

EZBH008E The port range defined for CINET use has not been reserved for OMVS on this stack.

Explanation: Check CSTCP_CINET_PORTRNG_RSV_(tcpipstackname) determined that the port range defined for CINET use in the BPXPRMxx parmlib member is not reserved for OMVS on this stack.

IBM suggests that the port range specified by the INADDRANYPORT and INADDRANYCOUNT parameters in the BPXPRMxx parmlib member for use by CINET should be reserved for OMVS using the PORTRANGE TCP/IP profile statement. This prevents a TCP/IP stack from allocating a port that CINET might subsequently attempt to use, which might result in an ABEND and the message:

BPXF219I A SOCKETS PORT ASSIGNMENT CONFLICT EXISTS BETWEEN UNIX SYSTEM SERVICES AND tcpipstackname

- | See the section on ephemeral port reservations for multiple instances of TCP/IP in z/OS Communications Server: IP Configuration Guide for more information about the reservations needed.

See the information about the PORTRANGE statement in z/OS Communications Server: IP Configuration Reference for more information about the PORTRANGE statement.

See for z/OS MVS Initialization and Tuning Reference more information on the INADDRANYPORT and INADDRANYCOUNT parameters.

The check name includes the jobname of the TCP/IP stack as a suffix.

System action: The system continues processing.

- | **Operator response:** Determine the CINET INADDRANY port range by issuing
| D OMVS,CINET

- | Contact the responsible system programmer to create a data set containing the PORTRANGE statements needed.
- | Once available issue:
- | V TCPIP,*tcpipstackname*,OBEYFILE,*filename*
- | In the message text:
- | *tcpipstackname*
| The name of the TCP/IP stack.
- | *filename*
| The name of the OBEY file to reserve the CINET INADDRANY port range.

See the information about the VARY TCPIP,,OBEYFILE command in z/OS Communications Server: IP System Administrator's Commands for more information about the VARY TCPIP,,OBEYFILE command.

- | **System programmer response:**

- | Determine the CINET INADDRANY port range by issuing:
- | D OMVS,CINET

- | Change the TCP/IP profile to include a PORTRANGE statement for both TCP and UDP to reserve the port range defined by the INADDRANYPORT and INADDRANYCOUNT parameters in the BPXPRMxx parmlib member for use by OMVS. Also, place these statements in a separate data set for use in an OBEYFILE command to have these reservations take effect immediately. For more information on OBEYFILE command, see the operator response section of this message.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC1

Routing code: Not applicable.

Descriptor code: 3

Automation: Not applicable.

Example: Not applicable.

EZBH009I This check is not applicable in the current environment. This check is applicable only in a CINET environment.

Explanation: Check CSTCP_CINET_PORTRNG_RSV_*tcpipstackname* is not applicable in the current environment. It is applicable only in a CINET environment, and determines whether the port range defined for CINET use by the INADDRANYPORT and INADDRANYCOUNT parameters in the BPXPRMxx parmlib member are reserved for OMVS by specifying a PORTRANGE statement in the TCP/IP profile for this stack.

The check name includes the jobname of the TCP/IP stack as a suffix.

System action: The system continues processing.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC1

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

EZBH010I • EZBH011E

Example: Not applicable.

EZBH010I The current number of IPv4 indirect routes is below or equal to the maximum threshold (Current = *current_val* , High = *high_val* , Maximum = *maximum_val*)

Explanation: The CSTCP_IPMAXRT4_TCPIP*stackname* check ran successfully and found no exceptions. The check determined that the current number of IPv4 indirect static and dynamic routes in the TCP/IP stack routing table is within the maximum threshold value for this check. This message is issued after TCP/IP initialization and at the specified time intervals using the INTERVAL parameter of the IBM Health Checker for z/OS.

The check name includes the job name of the TCP/IP stack as a suffix.

current_val is the current number of IPv4 indirect routes in the TCP/IP stack routing table.

high_val is the highest recorded number of IPv4 indirect routes in the TCP/IP stack routing table during the time interval as defined in the INTERVAL parameter for the IBM Health Checker for z/OS.

maximum_val is the configured or default maximum threshold for the number of IPv4 indirect routes in the TCP/IP stack routing table as defined in the IPMAXRT4 parameter for the IBM Health Checker for z/OS.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK1

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZBH010I The current number of IPv4 indirect routes is below or equal to the maximum threshold
(Current = 1000, High = 1500, Maximum = 2000)

EZBH011E The current number of IPv4 indirect routes exceeds the maximum threshold (Current = *current_val* , High = *high_val* , Maximum = *maximum_val*)

Explanation: The CSTCP_IPMAXRT4_TCPIP*stackname* check determined that the current number of IPv4 indirect static and dynamic routes in the TCP/IP stack routing table is greater than the maximum threshold value for this check. The high number of routes might cause high CPU consumption from routing changes and less than optimal operations in OMPROUTE and the TCP/IP stack. Actions should be taken to reduce the number of routes.

The check name includes the job name of the TCP/IP stack as a suffix.

current_val is the current number of IPv4 indirect routes in the TCP/IP stack routing table.

high_val is the highest recorded number of IPv4 indirect routes in the TCP/IP stack routing table during the time interval as defined in the INTERVAL parameter for the IBM Health Checker for z/OS.

maximum_val is the configured or default maximum threshold for the number of IPv4 indirect routes in the TCP/IP stack routing table as defined in the IPMAXRT4 parameter for the IBM Health Checker for z/OS.

System action: The system continues processing.

Operator response: Contact the system programmer.

System programmer response: To reduce the number of indirect OSPF routes, IBM suggests that the OSPF areas that contain the z/OS Communications Server application host or sysplex be configured as stub areas for optimal performance. Stub areas are used so that IPv4 route summaries from other areas are not flooded into the stub areas by the area border routers. See the minimizing the routing responsibility of z/OS Communications Server information in z/OS Communications Server: IP Configuration Guide.

Route filtering options for the address ranges in the areas are also available to control the OSPF route advertisements. See the AREA statement and the RANGE statement in z/OS Communications Server: IP Configuration Reference for more information about the Stub_Area and Advertise parameters.

To reduce the number of indirect RIP or static routes, IBM suggests the configuration of RIP or static networks that contain the z/OS Communications Server application host or sysplex use route summarization and/or filters for optimal performance. Use of network-specific or default routes that represent the more specific indirect routes provides the route summarization.

Use of the RIPv2 option provides network masks in the RIP advertisements. Filtering options are also available to control the RIP route advertisements. See the RIP_INTERFACE statement in z/OS Communications Server: IP Configuration Reference for information on RIPv2 and the receive filter parameters.

See the BEGINROUTES statement in z/OS Communications Server: IP Configuration Reference for information on defining IPv6 prefixes or default routes. Modify the routes as necessary for route summarization. Then issue a VARY TCPIP,OBEYFILE command with an OBEY file that contains the modified BEGINROUTES block.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: EZBHCCK1

Routing code: Not applicable.

Descriptor code: 3

Automation: Not applicable.

Example:

EZBH011E The current number of IPv4 indirect routes exceeds the maximum threshold (Current = 2500, High = 3000, Maximum = 2000)

EZBH012I The current number of IPv6 indirect routes is below or equal to the maximum threshold (Current = current_val , High = high_val , Maximum = maximum_val)

Explanation: The CSTCP_IPMAXRT6_TCPIP_{stackname} check ran successfully and found no exceptions. The check determined that the current number of IPv6 indirect static and dynamic routes in the TCP/IP stack routing table is within the maximum threshold value for this check. This message is issued after TCP/IP initialization and at the specified time intervals using the IBM Health Checker's INTERVAL parameter.

The check name includes the job name of the TCP/IP stack as a suffix.

current_val is the current number of IPv6 indirect routes in the TCP/IP stack routing table.

high_val is the highest recorded number of IPv6 indirect routes in the TCP/IP stack routing table during the time interval as defined in the INTERVAL parameter for the IBM Health Checker for z/OS.

maximum_val is the configured or default maximum threshold for the number of IPv6 indirect routes in the TCP/IP stack routing table as defined in the IPMAXRT6 parameter for the IBM Health Checker for z/OS.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK1

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

EZBH013E

Example:

EZBH012I The current number of IPv6 indirect routes is below or equal to the maximum threshold
(Current = 500, High = 750, Maximum = 2000)

EZBH013E The current number of IPv6 indirect routes exceeds the maximum threshold (Current = *current_val* , High = *high_val* , Maximum = *maximum_val*)

Explanation: The CSTCP_IPMAXRT6_TCPIPstackname check determined that the current number of IPv6 indirect static and dynamic routes in the TCP/IP stack routing table is greater than the maximum threshold value for this check. The high number of routes might cause high CPU consumption from routing changes and less than optimal operations in OMPROUTE and the TCP/IP stack. Actions should be taken to reduce the number of routes.

The check name includes the job name of the TCP/IP stack as a suffix.

current_val is the current number of IPv6 indirect routes in the TCP/IP stack routing table.

high_val is the highest recorded number of IPv6 indirect routes in the TCP/IP stack routing table during the time interval as defined in the INTERVAL parameter for the IBM Health Checker for z/OS.

maximum_val is the configured or default maximum threshold for the number of IPv6 indirect routes in the TCP/IP stack routing table as defined in the IPMAXRT6 parameter for the IBM Health Checker for z/OS.

System action: The system continues processing.

Operator response: Contact the system programmer.

System programmer response: To reduce the number of OSPF indirect routes, IBM suggests that the OSPF areas that contain the z/OS Communications Server application host or sysplex be configured as stub areas for optimal performance. Stub areas are used so that IPv6 prefixes from other areas are not flooded into the stub areas by the area border routers. See the minimizing the routing responsibility of z/OS Communications Server information in z/OS Communications Server: IP Configuration Guide.

Route filtering options for the address ranges in the areas are also available to control the OSPF route advertisements. See the IPv6_AREA statement and the IPv6_RANGE statement in z/OS Communications Server: IP Configuration Guide for more information about the Stub_Area and Advertise parameters.

To reduce the number of indirect RIP or static routes, IBM suggests the configuration of RIP or static networks that contain the z/OS Communications Server application host or sysplex use route summarization and/or filters for optimal performance. Use of IPv6 prefixes or default routes that represent the more specific indirect routes provides the route summarization.

Filtering options are also available to control the RIP route advertisements. See the IPv6_RIP_INTERFACE statement in z/OS Communications Server: IP Configuration Guide for information on the receive filter parameters.

See the BEGINROUTES statement in z/OS Communications Server: IP Configuration Reference for information on defining IPv6 prefixes or default routes. Modify the routes as necessary for route summarization. Then issue a VARY TCPIP,,OBEYFILE command with an OBEY file that contains the modified BEGINROUTES block.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC1

Routing code: Not applicable.

Descriptor code: 3

Automation: Not applicable.

Example:

EZBH013E The current number of IPv6 indirect routes exceeds the maximum threshold
(Current = 4000, High = 3000, Maximum = 2000)

EZBH014I GLOBALTCPIPDATA is specified when AUTOQUIESCE is specified.

Explanation: Check CSRES_AUTOQ_GLOBALTCPIPDATA ran successfully and found no exceptions. The check detected that the GLOBALTCPIPDATA resolver setup statement is specified when the AUTOQUIESCE operand is specified on the UNRESPONSIVETHRESHOLD resolver setup statement.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC2

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZBH014I - GLOBALTCPIPDATA is specified when AUTOQUIESCE is specified.

EZBH015E GLOBALTCPIPDATA was not specified when AUTOQUIESCE was specified.

Explanation: Check CSRES_AUTOQ_GLOBALTCPIPDATA detected that the GLOBALTCPIPDATA resolver setup statement was not specified when the AUTOQUIESCE operand was specified on the UNRESPONSIVETHRESHOLD resolver setup statement. The AUTOQUIESCE operand was ignored.

System action: The resolver uses the UNRESPONSIVETHRESHOLD percentage value to perform the network operator notification function instead of performing the autonomic quiescing of unresponsive name servers function.

Operator response: Contact the system programmer.

System programmer response:

- If you do not want unresponsive name servers to be automatically quiesced, perform one of the following actions:
 - Remove the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD statement, but leave the threshold percentage coded on the statement.
 - Remove the UNRESPONSIVETHRESHOLD statement completely. The network operator notification function will run by default.
 - Leave the resolver setup file unchanged. You will continue to see message EZBH015E every time the resolver is started or a MODIFY RESOLVER,REFRESH command is issued, but the autonomic quiescing function will not be active.
- If you want unresponsive name servers to be automatically quiesced, perform the following actions:
 - If you do not already have a global TCPIP.DATA file, create one. Code the appropriate resolver-related TCPIP.DATA statements in the global TCPIP.DATA file you just created.
 - Code the GLOBALTCPIPDATA statement in the resolver setup file, specifying the name of the global TCPIP.DATA file to be used.

If you have corrected the resolver setup file, instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=setup_file_name command to activate the changes.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC2

Routing code: Not applicable.

EZBH016I • EZBH017I

Descriptor code: 3

Automation: This message is a candidate for automation in cases where different resolver setup files are used to enable different resolver functions.

Example:

EZBH015E - GLOBALTCPIPDATA was not specified when AUTOQUIESCE was specified

EZBH016I This check is not applicable when AUTOQUIESCE is not specified

Explanation: Check CSRES_AUTOQ_GLOBALTCPIPDATA is not applicable when the AUTOQUIESCE operand is not specified on the UNRESPONSIVETHRESHOLD resolver setup statement.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK2

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: This message is not a candidate for automation.

Example:

EZBH016I - This check is not applicable when AUTOQUIESCE is not specified

EZBH017I The resolver timeout value is less than or equal to the *deftype* specified value of *timeout* when the autonomic quiescing of unresponsive name servers function is active

Explanation: Check CSRES_AUTOQ_TIMEOUT ran successfully and found no exceptions. The check detected that the resolver timeout value is less than or equal to the *timeout* value specified for the check when the autonomic quiescing of unresponsive name servers function is active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement. The resolver timeout value is specified by using the RESOLVERTIMEOUT statement in the global TCPIP.DATA file. The default value is 5 seconds.

In the message text:

deftype

Indicates whether the maximum value for this check has been overridden by the user.

OWNER

The default maximum check value has not been overridden by the user.

INSTALLATION

The maximum check value has been overridden by the user.

timeout

The maximum check value against which the resolver timeout value is compared.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK2

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZBH017I - The resolver timeout value is less than or equal to the installation specified value of 5 when the autonomic quiescing of unresponsive name servers function is active

EZBH018E The resolver timeout value is greater than the *deftype* specified value of *timeout* when the autonomic quiescing of unresponsive name servers function is active.

Explanation: Check CSRES_AUTOQ_TIMEOUT detected that the RESOLVERTIMEOUT statement is specified with a value greater than the *timeout* value specified for the check when the autonomic quiescing of unresponsive name servers function is active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement.

The default value for the RESOLVERTIMEOUT statement is 5 seconds. When the autonomic quiescing of unresponsive name servers function is active, the resolver polls unresponsive name servers every six seconds. The resolver uses the value from the RESOLVERTIMEOUT statement in the global TCPIP.DATA file, or the default value, to determine how long to wait for a response to the poll. If you specify a value for the RESOLVERTIMEOUT statement that is greater than 5 seconds, the resolver will be less efficient when polling unresponsive name servers.

In the message text:

deftype

Indicates whether the maximum value for this check has been overridden by the user.

OWNER

The default maximum check value has not been overridden by the user.

INSTALLATION

The maximum check value has been overridden by the user.

timeout

The maximum check value against which the resolver timeout value is compared.

System action: The system continues processing.

Operator response: If you want to continue using the autonomic quiescing function with the current RESOLVERTIMEOUT value, no action is needed.

If you no longer want to use the autonomic quiescing function, or the RESOLVERTIMEOUT value must be less than or equal to the *timeout* value, contact the system programmer.

System programmer response: If you want to use the autonomic quiescing function with the current RESOLVERTIMEOUT value, no action is needed.

If you want to use the autonomic quiescing function with a RESOLVERTIMEOUT value less than or equal to the *timeout* value, change the value on the RESOLVERTIMEOUT statement in the global TCPIP.DATA file. After the global TCPIP.DATA file has been corrected, instruct the operator to issue a MODIFY RESOLVER,REFRESH command to update the value.

If you no longer want to use the autonomic quiescing function, remove the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD resolver setup statement in the resolver setup file. After the resolver setup file has been corrected, instruct the operator to issue a MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command to stop the autonomic quiescing function.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCCK2

Routing code: Not applicable.

Descriptor code: 3

EZBH019I • EZBH020I

Automation: This message is a candidate for automation in cases where different global TCPIP.DATA files exist.

Example:

EZBH018E - The resolver timeout value is greater than the installation specified value of 5 when the autonomic quiescing of unresponsive name servers function is active

EZBH019I This check is not applicable when the autonomic quiescing of unresponsive name servers function is not active

Explanation: Check CSRES_AUTOQ_TIMEOUT is not applicable when the autonomic quiescing of unresponsive name servers function is not active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK2

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: This message is not a candidate for automation.

Example:

EZBH019I - This check is not applicable when the autonomic quiescing of unresponsive name servers function is not active

EZBH020I The resolver is using UDP to communicate with name servers when the autonomic quiescing of unresponsive name servers function is active.

Explanation: Check CSRES_AUTOQ_RESOLVEVIA ran successfully and found no exceptions. The check detected that the resolver is using UDP to communicate with the name server when the autonomic quiescing of unresponsive name servers function is active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement. The protocol used by the resolver to communicate with name servers is specified by using the RESOLVEVIA statement in the global TCPIP.DATA file. The default value is UDP.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK2

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: This message is not a candidate for automation.

Example:

EZBH020I - The resolver is using UDP to communicate with name servers when the autonomic quiescing of unresponsive name servers function is active

EZBH021E The resolver is using TCP to communicate with name servers when the autonomic quiescing of unresponsive name servers function is active.

Explanation: Check CSRES_AUTOQ_RESOLVEVIA detected that the RESOLVEVIA statement is specified with the value TCP in the global TCPIP.DATA file when the autonomic quiescing of unresponsive name servers function is active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement.

The default value for the RESOLVEVIA statement is UDP. If the autonomic quiescing of unresponsive name server function is active, the resolver polls unresponsive name servers by using UDP, not TCP. If your installation uses TCP to forward the DNS queries generated by an application to name servers, the results of the resolver polling attempts by using UDP will not accurately reflect the responsiveness of the name server in your installation.

System action: The system continues processing.

Operator response: If you want to continue using the autonomic quiescing function with RESOLVEVIA TCP, no action is needed.

If you no longer want to use the autonomic quiescing function, or the RESOLVEVIA value should be UDP, contact the system programmer.

System programmer response: If you want to use the autonomic quiescing function with RESOLVEVIA TCP, no action is needed.

If you want to use the autonomic quiescing function with RESOLVEVIA UDP, remove the RESOLVEVIA statement or change the value to UDP in the global TCPIP.DATA file. After the global TCPIP.DATA file is corrected, instruct the operator to issue a MODIFY RESOLVER,REFRESH command to update the value.

If you no longer want to use the autonomic quiescing function, remove the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD resolver setup statement in the resolver setup file. After the resolver setup file has been corrected, instruct the operator to issue a MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command to stop the autonomic quiescing function.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC2

Routing code: Not applicable.

Descriptor code: 3

Automation: This message is a candidate for automation in cases where different global TCPIP.DATA files exist.

Example:

EZBH021E - The resolver is using TCP to communicate with name servers when the autonomic quiescing of unresponsive name servers function is active

EZBH022I This check is not applicable when the autonomic quiescing of unresponsive name servers function is not active.

Explanation: Check CSRES_AUTOQ_RESOLVEVIA is not applicable when the autonomic quiescing of unresponsive name servers function is not active. This function is enabled by specifying the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCC2

EZBH900I

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: This message is not a candidate for automation.

Example:

EZBH022I - This check is not applicable when the autonomic quiescing of unresponsive name servers function is not active

EZBH900I INTERNAL ERROR: Function *func_name* RC *return_code* RSN *reason_code*

Explanation: Check processing for the TCP/IP check identified in the preceding IBM Health Checker for z/OS message failed as the result of an internal processing error.

The check name includes the job name of the TCP/IP stack as a suffix.

In the message text:

func_name

The name of the function that failed.

return_code

The failure return code that was returned by the function. It is displayed as 8 hexadecimal digits. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

reason_code

The failure reason code that was returned by the function. It is displayed as 8 hexadecimal digits. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: System processing continues. The check did not run for the specified stack.

Operator response: Contact the system programmer.

System programmer response: Use the return code and reason code values for the function specified to determine the cause of the failure and correct the problem. If the problem cannot be determined, or corrected, contact the IBM Software Support Center.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBHCK1

Example: EZBH900I INTERNAL ERROR: Function BPX1IOC RC 000003F3 RSN 00000532

Chapter 11. EZD0xxxx messages

EZD0001I SETTING VLAN ID NOT SUPPORTED FOR DEVICE *device_name*

Explanation: TCP/IP could not set the VLAN ID for this device. The OSA-Express adapter microcode level does not support setting the VLAN ID.

device_name is the name of the device.

System action: TCP/IP prevents the device from activating.

Operator response: Inform the system programmer about the error.

System programmer response: Install a level of OSA-Express microcode that supports the VLAN ID function. Use the VTAM DISPLAY TRL command to determine the OSA-Express microcode level. For more information about the VTAM DISPLAY TRL command, see z/OS Communications Server: SNA Operation.

Module: TCPIP

Procedure name: EZBIFIND

EZD0002I ERROR SETTING VLAN ID FOR DEVICE *device_name*

Explanation: An unexpected error occurred while setting the VLAN ID for the device.

device_name is the name of the device.

System action: TCP/IP prevents the device from activating.

Operator response: Inform the system programmer about the error.

System programmer response: Obtain a TCP/IP CTRACE with the VTAM option and contact IBM software support services.

Module: TCPIP

Procedure name: EZBIFIND

EZD0003I SETTING VLAN ID NOT SUPPORTED FOR INTERFACE *interface_name*

Explanation: TCP/IP could not set the VLAN ID for this interface. The OSA-Express adapter microcode level does not support setting the VLAN ID.

interface_name is the name of the interface.

System action: TCP/IP prevents the device from activating.

Operator response: Inform the system programmer about the error.

System programmer response: Install a level of OSA-Express microcode that supports the VLAN ID function. Use the VTAM DISPLAY TRL command to determine the OSA-Express microcode level. For more information about the VTAM DISPLAY TRL command, see z/OS Communications Server: SNA Operation.

Module: TCPIP

Procedure name: EZBIFIND

EZD0004I ERROR SETTING VLAN ID FOR INTERFACE *interface_name*

Explanation: An unexpected error occurred while setting the VLAN ID for the interface.

If the interface is configured with CHPID type OSX, one possible reason for this error is that the VLAN ID is not authorized for the ensemble virtual network.

interface_name is the name of the interface.

System action: TCP/IP prevents the interface from activating.

EZD0005I • EZD0007I

Operator response: Inform the system programmer about the error.

System programmer response: Obtain a TCP/IP CTRACE with the VTAM option and contact IBM software support services.

If the interface is configured with CHPID type OSX, ensure that the virtual network you created through the network virtualization function specifies the same VLAN ID as the OSX interface.

Module: TCPIP

Procedure name: EZBIFIND

EZD0005I SETTING VLAN USER PRIORITY NOT SUPPORTED FOR INTERFACE *interface_name*

Explanation: TCP/IP cannot use VLAN priority for this interface. The OSA-Express adapter microcode level does not support the VLAN priority function.

interface_name is the name of the interface.

System action: TCP/IP continues with interface activation but does not use VLAN priority.

Operator response: Inform the system programmer about the error.

System programmer response: Install a level of OSA-Express microcode that supports the VLAN priority function. Use the VTAM DISPLAY TRL command to determine the OSA-Express microcode level. For more information about the VTAM DISPLAY TRL command, see z/OS Communications Server: SNA Operation.

Module: TCPIP

Procedure name: EZBIFIND

EZD0006I ERROR SETTING VLAN USER PRIORITY FOR INTERFACE *interface_name*

Explanation: An unexpected error occurred while setting the VLAN priority for the interface.

interface_name is the name of the interface.

System action: TCP/IP continues with interface activation but does not use VLAN priority.

Operator response: Inform the system programmer about the error.

System programmer response: Obtain a TCP/IP CTRACE with the VTAM option and contact IBM software support services.

Module: TCPIP

Procedure name: EZBIFIND

EZD0007I CONNECTION TO *addr* CLEARED FOR INTERFACE *Interface_Name*

Explanation: TCP/IP was notified that the MPCPTP6 connection to the specified IPv6 address for the specified interface is no longer active.

addr is the IPv6 address of the remote node.

Interface_Name is the name of the interface.

System action: The specified connection is no longer available for use with TCP/IP. TCP/IP will attempt to recover the connection.

Operator response: None.

System programmer response: None.

Module: EZBIFIUM

Procedure name: CM_CLEAR_IND_ATMMPC

EZD0008I TIMEOUT DURING MPCPTP OR MPCPTP6 CONTROL PACKET EXCHANGE — DEACTIVATING *dev_or_interface_name*

Explanation: The remote node is not responding during the MPCPTP or MPCPTP6 control packet exchange.

dev_or_interface_name is the name of the device or interface. This value of this field displays in the format of DEVICE *device_name* or INTERFACE *interface_name*.

System action: The IPv6 Interface or IPv4 Link on which the timeout occurred is deactivated.

Operator response: Contact the system programmer.

System programmer response: Obtain a CTRACE with OPTIONS=VTAM,VTAMDATA (on both sides, if the remote node is an IBM z/OS host) and contact the IBM Software Support Center. If the remote node is not an IBM z/OS host, the IBM Software Support Center might instruct you to contact the service group for the remote node.

Module: EZBIFOUT

Procedure name: Process_MPC_Rxmt_Queue

EZD0009I CONNECTION TO *addr* ACTIVE FOR INTERFACE *interface_name*

Explanation: The MPCPTP6 connection to the specified IPv6 address for the specified interface is now active.

addr is the IPv6 address of the remote node.

interface_name is the name of the interface.

System action: The specified connection is now available for use by TCP/IP.

Operator response: None.

System programmer response: None.

Module: EZBIFIUM

Procedure name: DM_ACT_IND_MPC

EZD0010I ERROR: CODE= *Error_Code* DURING *Link_Control_Function* CONNECTION TO *addr* FOR INTERFACE *Interface_Name* DIAGNOSTIC CODE: *Internal_Diagnostic_Code*

Explanation: The Link Layer has detected an error during activation of a virtual connection (VC) for an MPCPTP6 interface.

Error_Code is the Data Link Control (DLC) Status Code for the link layer.

Link_Control_Function is the function being performed on the VC.

addr is the IPv6 address of the remote node.

Interface_Name is the name of the interface.

Internal_Diagnostic_Code is an internal diagnostic code for use by IBM.

System action: TCP/IP does not activate the VC.

Operator response: Consult the section on Data Link Control (DLC) Status Codes in z/OS Communications Server: IP and SNA Codes for a description of the status code for the link layer. If a hardware problem is indicated, correct the hardware problem and restart the MPCPTP6 interface.

System programmer response: Perform the action described in the z/OS Communications Server: IP and SNA Codes for the indicated status code.

Module: EZBIFIUT

Procedure name: IUT_MESSAGE

EZD0012I • EZD0013I

EZD0012I DUPLICATE ADDRESS DETECTION PREVENTED BY IPSEC FOR *type* CONFIGURED HOME ADDRESS *addr* ON INTERFACE *intfname*

Explanation: TCP/IP cannot verify the uniqueness of this IP address because the IPSec policy is preventing the stack from sending a neighbor solicitation packet for duplicate address detection.

In the message text:

type

Specifies how the home address was configured. Possible values are:

MANUAL

Indicates that the home address was manually configured in the TCP/IP profile.

AUTO Indicates that the address is either a link-local automatically generated address or an automatically configured address.

addr

Specifies the address for which TCP/IP was attempting duplicate address detection.

intfname

The interface name.

System action: TCP/IP marks the home address as unavailable for use. If the home address is the link-local address, then TCP/IP deactivates the interface.

Operator response: Contact the system programmer.

System programmer response: Configure filter rules to permit neighbor solicitation and configure neighbor advertisement packets to enable duplicate address detection.

See the following in z/OS Communications Server: IP Configuration Guide:

- The information about special considerations when using IP security for IPv6 for more information about configuring IP filter rules
- The information about setting up physical characteristics in PROFILE.TCPIP for example filter rules
- The Policy sample files for example filter rules

User response: Not applicable.

Problem determination: Not applicable.

Module: EZB6PDAD

Example: None.

EZD0013I LINK *takeback_link_name* HAS TAKEN BACK ARP RESPONSIBILITY FROM LINK *takeover_link_name*

Explanation: The link specified by the *takeback_link_name* value became inactive and the link specified by the *takeover_link_name* value took over the ARP responsibility. The takeback link became active again, so it has taken back the ARP responsibility.

In the message text:

takeback_link_name

The name of the link that has taken back the ARP responsibility.

takeover_link_name

The name of the link that has released the ARP responsibility.

System action: TCP/IP reassigns ARP responsibility to the takeback link. TCP/IP sends a gratuitous ARP for the IP address of the takeback link that will reply to ARP requests as the owner.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBIFSTC

Example: None.

EZD0014I INTERFACE *takeback_interface_name* HAS TAKEN BACK ND RESPONSIBILITY FROM INTERFACE *takeover_interface_name*

Explanation: The interface specified by the *takeback_interface_name* value became inactive and the interface specified by the *takeover_interface_name* value took over the neighbor discovery (ND) address resolution responsibility. The takeback interface is active again, so it has taken back the ND address resolution responsibility.

In the message text:

takeback_interface_name

The name of the interface that has taken back the ND Address Resolution responsibility.

takeover_interface_name

The name of the interface that has released the ND address resolution responsibility.

System action: TCP/IP reassigns ND address resolution responsibility to the takeback interface. TCP/IP sends a gratuitous neighbor advertisement for the IP address of the takeback interface that will reply to neighbor solicitation requests as the owner.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBIFSTC

Example: None.

EZD0015I *osa_portname* DOES NOT SUPPORT OSAENTA TRACE

Explanation: The VARY TCPIP,,OSAENTA command or an OSAENTA statement in PROFILE.TCPIP was specified with the ON parameter for an OSA-Express, which does not support the OSA-Express network traffic analyzer trace function.

In the message text:

osa_portname

The value specified on the PORTNAME= parameter on the OSAENTA command or statement.

System action: TCP/IP does not activate the OSAENTA trace function on this OSA-Express.

Operator response: Contact the system programmer.

System programmer response: Install a level of OSA-Express microcode that supports the OSAENTA trace function. Use the VTAM DISPLAY TRL command to determine the currently installed OSA-Express Licensed Internal Code (LIC) level. See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0016I • EZD0017I

EZD0016I OSAENTA TRACE ENABLED FOR *osa_portname*

Explanation: TCP/IP successfully activated the OSA-Express network traffic analyzer trace function with the OSA-Express adapter in response to a VARY TCPIP,,OSAENTA command or OSAENTA statement in PROFILE.TCPIP with the ON parameter.

In the message text:

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement.

System action: TCP/IP starts collecting trace data from the OSA-Express according to the current OSAENTA settings.

Operator response: No action needed, but if you want to display the current OSAENTA settings, use the Netstat DEVlinks/-d command. See the information about Netstat in z/OS Communications Server: IP System Administrator's Commands.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0017I OSAENTA TRACE MODIFIED FOR *osa_portname*

Explanation: TCP/IP successfully modified the OSA-Express network traffic analyzer trace settings with the OSA-Express adapter in response to a VARY TCPIP,,OSAENTA command or OSAENTA statement in PROFILE.TCPIP.

In the message text:

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement.

System action: TCP/IP starts collecting trace data from the OSA-Express according to the new OSAENTA settings.

Operator response: No action needed, but if you want to display the current OSAENTA settings, use the Netstat DEVLINKS/-d command. See the information about NETSTAT in z/OS Communications Server: IP System Administrator's Commands

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0018I OSAENTA TRACE DISABLED FOR *osa_portname*

Explanation: TCP/IP has deactivated the OSA-Express network traffic analyzer trace function in response to a V TCPIP,,OSAENTA command or OSAENTA statement in PROFILE.TCPIP with the OFF parameter.

In the message text:

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement.

System action: TCP/IP stops collecting trace data on this OSA-Express.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0019I OSAENTA TRACE STOPPED FOR *osa_portname* - REASON: *reason* LIMIT REACHED

Explanation: The stack reached one of the limits specified on the V TCPIP,,OSAENTA command or the OSAENTA statement in PROFILE.TCPIP for OSA-Express network traffic analyzer trace collection, and stopped collecting trace data on this OSA-Express.

In the message text:

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement.

reason

The specific limit that was reached. The limit was one of the following:

- DATA - amount of data traced
- FRAMES - number of frames traced
- RECORD - number of records traced
- TIME - length of time the trace was active

System action: TCP/IP stops collecting trace data on this OSA-Express. If the trace is restarted, the current OSAENTA settings remain in effect.

Operator response: Contact the system programmer.

System programmer response: To restart the trace, issue a VARY TCPIP,,OSAENTA command specifying the ON parameter or issue a VARY TCPIP,,OBEYFILE command with a TCP/IP profile that contains an OSAENTA statement specifying the ON parameter. See the information about the VARY TCPIP,,OSAENTA command in z/OS Communications Server: IP System Administrator's Commands and the OSAENTA statement in z/OS Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

EZD0020I • EZD0021I

Descriptor code: 12

Example: Not applicable.

EZD0020I ERROR *error_code* ENABLING OSAENTA TRACE FOR *osa_portname*

Explanation: TCP/IP attempted to enable the OSA-Express network traffic analyzer trace in response to a VARY TCPIP,,OSAENTA command or OSAENTA statement in PROFILE.TCPIP with the ON parameter. However, OSA-Express reported an error that prevents the stack from enabling the trace.

In the message text:

error_code

The error code returned by the OSA-Express.

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement

System action: TCP/IP does not enable the OSAENTA trace on this OSA-Express.

Operator response: Contact the system programmer

System programmer response: See OSA Network Traffic Analyzer (OSAENTA) Error Codes in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for a description of the error code and its potential action. After correcting the error, use the OSAENTA command or statement to activate the trace. See the information about the VARY TCPIP,,OSAENTA command in z/OS Communications Server: IP System Administrator's Commands and the OSAENTA statement in z/OS Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example:

EZD0020I ERROR 0005 ENABLING OSAENTA TRACE FOR OSAQDI04

EZD0018I OSAENTA TRACE DISABLED FOR OSAQDI04

EZD0021I ERROR *error_code* MODIFYING OSAENTA TRACE FOR *osa_portname*

Explanation: TCP/IP attempted to modify the OSA-Express network traffic analyzer trace settings with the OSA-Express adapter in response to a VARY TCPIP,,OSAENTA command or OSAENTA statement in PROFILE.TCPIP. However, OSA-Express reported an error that prevents the stack from modifying the trace settings.

In the message text:

error_code

The error code returned by the OSA-Express.

osa_portname

The value specified on the PORTNAME= parameter, which was specified on the OSAENTA command or statement.

System action: TCP/IP disables the OSAENTA trace on this OSA-Express.

Operator response: Contact the system programmer.

System programmer response: See OSA Network Traffic Analyzer (OSAENTA) Error Codes in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for information about OSA reject codes and a description of the error code and its potential action. After correcting the error, use the OSAENTA command or statement to activate the trace. See the information about the VARY TCPIP,,OSAENTA command in z/OS Communications Server: IP System Administrator's Commands and the OSAENTA statement in z/OS

Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example:

```
EZD0021I ERROR 0005 MODIFYING OSAENTA TRACE FOR OSAQDI04
EZD0018I OSAENTA TRACE DISABLED FOR OSAQDI04
```

EZD0022I INTERFACE *interface_name* DOES NOT SUPPORT THE ISOLATE FUNCTION

Explanation: The ISOLATE parameter was specified on the INTERFACE statement for this device but the level of OSA-Express adapter microcode that is installed does not support the ISOLATE function.

In the message text:

interface_name

The name of the interface with the ISOLATE parameter specified.

System action: Interface activation fails.

Operator response: Contact the system programmer.

System programmer response: Either install a level of OSA-Express microcode that supports the ISOLATE function or remove the ISOLATE parameter from the INTERFACE statement. Use the VTAM DISPLAY TRL command to determine what level of the OSA-Express Licensed Internal Code (LIC) is currently installed. See the information about the DISPLAY TRL command information in z/OS Communications Server: SNA Operation for more information.

The ISOLATE function is limited to OSA-Express2 or OSA-Express3 ethernet features in QDIO mode and running at least an IBM System z9® Enterprise Class (EC) or z9 Business Class (BC). See the 2094, 2096, 2097, and 2098 DEVICE Preventive Service Planning (PSP) buckets for more information.

See the information about the INTERFACE-IPAQENET OSA-Express QDIO interface statement and the INTERFACE-IPAQENET6 OSA-Express QDIO interface statement in z/OS Communications Server: IP Configuration Reference for information about OSA-Express connection isolation.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Automation: This message is displayed on the system console. Automation might be appropriate because the activation of the interface is not allowed when this message is issued.

Example:

```
EZD0022I INTERFACE OSA3 DOES NOT SUPPORT THE ISOLATE FUNCTION.
```

EZD0023I IPV6 MULTIPATH PERPACKET NOT VALID WITH IPV6 SECURITY – IPV6 MULTIPATH SUPPORT DISABLED FOR ROUTE TABLE *table*

Explanation: IPv6 multipath perpacket cannot be enabled for a policy-based route table when IPv6 security support is enabled on the TCP/IP stack.

In the message text:

EZD0024I

table

The name of a policy-based route table

System action: TCP/IP continues. IPv6 multipath support is disabled for the specified route table.

Operator response: Contact the system programmer.

System programmer response: To use IPv6 multipath support with IPv6 security, enable IPv6 multipath per connection support by coding PerConnection on the Multipath6 parameter of the RouteTable statement in the policy configuration. See policy-based routing (Routing) policy statements in z/OS Communications Server: IP Configuration Reference for information about the RouteTable policy statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZB6PPBR

Routing code: 2

Descriptor code: 12

Automation: This message is displayed on the console. Automation can detect when IPv6 multipath perpacket is configured for a policy-based route table and IPv6 security support is enabled on the TCP/IP stack.

Example:

```
EZD0023I IPV6 MULTIPATH PERPACKET NOT VALID WITH IPV6 SECURITY  
- IPV6 MULTIPATH SUPPORT DISABLED FOR ROUTE TABLE FTPRTE$6
```

EZD0024I DEVICE *device_name* DOES NOT SUPPORT VMAC

Explanation: Virtual MAC (VMAC) was specified on the LINK statement for this device but the OSA-Express adapter microcode level does not support assigning Virtual MAC addresses. TCP/IP could not assign a VMAC address for this device during device activation.

In the message text:

device_name

The name of the device with VMAC configured.

System action: Device activation fails.

Operator response: Contact the system programmer.

System programmer response: Either install a level of OSA-Express microcode that supports the virtual MAC function or remove the VMAC parameter from the LINK statement. Use the VTAM DISPLAY TRL command to determine the currently installed OSA-Express Licensed Internal Code (LIC) level. See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for more information. See the 2094DEVICE Preventive Service Planning (PSP) bucket and the 2096DEVICE Preventive Service Planning (PSP) bucket for the OSA-Express LIC levels required for VMAC support. See the information about OSA-Express Virtual MAC (VMAC) routing or workload balancing in z/OS Communications Server: IP Configuration Guide for information about the networking affects of configuring with and without VMAC addresses.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Storage Utilization

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0025I INTERFACE *interface_name* DOES NOT SUPPORT VMAC

Explanation: Virtual MAC (VMAC) was specified on the INTERFACE statement for this device but the OSA-Express adapter microcode level does not support assigning VMAC addresses. TCP/IP could not assign a VMAC address for this interface during interface activation.

In the message text:

interface_name

The name of the interface with VMAC configured.

System action: Interface activation fails.

Operator response: Contact the system programmer.

System programmer response: Either install a level of OSA-Express microcode that supports the Virtual MAC function or remove the VMAC parameter from the LINK statement. Use the VTAM DISPLAY TRL command to determine the currently installed OSA-Express Licensed Internal Code (LIC) level. See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for more information. See the 2094DEVICE Preventive Service Planning (PSP) bucket and the 2096DEVICE Preventive Service Planning (PSP) bucket for the OSA-Express LIC levels required for VMAC support. See the information about OSA-Express Virtual MAC (VMAC) routing or workload balancing in z/OS Communications Server: IP Configuration Guide for information about the networking affects of configuring with and without VMAC addresses.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Stack Configuration

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0026I ERROR *error_code* ASSIGNING VMAC TO DEVICE *device_name*

Explanation: An unexpected error occurred while assigning a virtual MAC (VMAC) address to the device.

In the message text:

error_code

The error code returned from the OSA-Express microcode.

device_name

The name of the device.

System action: Device activation fails.

Operator response: Contact the system programmer.

System programmer response: See OSA Reject Codes and Internal Errors in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for information about the OSA Reject Codes and a description of the error.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Stack Configuration

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

EZD0027I ERROR *error_code* ASSIGNING VMAC TO INTERFACE *interface_name*

Explanation: An unexpected error occurred while assigning a virtual MAC (VMAC) address to the interface.

In the message text:

error_code

The error code returned from the OSA-Express microcode.

interface_name

The name of the interface.

System action: Interface activation fails.

Operator response: Contact the system programmer.

System programmer response: See OSA Reject Codes and Internal Errors in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for information about the OSA Reject Codes and a description of the error.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Stack Configuration

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example: Not applicable.

**EZD0028I IPV4 MULTIPATH PERPACKET NOT VALID WITH IPV4 SECURITY - MULTIPATH SUPPORT
DISABLED FOR ROUTE TABLE *table***

Explanation: IPv4 multipath perpacket cannot be enabled for a policy-based route table when IPv4 security support is enabled on the TCP/IP stack.

In the message text:

table

The name of a policy-based route table.

System action: TCP/IP continues. IPv4 multipath support is disabled for the specified route table.

Operator response: Contact the system programmer.

System programmer response: If you want to use IPv4 multipath support in conjunction with IPv4 security, enable multipath per connection support by coding PerConnection on the Multipath parameter of the RouteTable statement in the policy configuration. See the information about the policy-based routing (Routing) policy statements in z/OS Communications Server: IP Configuration Reference for information about the RouteTable policy statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIPPBR

Routing code: 2

Descriptor code: 12

Example:

EZD0028I IPV4 MULTIPATH PERPACKET NOT VALID WITH IPV4 SECURITY - MULTIPATH
SUPPORT DISABLED FOR ROUTE TABLE FTPRTE5

EZD0029I PATH MTU DISCOVERY SUPPORT IS DISABLED FOR ROUTE TABLE table

Explanation: Path MTU discovery support was disabled for the specified policy-based route table. This occurred because a value of Yes was coded for the IgnorePathMtuUpdate parameter on the RouteTable policy statement that defined the route table.

In the message text:

table

The name of a policy-based route table.

System action: TCP/IP continues. Path MTU discovery updates will not be applied to any routes in the specified route table.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP

Module: EZBIPPBR

Routing code: 2

Descriptor code: 12

Example:

EZD0029I PATH MTU DISCOVERY SUPPORT IS DISABLED FOR ROUTE TABLE FTPRTE\$

EZD0030I DISPLAY OSAINFO FAILED FOR *name* - *reason*

Explanation: The DISPLAY TCPIP,,OSAINFO request could not be processed for one of the reasons listed below.

In the message text:

name

The INTFNAME value specified on the DISPLAY TCPIP,,OSAINFO command.

reason

The reason for the error. Possible values are:

LINK OR INTERFACE DOES NOT EXIST

The LINK or INTERFACE name does not exist.

LINK OR INTERFACE DOES NOT SUPPORT DISPLAY OSAINFO

The LINK or INTERFACE does not support the DISPLAY TCPIP,,OSAINFO command.

LINK OR INTERFACE NOT ACTIVE

The OSA-Express is not currently active.

COMMAND ALREADY IN PROGRESS

A DISPLAY TCPIP,,OSAINFO command is already in progress for the OSA-Express.

STORAGE NOT AVAILABLE

Storage required to complete the DISPLAY TCPIP,,OSAINFO request could not be obtained.

COMMAND TIMED OUT

The OSA-Express has taken too long to reply with the information.

System action: Processing of the DISPLAY TCPIP,,OSAINFO command is discontinued.

Operator response: Not applicable.

System programmer response: For persistent COMMAND TIMED OUT failures, obtain a TCP/IP CTRACE with the VTAM option and contact IBM software support services.

User response: Follow the procedure described in the Problem Determination and re-submit the DISPLAY TCPIP,,OSAINFO command.

EZD0031I • EZD0032I

Problem determination:

- If the *reason* value is LINK OR INTERFACE DOES NOT EXIST, issue the DISPLAY TCPIP,,NETSTAT,DEVLINKS command.
- If the *reason* value is LINK OR INTERFACE NOT ACTIVE, start the LINK or INTERFACE.
- If the *reason* value is LINK OR INTERFACE DOES NOT SUPPORT DISPLAY OSAINFO, either the LINK or INTERFACE is not OSA-Express or the OSA-Express must be upgraded prior to issuing this command. DISPLAY TCPIP,,OSAINFO is limited to OSA-Express3 ethernet features in QDIO mode (CHPID type OSD, OSM, or OSX).
- If the *reason* value is COMMAND ALREADY IN PROGRESS, wait for the previous command to complete.
- If the *reason* value is STORAGE NOT AVAILABLE, determine and fix the reason for the storage shortage. See the information about the diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems.
- If the *reason* value is COMMAND TIMED OUT, the OSA-Express is either extremely busy or an internal error occurred. If the failure persists contact the system programmer.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND, EZBIFDOB

Routing code: *

Descriptor code: *

Automation: Not applicable.

Example:

EZD0030I DISPLAY OSAINFO FAILED FOR NSQDIO11 - LINK OR INTERFACE DOES NOT EXIST

EZD0031I TCP/IP CS *versionRelease* TCPIP Name: *name time*

Explanation: This is the first message in the DISPLAY TCPIP,,OSAINFO command report. See the information about the DISPLAY TCPIP,,OSAINFO command in z/OS Communications Server: IP System Administrator's Commands for a detailed description of the report.

EZD0032I IPV6 PATH MTU DISCOVERY SUPPORT IS DISABLED FOR ROUTE TABLE *table*

Explanation: IPv6 path MTU discovery support was disabled for the specified policy-based route table. This occurred because a value of Yes was coded for the IgnorePathMtuUpdate6 parameter on the RouteTable policy statement that defined the route table.

In the message text:

table

The name of a policy-based route table

System action: TCP/IP continues. IPv6 path MTU discovery updates will not be applied to any routes in the specified route table.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZB6PPBR

Routing code: 2

Descriptor code: 12

Automation: This message is displayed on the console. Automation can detect when IPv6 path MTU discovery support is disabled for a policy-based route table.

Example:

EZD0032I IPV6 PATH MTU DISCOVERY SUPPORT IS DISABLED FOR ROUTE TABLE FTPRTES6

EZD0033I GATEWAY ADDRESS *ipaddress* SPECIFIED IN ROUTE TABLE *rttable* IS NOT VALID

Explanation: A route entry or dynamic routing parameter entry in the specified policy-based route table contains a gateway address that is not valid. This message might be issued because the gateway address is a local address.

In the message text:

ipaddress

The gateway address specified on a route entry or dynamic routing parameter entry in a RouteTable statement defined in a Policy Agent configuration file.

rttable

The name of the route table in a Policy Agent configuration file.

System action: Processing continues. The route is not added to the policy-based route table.

Operator response: Contact the system programmer.

System programmer response: Correct the entry in the RouteTable statement in the Policy Agent configuration file. See the information about the policy-based routing (Routing) policy statements in z/OS Communications Server: IP Configuration Reference for information about configuring a route entry or dynamic routing parameters entry.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBIPRTE, EZBIPPBR, EZB6PRTE, EZB6PPBR

Routing code: 2

Descriptor code: 12

Example:

```
EZD0033I GATEWAY ADDRESS 127.0.0.2 SPECIFIED IN ROUTE TABLE FTPRTES IS NOT VALID
EZD0033I GATEWAY ADDRESS FE80::3 SPECIFIED IN ROUTE TABLE FTPRTES6 IS NOT VALID
```

EZD0034I INTERFACE *interface* SPECIFIED IN ROUTE TABLE *rttable* IS NOT VALID

Explanation: A route entry or dynamic routing parameters entry in the specified policy-based route table contains an interface that is not valid. This message might be issued because the interface is a VIPA or loopback interface.

In the message text:

interface

The link name specified on a route entry or dynamic routing parameters entry in a RouteTable statement that is defined in a Policy Agent configuration file.

rttable

The name of the route table in a Policy Agent configuration file.

System action: Processing continues. The route is not added to the policy-based route table.

Operator response: Contact the system programmer.

System programmer response: Correct the route entry in the RouteTable statement in the Policy Agent configuration file. See the information about the policy-based routing (Routing) policy statements in z/OS Communications Server: IP Configuration Reference for more information about configuring the route entry or dynamic routing parameters entry.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBIPRTE, EZBIPPBR, EZB6PRTE, EZB6PPBR

Routing code: 2

Descriptor code: 12

EZD0035I • EZD0036I

Example:

EZD0034I INTERFACE VIPA1 SPECIFIED IN ROUTE TABLE FTPRTE IS NOT VALID

EZD0035I DESTINATION ADDRESS *ipaddress* SPECIFIED IN ROUTE TABLE *rttable* IS NOT VALID

Explanation: A route entry in the specified policy-based route table contains a destination address that is not valid. This message might be issued because the destination address is a local address.

In the message text:

ipaddress

The destination address specified on a route entry in a RouteTable statement that is defined in a Policy Agent configuration file.

rttable

The name of the route table in a Policy Agent configuration file.

System action: Processing continues. The route is not added to the policy-based route table.

Operator response: Contact the system programmer.

System programmer response: Correct the route entry in the RouteTable statement in the Policy Agent configuration file. See the information about the policy-based routing (Routing) policy statements in z/OS Communications Server: IP Configuration Reference for more information about configuring the route entry.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBIPRTE, EZB6PRTE

Routing code: 2

Descriptor code: 12

Example:

EZD0035I DESTINATION ADDRESS 10.1.1.1 SPECIFIED IN ROUTE TABLE FTPRTE IS NOT VALID

EZD0035I DESTINATION ADDRESS 2001:DB8:0:A1B::3:3 SPECIFIED IN ROUTE TABLE FTPRTE6 IS NOT VALID

EZD0036I DEVICE *device_name* DOES NOT SUPPORT DYNAMIC INBPERF

Explanation: The value DYNAMIC was specified for the INBPERF parameter on the LINK statement for an OSA-Express adapter. The OSA-Express adapter microcode level does not support the INBPERF DYNAMIC setting.

In the message text:

device_name

The name of the device from the DEVICE statement.

System action: TCP/IP activates the device with the default INBPERF parameter setting BALANCED.

Operator response: Contact the system programmer.

System programmer response: Install a level of OSA-Express microcode that supports the dynamic LAN idle function. Use the VTAM DISPLAY TRL command to determine your current OSA-Express microcode level.

See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for information about the VTAM DISPLAY TRL command.

See the 2094DEVICE Preventive Service Planning (PSP) and the 2096DEVICE Preventive Service Planning (PSP) buckets for further information about which level of OSA-Express microcode supports the dynamic LAN idle function.

See the information about DEVICE and LINK - MPCIPA OSA-Express QDIO devices information in z/OS Communications Server: IP Configuration Reference for information about the INBPERF parameter.

If you choose to not use the dynamic LAN idle function, remove the DYNAMIC value from the LINK statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFSTC

Routing code: 2,8

Descriptor code: 12

Example:

EZD0036I DEVICE OSAQDI01 DOES NOT SUPPORT DYNAMIC INBPERF

EZD0037I INTERFACE *interface_name* DOES NOT SUPPORT DYNAMIC INBPERF

Explanation: The value DYNAMIC was specified for the INBPERF parameter on the INTERFACE statement for an OSA-Express adapter. The OSA-Express adapter microcode level does not support the INBPERF DYNAMIC setting.

In the message text:

interface_name

The name of the interface from the INTERFACE statement.

System action: TCP/IP activates the associated interface with the default INBPERF parameter setting BALANCED.

Operator response: Contact the system programmer.

System programmer response: Install a level of OSA-Express microcode that supports the dynamic LAN idle function. Use the VTAM DISPLAY TRL command to determine your current OSA-Express microcode level.

See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for information about the VTAM DISPLAY TRL command.

See the 2094DEVICE Preventive Service Planning (PSP) and the 2096DEVICE Preventive Service Planning (PSP) buckets for more information about which level of OSA-Express microcode supports the dynamic LAN idle function.

See the information about INTERFACE - IPAQENET6 OSA-Express QDIO interfaces information in z/OS Communications Server: IP Configuration Reference for information about the INBPERF parameter.

If you choose to not use the dynamic LAN idle function, remove the DYNAMIC value from the INTERFACE statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFSTC

Routing code: 2,8

Descriptor code: 12

Example:

EZD0037I INTERFACE QDI06101 DOES NOT SUPPORT DYNAMIC INBPERF

EZD0038I ERROR *error_code* UPDATING DYNAMIC INBPERF SETTINGS FOR *osa_portname*

Explanation: An unexpected error occurred while dynamically updating the OSA-Express frequency of interruptions for inbound traffic.

In the message text:

error_code

The error code returned from the OSA-Express microcode.

osa_portname

The name of the device or the name of the PORTNAME parameter of the interface that encountered the error.

System action: The OSA-Express adapter will use the last successfully transmitted values to interrupt the host for inbound traffic.

EZD0039I • EZD0040I

Operator response: Contact the system programmer.

System programmer response: See OSA Reject Codes and Internal Errors in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for information about the OSA Reject Codes and a description of the error.

If the OSA-Express adapter experiences inbound performance problems, change the INBPERF setting from DYNAMIC to an alternate value on the LINK statement and INTERFACE statement representing this OSA-Express adapter. Then stop and restart the OSA-Express device and interface.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Example:

```
EZD0038I ERROR E00C UPDATING DYNAMIC INBPERF SETTINGS FOR OSAQDI04
```

EZD0039I INTERFACE *interface_name* IS NOT BROADCAST CAPABLE

Explanation: An IPAQNET interface has been activated with the IPBCAST parameter, which indicates that broadcast capability was requested; however, the interface is not broadcast capable.

In the message text:

interface_name

The name of the interface that is not broadcast capable.

System action: TCP/IP allows the interface to activate, but broadcast support for this interface will be set to no. No broadcast packets can be sent or received over this interface.

Operator response: None.

System programmer response: Install the latest level of OSA-Express microcode and restart the interface.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD0039I INTERFACE OSAQDI04 IS NOT BROADCAST CAPABLE
```

EZD0040I INTERFACE *takeover_interface_name* HAS TAKEN OVER ARP RESPONSIBILITY FOR INACTIVE INTERFACE *inactive_interface_name*

Explanation: An interface became inactive and TCP/IP detected another active interface on the same physical network that can take over ARP responsibility for the inactive interface. If the inactive interface becomes active again, then TCP/IP reassigns the ARP responsibility to that interface. See the information about interface-layer fault-tolerance for local area networks (interface-takeover function) in z/OS Communications Server: IP Configuration Guide for more information about the interface-takeover function.

In the message text:

takeover_interface_name

The name of the interface that took over the ARP responsibility.

inactive_interface_name

The name of the inactive interface.

System action: TCP/IP assigns ARP responsibility for the inactive interface to the takeover interface. TCP/IP sends a gratuitous ARP for the IP address of the inactive interface and uses the takeover interface to reply to ARP requests on behalf of the inactive interface.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Automation: This message replaces message EZZ4329I, which was retired in V1R10.

Example:

EZD0040I INTERFACE OSAQDI02 HAS TAKEN OVER ARP RESPONSIBILITY FOR INACTIVE INTERFACE OSAQDI01

EZD0041I INTERFACE *takeback_interface_name* HAS TAKEN BACK ARP RESPONSIBILITY FROM INTERFACE *takeover_interface_name*

Explanation: An interface that previously had its ARP responsibility taken over by another interface became active again, so it took back the ARP responsibility. See the information about interface-layer fault-tolerance for local area networks (interface-takeover function) in z/OS Communications Server: IP Configuration Guide for more information about the interface-takeover function.

In the message text:

takeback_interface_name

The name of the interface that took back the ARP responsibility.

takeover_interface_name

The name of the interface that released the ARP responsibility.

System action: TCP/IP reassigns ARP responsibility to the takeback interface. TCP/IP sends a gratuitous ARP for the IP address of the takeback interface that will reply to ARP requests as the owner.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFSTC

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD0041I INTERFACE OSAQDI01 HAS TAKEN BACK ARP RESPONSIBILITY FROM INTERFACE OSAQDI02

EZD0042I AUTOCONFIGURATION OF TEMPORARY ADDRESSES IS DISABLED FOR INTERFACE *interface_name*

Explanation: The TCP/IP stack attempted three times to generate a temporary autoconfigured address and to verify that it was unique. During the verification of each of the generated temporary addresses, another node on the link indicated that it was already using the address. Autoconfiguration of temporary addresses is disabled.

In the message text:

interface_name

The name of the IPv6 interface for which autoconfiguration is disabled.

System action: TCP/IP continues.

Operator response: If temporary addresses are not necessary for this interface, no action is required. The interface remains active and autoconfigured public addresses are unaffected. If you want temporary addresses to be generated for the interface, contact the system programmer.

System programmer response: Use the INTERFACE ADDTEMPPREFIX configuration statement to enable temporary address autoconfiguration on the interface for a specific set of prefixes or for all prefixes. Issue a VARY TCPIP,,OBEYFILE command to update the configuration. See the information about the INTERFACE statement in z/OS Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: For each of the temporary addresses that was rejected, message EZZ9780I is generated.

Source: z/OS Communications Server TCP/IP

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: This message goes to the console.

Example:

EZD0042I AUTOCONFIGURATION OF TEMPORARY ADDRESSES IS DISABLED FOR INTERFACE QDI06

EZD0043I RANDOM HISTORY VALUE FOR INTERFACE *interface_name* GENERATED BY *function* , ICSF *status* , ICSF RETURN CODE= *return_code* , ICSF REASON CODE= *reason_code*

Explanation: When IPv6 temporary address autoconfiguration is supported for an interface, a random interface ID is generated for the interface. A history value is used as part of the algorithm to generate the random interface ID. The first time that an interface is started a random number generator is used to generate the history value.

If the cryptographic hardware is available, the Intergrated Cryptographic Service Facility (ICSF) callable service CSNBRNG generates the history value. If the cryptographic hardware is not available or an error occurs using CSNBRNG, a software random number generator generates the history value.

In the message text:

interface_name

The name of the IPv6 interface for which the history value was generated.

function

Indicates whether the history value was generated by the ICSF callable service CSNBRNG random number generator or by a software random number generator.

status

Indicates whether ICSF is active.

return_code

The return code value, in hexadecimal format, that was returned by the ICSF service. This field is relevant only if the *status* value is ACTIVE. Otherwise, the value N/A is displayed.

reason_code

The reason code value, in hexadecimal format, that was returned by the ICSF service. This field is relevant only if the *status* value is ACTIVE. Otherwise, the value N/A is displayed.

System action: TCP/IP continues.

Operator response: Not applicable.

System programmer response: This is an informational message. No action is required.

If the history value was generated by a software random number generator and you want the value to be generated by the ICSF CSNBRNG random number generator, then use the ICSF status, return code, and reason code to determine the problem. When the problem is resolved, the ICSF CSNBRNG random number generator will be used to generate the next history value. The history value is generated only the first time that an interface is started after the TCP/IP stack is started.

User response: Not applicable.

Problem determination: If the *status* value indicates that ICSF is INACTIVE, start ICSF. If the ICSF return code or reason code is a nonzero value, then see the ICSF return and reason codes information in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.

Source: z/OS Communications Server TCP/IP

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: This message goes to the console.

Example: In this example, ICSF is not active. A software random number generator generated the history value.

```
EZD0043I RANDOM HISTORY VALUE FOR INTERFACE QDI06 GENERATED BY SOFTWARE , ICSF INACTIVE ,
      ICSF RETURN CODE= N/A , ICSF REASON CODE= N/A
```

In this example, ICSF is active and the ICSF module CSNBRNG successfully generated the history value.

```
EZD0043I RANDOM HISTORY VALUE FOR INTERFACE QDI06 GENERATED BY CSNBRNG , ICSF ACTIVE ,
      ICSF RETURN CODE= 0 ICSF REASON CODE= 0
```

In this example, ICSF is active and an unsuccessful attempt was made to generate the history value using the ICSF module CSNBRNG. A software random number generator generated the history value.

```
EZD0043I RANDOM HISTORY VALUE FOR INTERFACE QDI06 GENERATED BY SOFTWARE , ICSF ACTIVE ,
      ICSF RETURN CODE= C , ICSF REASON CODE= 2B34
```

EZD0044I INTERFACE *interface_name* NOT ALLOWED - *reason*

Explanation: The stack could not define the interface because the interface did not adhere to the rules for defining multiple VLAN interfaces to the same OSA-Express port or HiperSockets™ CHPID. See the information about OSA VLAN or HiperSockets and VLAN in z/OS Communications Server: IP Configuration Guide for more information about these rules. This message provides more details for message EZZ0618I.

In the message text:

interface_name

The name of the interface.

reason

The reason for the rejection. Possible values are:

NO VLAN ID

The INTERFACE statement did not specify the VLANID parameter.

NO VLAN ID FOR AN EARLIER DEFINITION

A previous INTERFACE statement for the same OSA-Express port did not specify the VLANID parameter.

VLAN ID NOT UNIQUE

The VLANID parameter on the INTERFACE statement conflicts with the VLANID parameter on a previous INTERFACE statement for the same OSA-Express port.

NOT VMAC ROUTEALL

The INTERFACE statement did not specify the VMAC parameter value ROUTEALL.

EZD0045I

NOT VMAC ROUTEALL FOR AN EARLIER DEFINITION

A previous INTERFACE statement for the same OSA-Express port did not specify the VMAC parameter value ROUTEALL.

NO SUBNET MASK

The INTERFACE statement did not specify a subnet mask.

NO SUBNET MASK FOR AN EARLIER DEFINITION

A previous INTERFACE statement for the same OSA-Express port did not specify a subnet mask.

SUBNET NOT UNIQUE

The subnet specified by the INTERFACE overlaps with the subnet specified by a previous INTERFACE statement for the same OSA-Express port.

EXCEEDED MAXIMUM NUMBER OF VLANS

There are already 32 INTERFACE statements for the same OSA-Express port for this IP version.

System action: TCP/IP continues with profile processing, but ignores this INTERFACE statement.

Operator response: Contact the system programmer.

System programmer response: Correct the TCPIP profile to adhere to the rules for defining multiple VLAN interfaces to the same OSA-Express port and restart the stack.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBIFIOC

Routing code: 2, 8

Descriptor code: 12

Example:

EZD0044I INTERFACE OSAQDI02 NOT ALLOWED - VLAN ID NOT UNIQUE

EZD0045I INTERFACE *interface_name* DOES NOT SUPPORT OLM

Explanation: The OLM parameter was specified on the INTERFACE statement for this device but the OSA-Express adapter microcode level does not support optimized latency mode.

In the message text:

interface_name

The name of the interface.

System action: TCP/IP activates the device without optimized latency mode enabled.

Operator response: Contact the system programmer.

System programmer response: Either install an OSA-Express Licensed Internal Code (LIC) level that supports optimized latency mode or remove the OLM parameter from the INTERFACE statement. Optimized latency mode is limited to OSA-Express3 ethernet features in QDIO mode running on an IBM System z10™. Use the VTAM DISPLAY TRL command to determine the OSA-Express LIC level that is currently installed. See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for more information. See the 2097DEVICE Preventive Service Planning (PSP) bucket and the 2098DEVICE Preventive Service Planning (PSP) bucket for the OSA-Express LIC levels required for optimized latency mode support.

See the information about the optimized latency mode in z/OS Communications Server: IP Configuration Guide for information about the networking affects of configuring with and without optimized latency mode.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Automation: None.

Example:

EZD0045I INTERFACE OSAQDI04 DOES NOT SUPPORT OLM

EZD0046I ERROR *error_code* ENABLING OLM FOR INTERFACE *interface_name*

Explanation: An error occurred while enabling optimized latency mode for the interface.

In the message text:

error_code

The error code returned from the OSA-Express microcode.

interface_name

The name of the interface.

System action: TCP/IP activates the device without optimized latency mode enabled.

Operator response: Contact the system programmer.

System programmer response: See OSA Error Codes in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for a description of the error code and potential action.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2,8

Descriptor code: 12

Automation: None

Example:

EZD0046I ERROR 0001 ENABLING OLM FOR INTERFACE OSAQDI04

EZD0047I ERROR *error_code* REGISTERING DVIPA *ipaddr* FOR SYSPLEX DISTRIBUTOR WORKLOAD QUEUEING ON INTERFACE *interface_name*

Explanation: An error occurred while the stack was registering an IP address for sysplex distributor inbound workload queueing.

In the message text:

error_code

The OSA reject code that is returned from the OSA-Express microcode.

ipaddr

The distributed dynamic VIPA that was configured on a VIPADISTRIBUTE statement.

interface_name

The name of the OSA-Express QDIO interface that supports inbound workload queueing.

System action: Sysplex distributor traffic that is received over this interface for this distributed DVIPA is not eligible for inbound workload queueing. Instead, OSA-Express delivers this traffic to the stack using the primary input queue.

Operator response: Contact the system programmer.

System programmer response: See OSA Error Codes in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for a description of the error code and potential action.

User response: Not applicable.

EZD0048I • EZD0049I

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2.8

Descriptor code: 12

Automation: None.

Example:

```
ERROR 0002 REGISTERING DVIPA 197.20.1.1 FOR SYSPLEX DISTRIBUTOR WORKLOAD QUEUEING ON INTERFACE OSAQDI02
```

EZD0048I INTERFACE *interface_name* DOES NOT SUPPORT QDIO INBOUND WORKLOAD QUEUEING

Explanation: The WORKLOADQ parameter was specified on the INTERFACE statement for this device in the TCP/IP profile. The OSA-Express adapter microcode level for this device does not support QDIO inbound workload queueing.

In the message text:

interface_name

The name of the interface.

System action: TCP/IP activates the device without QDIO inbound workload queueing enabled.

Operator response: Contact the system programmer.

System programmer response: Either install an OSA-Express Licensed Internal Code (LIC) level that supports QDIO inbound workload queueing or remove the WORKLOADQ parameter from the INTERFACE statement. QDIO inbound workload queueing is limited to OSA-Express3 ethernet features in QDIO mode (CHPID type OSD) that are running on an IBM System z10. Use the VTAM DISPLAY TRL command to determine what OSA-Express LIC level is currently installed. See the information about the DISPLAY TRL command in z/OS Communications Server: SNA Operation for more information. See the 2097DEVICE Preventive Service Planning (PSP) bucket and the 2098DEVICE Preventive Service Planning (PSP) bucket for the OSA-Express LIC levels required for QDIO inbound workload queueing support.

See the information about the QDIO inbound workload queueing in z/OS Communications Server: IP Configuration Guide for information about the networking affects of configuring with and without the WORKLOADQ parameter.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2.8

Descriptor code: 12

Automation: None.

Example:

```
EZD0048I INTERFACE OSAQDI04 DOES NOT SUPPORT QDIO INBOUND WORKLOAD QUEUEING
```

EZD0049I ERROR *error_code* REGISTERING IP ADDR *ipaddr* AND PORT *port* FOR EE WORKLOAD QUEUEING ON INTERFACE *interface_name*

Explanation: An error occurred while the stack was registering an IP address and port for Enterprise Extender inbound workload queueing.

In the message text:

error_code

The OSA reject code returned from the OSA-Express microcode.

ipaddr

The static VIPA used for Enterprise Extender.

port

The UDP port used for Enterprise Extender.

interface_name

The name of the OSA-Express QDIO interface that supports inbound workload queueing.

System action: Enterprise Extender traffic that is received over this interface for this IP address and port is not eligible for inbound workload queuing. Instead, OSA-Express delivers this traffic to the stack by using the primary input queue.

Operator response: Contact the system programmer.

System programmer response: See OSA Error Codes in zEnterprise System and System z10 OSA-Express Customer's Guide and Reference for a description of the error code and potential action.

User response: Not applicable.

Problem determination: Not Applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIFIND

Routing code: 2, 8

Descriptor code: 12

Automation: Not applicable.

Example:

```
ERROR 0002 REGISTERING IP ADDR 200.1.1.1 AND PORT 12000 FOR EE WORKLOAD QUEUEING ON INTERFACE OSAQDI02
```

EZD0101I NETSTAT *versionRelease*

Explanation: This message displays the current version and release for the command being displayed in the LONG format. The message is followed by the output for the requested command report. See the Netstat report details and examples in z/OS Communications Server: IP System Administrator's Commands for a detailed description of the report.

System action: The Display Netstat command continues.

Operator response: None.

System programmer response: None.

Module: EZACDNE6

Procedure name: procACCN6(), procALLC6(), procARP(), procBYTE6(), procCACH6(), procCNFG6(), procCONN6(), procDEVL6(), procDVCF6(), procHOME6(), procIDS6(), procND6(), procPORT6(), procROUT6(), procSOCK6(), procSTAT6(), procVCRT6(), procVDPT6(), procVIPA6()

EZD0800I *proc_name* IP ADDRESS *ip_address* IS NOT VALID FOR USE IN ENTERPRISE EXTENDER

Explanation: The IP address is not valid. The IP address was not defined to the TCP/IP stack or was defined as a loopback address.

proc_name is the name of the started task associated with the TCP/IP address space.

ip_address is the Internet protocol address defined in SNA for the Enterprise Extender connection.

System action: The Enterprise Extender connection using this IP address as the local address fails.

Operator response: None.

System programmer response: Ensure that the IP address for Enterprise Extender defined in SNA matches a static VIPA address defined in this TCP/IP stack. The IP address is defined in SNA using the IPADDR or HOSTNAME start options or the IPADDR or HOSTNAME GROUP operands in the XCA major node. For more information, see z/OS Communications Server: SNA Resource Definition Reference.

EZD0801I • EZD0802I

Module: EZBUDBYP

Procedure name: OpenReq

EZD0801I *proc_name IP ADDRESS ip_address IS NOT A VALID STATIC VIPA ADDRESS*

Explanation: The local IP address requested for an Enterprise Extender connection is not defined as one of the static VIPA addresses in this TCP/IP stack.

proc_name is the name of the started task associated with the TCP/IP address

space. *ip_address* is the Internet protocol address defined in SNA for the Enterprise Extender connection.

System action: The Enterprise Extender connection using this IP address as the local address fails.

Operator response: None.

System programmer response: Ensure that the Enterprise Extender definitions defined in SNA match the static VIPA definitions in your TCP/IP profile. The IP address is defined in SNA using the IPADDR or HOSTNAME start options or the IPADDR or HOSTNAME GROUP operands in the XCA major node. For more information, see z/OS Communications Server: SNA Resource Definition Reference.

Module: EZBUDBYP

Procedure name: OpenReq

EZD0802I *proc_name ENTERPRISE EXTENDER CONNECTION FAILURE ON IP ADDRESS ip_address REASON reason*

Explanation: An Enterprise Extender connection using this IP address failed for the reason indicated.

In the message text:

proc_name

The name of the started task associated with the TCP/IP address space.

ip_address

The IP address defined in SNA for the Enterprise Extender connection.

reason

A code identifying the reason for the failure. Possible values are:

- X'08'** The IP address requested or used by the caller is not a valid IP address for the stack.
- X'0C'** The IP address requested or used by the caller is not a valid VIPA address for the stack.
- X'10'** The port number requested by the caller cannot be reserved.
- X'14'** The parameter passed by the caller is not valid for the requested operation.
- X'18'** The state of the UDP connection is not valid for the requested operation.
- X'1C'** The requested destination for the datagram is unreachable.
- X'20'** The caller is not authorized to perform the requested operation.
- X'24'** The requested operation cannot be completed as a result of a storage failure.
- X'28'** The requested datagram to be sent exceeds the stack's maximum, or a received datagram has a data length of zero.
- X'40'** The requested operation could not be completed because of a permanent error.

System action: The Enterprise Extender connection using this IP address as the local address fails.

System programmer response: Save the system log and contact IBM service.

User response: Contact the system programmer.

Module: EZBIFIUM

Procedure name: ClearMPC

EZD0810I IPSec Suppressed logging of *number* packet message(s) due to buffer overflow: *timestamp*

Explanation: The stack ipsec log buffer overflowed. Log entries for the number of packets indicated cannot be logged.

number is the number of log entries.

timestamp indicates when the buffer overflow occurred. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

System action: TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: You might be logging messages that are not required or your IP Security stack might be under a denial-of-service attack. Ensure that you are logging only items of interest. For example, broadcast messages should have a deny rule with the IpFilterLogging option set to no to prevent filling up the log. If you are under attack, log processing will return to normal when the attack ends.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0811I Decapsulation failed: *timestamp* *sipaddr*= *sipaddr* *dipaddr*= *dipaddr* *proto*= *proto* *vpnaction*= *vpnaction* *tunnelID*= *tunID* *AHSPI*= *AHindex* *ESPSPi*= *ESPindex* *rsn*=*rsn* **ICSF Return Code= *return_code* **ICSF Reason Code** = *reason_code* *ikeport*= *ikeport***

Explanation: The IPSec packet cannot be decapsulated by the receiving stack and is discarded.

timestamp indicates when the decapsulation failure occurred. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- The protocol number

vpnaction is the *vpnaction* name. If no tunnel is found, *vpnaction* displays N/A.

- In the Policy Agent configuration file:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID. If the value of *vpnaction* is N/A, a tunnel with matching end points and security parameter indices (spi) could not be found.

EZD0811I

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

rsn indicates the specific reason decapsulation failed.

rsn Value	Explanation	Comments
1	Decryption failed	This problem might be caused by a transmission error or by a sender error. For manual tunnels, this might be the result of a policy definition error.
2	AH authentication failed	This problem might be caused by a transmission error or by a sender error. For manual tunnels, this might be the result of a policy definition error. This problem might also be caused by a failure in an ICSF service. If so, the specific failure will be reported on the ICSF Return Code and ICSF Reason Code fields.
3	ESP authentication failed	This problem might be caused by a transmission error or by a sender error. For manual tunnels, this might be the result of a policy definition error. This problem might also be caused by a failure in an ICSF service. If so, the specific failure will be reported on the ICSF Return Code and ICSF Reason Code fields.
4	Out of Replay window	A transmission error might have occurred or a packet might have been delayed.
6	Unknown authentication algorithm	An internal error occurred while authenticating the packet.
7	Unknown encryption algorithm	An internal error occurred while decrypting the packet.
8	No tunnel found for AH SPI	This message might be the result of a timing condition. On tunnel activation this message might be seen if packets are sent while one tunnel endpoint has the tunnel installed and the other tunnel endpoint does not. In this case, this is a transient condition and no action is required. For manual tunnels, this might be the result of a policy definition error. This message can also be the result of a transmission error or a sender error.
9	No tunnel found for ESP SPI	This message might be the result of a timing condition. On tunnel activation this message might be seen if packets are sent while one tunnel endpoint has the tunnel installed and the other tunnel endpoint does not. In this case, this is a transient condition and no action is required. For manual tunnels, this might be the result of a policy definition error. This message can also be the result of a transmission error or a sender error.
10	More than one tunnel matched during decapsulation	This might be due to one of the following problems: <ul style="list-style-type: none">• For manual tunnels, there is an error in the spi values specified in the policy definition.• The packet is protected by nested tunnels and z/OS is the endpoint for more than 1 of these tunnels. This configuration is not supported by z/OS

<i>rsn</i> Value	Explanation	Comments
11	IPSec headers did not match tunnel definition	The policy, either the AH policy, the ESP policy, or both, defined for the tunnel did not match the IPSec protocols in the packet. For example, the policy specified encryption was required but no ESP header was found. For manual tunnels, this is most likely a policy definition error.
12	AH and ESP headers not in expected sequence	For manual tunnels, this might be a result of a policy definition error.
13	Storage shortage	Storage to complete the request is not currently available. Until the storage shortage is relieved, decapsulation will fail.
14	Encrypted data length is not a multiple of 8 bytes or 16 bytes if AES encryption or decryption is being used	This problem might be caused by a transmission error or by faulty encryption of the data by the sender.
15	No data was sent in the packet	This problem might be caused by a transmission error or by a sender error.
16	The packet is too small to contain the AH or ESP header	This problem might be caused by a transmission error or by a sender error.
17	Invalid IP option length	This problem might be caused by a transmission error or by a sender error.
18	UDP Encapsulation mismatch	Either the packet was UDP-encapsulated and the tunnel did not indicate UDP encapsulation or the packet was not UDP-encapsulated and the tunnel expected UDP encapsulation.
19	Nested UDP-encapsulated headers	This configuration is not supported by z/OS.
24	Failure in ICSF Service	The ICSF Return Code and the ICSF Reason Code fields contain the return and reason codes that were returned from the ICSF service.
25	ICSF is not available	Either ICSF is not active or it has not completed initialization.
26	Encapsulation mismatch	The packet encapsulation did not match the local tunnel policy.

return_code is the return code value, in hexadecimal format, returned from the ICSF service.

reason_code is the reason code value, in hexadecimal format, returned from the ICSF service.

ikeport is the source port from the UDP encapsulation header. If the packet is not UDP encapsulated, the *ikeport* value is N/A.

System action: TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: The system programmer response depends on the *rsn* value:

<i>rsn</i> Value	System programmer response
1, 2, 3	<p>If the problem is transient, no action is required. For manual tunnels, verify that the security parameters and encryption keys on the IpManVpnAction statement are correctly defined. When configured with the IBM Configuration Assistant for z/OS Communications Server, the IpManVpnAction name corresponds to the name of the security level in the GUI. The IpManVpnAction name also contains a suffix that is appended to the security level name to guarantee uniqueness. For more details about the IpManVpnAction statement, see the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Otherwise, ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p> <p>If the problem was due to an ICSF failure, then see the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.</p>
4	<p>If the problem is transient, no action is required. Otherwise, ensure that the tunnel is defined and activated correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. The ipsec command can also be used to refresh or activate a tunnel. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>
6, 7	<p>Contact the IBM Software Support Center.</p>
8, 9	<p>If the problem is transient, no action is required. For manual tunnels, verify the security parameters and encryption keys on the IpManVpnAction statement are correctly defined. For more details about the IpManVpnAction statement, see the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Otherwise, ensure that the tunnel is defined and activated correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. The ipsec command can also be used to refresh or activate a tunnel. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>
10	<p>Ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>
11, 12	<p>For manual tunnels, verify the security parameters and encryption keys on the IpManVpnAction statement are correctly defined. For more details about the IpManVpnAction statement, see the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Otherwise, ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>
13	<p>Determine the cause of the storage shortage.</p>
14, 15, 16, 17	<p>If the problem is transient, no action is required. Otherwise, ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>
18, 19	<p>Ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.</p>

<i>rsn</i> Value	System programmer response
24	See the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.
25	Start ICSF if it is not active.
26	Contact the IBM Software Support Center.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0812I Tunnel deleted: *timestamp vpnaction= vpnaction tunnelID= tunID AHSPPI= AH_index ESPSPI= ESPindex*

Explanation: The specified tunnel is deleted from the stack.

timestamp indicates when the tunnel was deleted. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name.

- In the policy agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

AH_index is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0813I Tunnel expired: *timestamp vpnaction= vpnaction tunnelID= tunID AHSPPI= AHindex ESPSPI= ESPindex*

Explanation: The specified tunnel expired. The tunnel was marked inactive but was not deleted from the stack.

timestamp indicates the time the tunnel expired. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name.

- In the policy agent configuration file:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

EZD0814I

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0814I **Packet permitted:** *timestamp filter rule= rulename ext= instance sipaddr= sipaddr dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir) secclass= secclass dest= dest len= len vpnaction= vpnaction tunnelID= tunID ifcname= ifcname fragment= frag*

Explanation: An IP packet matched the indicated filter rule and was permitted. For this message to be written, the matched filter rule must have IpFilterLogging set to yes.

timestamp is the stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename is the filter rule name. If the IP packet matched a dynamic filter rule, the rule name of the corresponding anchor filter rule will be displayed; otherwise, the rule name of the matching filter rule will be displayed.

- In the policy agent configuration file, *rulename* is the name specified on the IpFilterRule statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rulename* corresponds to the name of a Connectivity Rule in the GUI. *rulename* also contains a suffix appended to the Connectivity Rule name to guarantee uniqueness.

instance is the rule name extension that indicates which instance of the rule name was matched.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol of the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.

- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

secclass is the security class assigned to the interface. Security class is a numeric value in the range of 0–255.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

vpnaction is the vpnaction name. If no tunnel is associated with the matched filter, *vpnaction* displays N/A.

- In the policy agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

ifcname is the interface name.

frag specifies whether the packet is a fragment. The value is **Y** if the packet is a fragment, or **N** if the packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

EZD0815I

Module: EZATRMD

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD0814I Packet permitted: 07/05/2007 16:19:44.39 filter rule= ipsec-2 ext= 1 sipaddr= 9.42.130.185  
dipaddr= 10.1.1.1 proto= tcp(6) sport= 80 dport= 1026 -- Interface= 9.1.1.1 (0) secclass= 255  
dest= local len= 284 vpnaction= DynAction tunnelID= Y4 ifcname= TRLE1AL fragment= N
```

```
EZD0815I Packet denied by policy: timestamp filter rule= rulename ext= instance sipaddr= sipadd dipaddr= dipaddr  
proto= proto tag1 tag2 tag3 Interface= ifcaddr ( dir ) secclass= secclass dest= dest len= len vpnaction=  
vpnaction tunnelID= tunID ifcname= ifcname fragment= frag
```

Explanation: An IP packet matched the indicated deny filter rule. For this message to be written, the matched filter rule must have IpFilterLogging set to yes.

timestamp is the stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename is the filter rule name. If the IP packet matched a dynamic filter rule, the rule name of the corresponding anchor filter rule will be displayed; otherwise, the rule name of the matching filter rule will be displayed.

- In the policy agent configuration file, *rulename* is the name specified on the IpFilterRule statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rulename* corresponds to the name of a Connectivity Rule in the GUI. *rulename* also contains a suffix appended to the Connectivity Rule name to guarantee uniqueness.

instance is the rule name extension that indicates which instance of the rule name was matched.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol of the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- MIPv6(135)
- IPIP(94)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.

- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

secclass is the security class assigned to the interface. Security class is a numeric value in the range of 0–255.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

vpnaction is the vpnaction name. If no tunnel is associated with the matched filter, *vpnaction* displays N/A.

- In the policy agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

ifcname is the interface name

tunID is the tunnel ID.

frag specifies whether the packet is a fragment. The value is **Y** if the packet is a fragment, or **N** if the packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

EZD0816I • EZD0818I

Module: EZATRMD

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD0815I Packet denied by policy: 07/05/2007 16:19:44.39 filter rule= deny-2 ext= 1 sipaddr= 9.42.130.185  
dipaddr= 10.1.1.1 proto= tcp(6) sport= 1026 dport= 80 -- Interface= 9.1.1.1 (I) secclass= 255  
dest= local len= 284 vpnaction= N/A tunnelID= N/A ifcname= TRLE1AL fragment= N
```

EZD0816I IPSec Policy updated: *timestamp* **type**= *policy_type* **status**= *policy_status*

Explanation: The Pagent policy or Default policy was updated.

timestamp indicates the time the policy change occurred in the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

policy_type indicates the type of policy updated. Valid types are **Pagent** or **Default**.

policy_status indicates whether the policy type updated was active or inactive. Possible values are **Active** or **Inactive**. For example, if the default policy was updated but the policy that was active at the time of the update was provided by pagent, *policy_status* will be **Inactive**.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0817I IPSec Policy switched to *policy_type* policy: *timestamp*

Explanation: The type of policy being used was changed as a result of the **ipsec -f default** or **ipsec -f reload** command.

policy_type indicates the type of policy that is now active as a result of the policy switch. Possible values are:

Pagent Indicates that the new policy is the IPSEC policy defined in Pagent.

Default

Indicates that the new policy is the IPSEC policy defined in the TCP/IP configuration file.

timestamp indicates the time the policy change occurred in the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0818I Tunnel added: *timestamp* **vpnaction**= *vpnaction* **tunnelID**= *tunID* **AHSPI**= *AHindex* **ESPSPPI**= *ESPindex*

Explanation: The specified tunnel was added to the stack.

timestamp indicates the time at which the tunnel was added by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name.

- In the policy agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0819I Tunnel activated: *timestamp vpnaction= vpnaction tunnelID= tunID AHSPI= AHindex ESPSPI= ESPindex*

Explanation: The specified manual tunnel was activated in the stack.

timestamp indicates the time at which the tunnel was activated. This time is retrieved from the systems time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name.

- In the policy agent configuration file, *vpnaction* is the name specified on the IpManVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0820I Tunnel deactivated: *timestamp vpnaction= vpnaction tunnelID= tunID AHSPI= AHindex ESPSPI= ESPindex*

Explanation: The specified manual tunnel was deactivated but was not deleted from the stack.

timestamp indicates the time at which the tunnel was deactivated. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name.

EZD0821I

- In the policy agent configuration file, *vpnaction* is the name specified on the IpManVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

tunID is the tunnel ID.

AHindex is the AH security parameter index.

ESPinindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0821I *Packet denied, no tunnel: timestamp filter rule= rulename ext= instance sipaddr= sipaddr dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir) secclass= secclass dest= dest len= len vpnaction= vpnaction ifcname= ifcname fragment= frag*

Explanation: An IP packet matched the indicated filter rule but no matching tunnel was found. For this message to be written, the matched filter rule must have IpFilterLogging set to yes.

timestamp is the stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename is the filter rule name. If the IP packet matched a dynamic filter rule, the rule name of the corresponding anchor filter rule will be displayed; otherwise, the rule name of the matching filter rule will be displayed.

- In the policy agent configuration file, *rulename* is the name specified on the IpFilterRule statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rulename* corresponds to the name of a Connectivity Rule in the GUI. *rulename* also contains a suffix appended to the Connectivity Rule name to guarantee uniqueness.

instance is the rule name extension that indicates which instance of the rule name was matched.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

secclass is the security class assigned to the interface. Security class is a numeric value in the range of 0–255.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

vpnaction is the vpnaction name. If no tunnel is associated with the matched filter, *vpnaction* displays N/A.

- In the policy agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, *vpnaction* is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, *vpnaction* is the name specified on the IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix appended to the security level name to guarantee uniqueness.

ifcname is the interface name

frag specifies whether the packet is a fragment. The value is **Y** if the packet is a fragment, or **N** if the packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: For manual tunnels, verify that the IPSecurity policy defined a tunnel and that the time conditions are correct.

EZD0822I

For dynamic tunnels, this message can occur if the tunnel is not found and **AllowOnDemand No** is specified in the policy. If this traffic should be allowed, either activate the tunnel using the **ipsec** command or change the policy to allow OnDemand negotiations of Security Associations.

- In the policy agent configuration file, take the following actions:
 - Set the time conditions by using the **IpTimeCondition** statement. Time conditions can be included in an **IpFilterRule** statement or in an **IpManVpnAction** statement.
 - Set **AllowOnDemand** on either the **IpFilterPolicy** statement or on an **IpLocalStartAction** statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, take the following actions:
 - Set the time conditions in the Advanced Settings panel of a security level that is defined as a manual tunnel or in the Connectivity Rule Advanced IPSec: Filter Logging / Effective Time panel
 - Set **AllowOnDemand** on the Connectivity Rule Advanced IPSec: Dynamic Tunnels: How to Activate panel.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code:

Descriptor code:

Automation: Not applicable.

Example:

```
EZD0821I Packet denied, no tunnel: 07/05/2007 16:19:44.39 filter rule= ipsec-2 ext= 1  
      sipaddr= 9.42.130.185 dipaddr= 10.1.1.1 proto= tcp(6) sport= 80 dport= 1026 --  
      Interface= 9.1.1.1 (0) secclass= 255 dest= local len= 284 vpnaction= DynAction  
      ifcname= TRLE1AL fragment= N
```

EZD0822I **Packet denied, tunnel inactive:** *timestamp filter rule= rulename ext= instance sipaddr= sipaddr dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir) secclass= secclass dest= dest len= len vpnaction= vpnaction tunnelID= tunID ifcname= ifcname fragment= frag*

Explanation: An IP packet matched the indicated filter rule but the tunnel is not active. For this record to be written, the matched filter rule must have **IpFilterLogging** set to **yes**.

timestamp is the stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename is the filter rule name. If the IP packet matched a dynamic filter rule, the rule name of the corresponding anchor filter rule will be displayed; otherwise, the rule name of the matching filter rule will be displayed.

instance is the rule name extension that indicates which instance of the rule name was matched.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)

- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

secclass is the security class assigned to the interface. Security class is a numeric value in the range of 0–255.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

vpnaction is applicable if a VpnAction name is associated with the matched filter. Otherwise, N/A will be shown. If the tunnel is a manual tunnel, this is the name specified on the IpManVpnAction statement. If the tunnel is a dynamic tunnel, this is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

ifcname is the interface name

frag specifies whether the packet is a fragment. The value is **Y** if the packet is a fragment, or **N** if the packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: Contact the system programmer.

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System programmer response: If the indicated tunnel should be active, use the **ipsec** command to activate the tunnel. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code:

Descriptor code:

Automation: Not applicable.

Example:

```
EZD0822I Packet denied, tunnel inactive: 07/05/2007 16:19:44.39 filter rule= ipsec-2 ext= 1  
    sipaddr= 9.42.130.185 dipaddr= 10.1.1.1 proto= tcp(6) sport= 80 dport= 1026 -=  
    Interface= 9.1.1.1 (0) secclass= 255 dest= local len= 284 vpnaction= ManualAction  
    tunnelID= M4 ifcname= TRLE1AL fragment= N
```

EZD0823I UDP Encapsulated ESP packet can not be routed: *timestamp sipaddr= sipaddr dipaddr= dipaddr proto= proto vpnaction= vpnaction tunnelID= tunID ESPSPI= ESPindex*

Explanation: The final destination address of a UDP-encapsulated ESP packet is not local. Routing beyond the tunnel endpoint is not supported for this type of encapsulation.

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

sipaddr is the public source IP address.

dipaddr is the destination IP address.

proto is the protocol from the decapsulated packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- OSPF(89)
- IPIP(94)
- The protocol number

vpnaction is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

ESPindex is the ESP security parameter index.

System action: The packet is dropped and TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: Ensure that the tunnel is defined correctly on the sending and receiving systems. See the information about IP Security in z/OS Communications Server: IP Configuration Guide for information about defining IPSec tunnels. Use the **ipsec** command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0824I Possible NAT traversal remapping detected: *timestamp original sipaddr=origsipaddr new sipaddr=newsipaddr original sport=origport new sport=newport dipaddr=dipaddr proto=proto vpnaction=vpnaction tunnelID=tunID ESPSPI=ESP SPI=tunID*

Explanation: A packet received over the specified tunnel contained a source IP address or source port that was different than the value at the time the tunnel was negotiated. If *origsipaddr* does not match *newsipaddr*, an address remapping might have occurred at the remote network address translation (NAT) device. If *origport* does not match *newport*, a port remapping might have occurred at the remote network address port translation (NAPT) device.

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

origsipaddr is the IP address of the tunnel current remote endpoint.

newsipaddr is the source IP address from the inbound packet.

origport is the remote IKE peer port at the time the tunnel was negotiated.

newport is the remote IKE peer port from the UDP encapsulation header of the inbound packet.

dipaddr is the destination IP address from the inbound packet.

proto is the protocol from the decapsulated packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- OSPF(89)
- IPIP(94)
- The protocol number

vpnaction is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

tunID is the ESP security parameter index.

System action: The current inbound packet is dropped and processing is initiated to verify whether a NAT remapping actually occurred. Subsequent packets that do not match the tunnel current remote endpoint of the IKE peer port are also dropped. TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0825I UDP encapsulated ESP unsupported protocol: *timestamp sipaddr=sipaddr dipaddr=dipaddr proto=proto vpnaction=vpnaction tunnelID=tunID ESPSPI=ESPindex*

Explanation: A UDP-encapsulated ESP packet was decapsulated, and the resulting packet contained a protocol other than TCP, UDP or ICMP. No other protocols are supported for a UDP-encapsulated ESP tunnel when the remote tunnel endpoint is a security gateway behind a NAT.

timestamp is the stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

sipaddr is the public source IP address.

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dipaddr is the destination IP address.

proto is the protocol from the decapsulated packet. Possible values are:

- IGMP(2)
- IP(4)
- OSPF(89)
- IPIP(94)
- The protocol number

vpnaction is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

ESPindex is the ESP security parameter index.

System action: The packet is discarded and TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0826I Remote port translation failed: *timestamp sipaddr= sipaddr dipaddr= dipaddr proto= proto srcport=srcport dstport=dstport ikeport=ikeport vpnaction= vpnaction tunnelID= tunID ESPSPI= ESPindex rsn= rsn*

Explanation: An unsuccessful attempt was made to perform remote port translation. The *rsn* value provides additional information about the failure.

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

sipaddr is the public source IP address.

dipaddr is the destination IP address.

proto is the protocol from the decapsulated packet. Possible values are:

- TCP(6)
- UDP(17)

srcport is the connection source port.

dstport is the connection destination port.

ikeport is the source port from the UDP encapsulation header.

vpnaction is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

ESPindex is the ESP security parameter index.

rsn is the reason code. Possible values are:

- 1 The connection source port (*srcport*) in the inbound packet was already in use by another client with the same public source IP address. No alternate port was available.
- 2 A storage shortage prevented an alternate port from being assigned.
- 3 An internal error occurred during table lookup.

- 4 An internal error prevented the port translation entry from being added.
- 6 An internal error occurred when port translation was requested for a protocol that was not valid.
- 7 An internal error prevented the port translation entry from being added.

System action: The packet is dropped and TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: The value of *rsn* determines the appropriate system programmer response.

- 1 The translated port selection is limited to the port range specified in the filter policy that the packet matches. If a translated port could not be assigned, then the maximum number of ports specified in the filter policy are in use. Use the **ipsec** command to display the filter and the port translation entries.
See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.
- See the information about remote port translation in z/OS Communications Server: IP Configuration Guide for more information about port translation.
- 2 Determine the cause of the storage shortage. See z/OS Communications Server: IP Diagnosis Guide for information about storage shortages.
- 3 If this message appears repeatedly, take a dump of TCP/IP and contact the IBM Software Support Center.
- 4 If this message appears repeatedly, take a dump of TCP/IP and contact the IBM Software Support Center.
- 6 If this message appears repeatedly, take a dump of TCP/IP and contact the IBM Software Support Center.
- 7 If this message appears repeatedly, take a dump of TCP/IP and contact the IBM Software Support Center.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0827I Remote port translated: *timestamp sipaddr= sipaddr dipaddr= dipaddr proto= proto srcport=srcport dstport=dstport ikeport=ikeyport xlateport=xlateport vpnaction= vpnaction tunnelID= tunID ESPSPI= ESPindex*

Explanation: The connection source port in the inbound packet (*srcport*) was already in use by another client with the same public source IP address and a translated source port for this client was not already assigned. A translated source port (*xlateport*) is assigned and will be used to complete the connection. Subsequent packets from this client using the same source port will also use the translated port value specified by *xlateport*.

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

sipaddr is the public source IP address.

dipaddr is the destination IP address at the time the translated source port was assigned. Subsequent packets using the translated port (*xlateport*) might have a different destination IP address.

proto is the protocol from the decapsulated packet. Possible values are:

- TCP(6)
- UDP(17)

srcport is the original connection source port.

dstport is the connection destination port at the time the translated source port was assigned. Subsequent packets using the translated port (*xlateport*) might have a different destination port.

ikeport is the source port from the UDP encapsulation header.

xlateport is the port assigned by IPSec processing that will be used on this stack in place of *srcport*.

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vpnaction is the name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

ESPindex is the ESP security parameter index.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None. This message is for informational purposes only. If it is necessary to obtain information about this connection from the client system, the original connection source port might be needed. The original source port can be found in this log message or by using the **ipsec** command to display the translated port information.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

See the information about remote port translation in z/OS Communications Server: IP Configuration Guide for additional information about port translation.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0828I **TCP remote port translation mismatch:timestamp sipaddr=sipaddr dipaddr=dipaddr srcport=srcport dstport=dstport origport=origport origininst =origininst currinst=currinst**

Explanation: The remote port translation information at the time the connection was established does not match the information assigned to the current inbound packet. This can occur if the connection was initiated in the clear but is currently using a UDP-encapsulated tunnel or vice versa. If this is the case, the value of *origininst* or *currinst* will be 0.

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

sipaddr is the public source IP address.

dipaddr is the destination IP address.

srcport is the translated connection source port.

dstport is the connection destination port.

origport is the original connection source port from the inbound packet.

origininst is the translated port instance ID at the time the connection was established.

currinst is the translated port instance ID assigned to the current packet.

System action: The packet is dropped and TCP/IP processing continues.

Operator response: Restart the TCP connection.

System programmer response: None.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0829I **Connections for DVIPA *ip_address* can not be recovered: timestamp**

Explanation: The dynamic virtual IP address (DVIPA), which is one of the endpoints of a sysplex-wide Security Association (SWSA), is being taken over by another TCPIP stack. Any connection using a UDP-encapsulated tunnel, in which the IKE daemon can act only as the responder, for either the phase 1 SA or the phase 2 SA, cannot be recovered. Because the IKE daemon can act only as the responder, the UDP encapsulated tunnel cannot be recovered by the backup stack.

ip_address is the dynamic virtual IP address (DVIPA).

timestamp is the stack timestamp that indicates the time at which the failure was detected by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

System action: The TCPIP stack taking over the DVIPA is not informed about the connections. TCP/IP processing continues.

Operator response: None.

System programmer response: None.

Module: EZATRZOS

Procedure name: trmd_ipsec_log

EZD0830I Tunnel distribution failed : *timestamp vpnaction= vpnaction tunnel ID= tunID AHSPI= AHindex ESPSPI= ESPindex*

Explanation: The specified tunnel cannot be distributed because an error occurred while initializing data in the coupling facility.

timestamp is the stack timestamp that indicates the time at which the tunnel was added by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP processing continues; the tunnel is not distributed but might be used on this system.

Operator response: Contact the system programmer. When the issue is resolved, refresh the indicated SA to allow distribution.

System programmer response: Ensure that the sysplex-wide Security Association (SWSA) coupling facility structure is set up correctly.

See the information about diagnosing sysplex-wide Security Association (SWSA) problems in z/OS Communications Server: IP Diagnosis Guide for information about diagnosing SWSA problems.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0831I Tunnel takeover preparation failed : *timestamp vpnaction= vpnaction tunnelID= tunID AHSPI= AHindex ESPSPI= ESPindex*

Explanation: The specified tunnel cannot be taken over because an error occurred while storing data into the coupling facility.

timestamp is the stack timestamp that indicates the time at which the tunnel was added by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time. This timestamp might be different than the syslogd message timestamp.

vpnaction is the vpnaction name specified on the IpDynVpnAction statement.

tunID is the tunnel ID.

AHindex is the AH security parameter index.

ESPindex is the ESP security parameter index.

System action: TCP processing continues; the tunnel cannot be taken over but might be used on this system.

Operator response: Contact the system programmer. When the issue is resolved, refresh the indicated SA to allow takeover.

EZD0832I

System programmer response: Ensure that the sysplex-wide Security Association (SWSA) coupling facility structure is set up correctly.

See the information about diagnosing sysplex-wide Security Association (SWSA) problems in z/OS Communications Server: IP Diagnosis Guide for information about diagnosing SWSA problems.

Module: EZATRMD

Procedure name: trmd_ipsec_log

EZD0832I **Packet denied by NAT Traversal Processing:** *timestamp filter rule= rulename ext= instance sipaddr= sipaddr dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir) dest= dest len= len vpnaction=vpnaction rsn=rsn ifcname= ifcname fragment= frag*

Explanation: An IP packet matched the indicated filter rule but further processing for NAT Traversal caused the packet to be denied. The *rsn* field provides more detailed information. For this message to be written, the matched filter rule must have IpFilterLogging set to yes.

timestamp is the stack timestamp that indicates the time at which the IP packet was denied by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename is the anchor filter rule name. The value of N/A is displayed when a target stack is processing an inbound packet that was received on the distributing stack as a UDP-encapsulated ESP packet. The packet was decapsulated by the distributor before the distributor forwarded it to the target stack.

instance is the rule name extension that indicates which instance of the rule name was matched. The value of N/A is displayed when a target stack is processing an inbound packet that was received on the distributing stack as a UDP-encapsulated ESP packet. The packet was decapsulated by the distributor before the distributor forwarded it to the target stack.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value:

- If the *proto* value is ICMP, the *tag1* value is **type=** followed by the ICMP type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the ICMP header is not present in the packet due to fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 is one of the following:

- If the *proto* value is ICMP, the *tag2* value is **code=** followed by the ICMP code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3value varies depending on the *proto* value and direction:

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the Communications Server NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the Communications Server NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

vpnaction is the name specified on the IpDynVpnAction statement for the referenced filter rule.

rsn is the reason code that indicates the specific NAT Traversal processing error. The *rsn* is one of the following:

<i>rsn</i> value	Affected packet	Explanation	Comments
1	Inbound TCP or UDP packet.	An internal error occurred when attempting to create a NAT Resolution Filter.	
2	Inbound TCP or UDP packet.	No storage could be allocated for a NAT Resolution Filter.	Storage to complete the request is not currently available. Until the storage shortage is relieved, packets will continue to be discarded.
3	Inbound TCP or UDP packet.	Unable to allocate a NAT Resolution Filter. The tunnel over which the packet was received cannot be found for the filter rule that the packet matched.	This could be the result of a policy mismatch between the peers. For example, an inbound packet that is received in the clear (for example, not encapsulated) but matches on a filter rule that specifies encapsulation.
4	Inbound non-TCP/UDP/ICMP packet	An inbound packet with a protocol not equal to TCP(6), UDP(17), or ICMP(1) matched on a NAT Traversal Anchor Filter.	When the IKE peer is a security gateway or the IKE peer is behind an NAPT, only inbound packets with a protocol value of TCP, UDP, or ICMP are supported over the UDP-encapsulated ESP tunnel.
5	Outbound TCP or UDP packet.	Unable to locate a matching NAT Resolution Filter.	When the IKE peer is a security gateway or the IKE peer is behind an NAPT, the NAT Resolution Filter is needed to determine which tunnel should be used for outbound packets. Data must be initiated from the client behind the security gateway or the client behind the NAPT.

<i>rsn value</i>	Affected packet	Explanation	Comments
6	Outbound non-TCP/UDP/ICMP packet	An outbound packet with a protocol not equal to TCP(6), UDP(17), or ICMP(1) matched on a NAT Traversal Anchor Filter.	When the IKE peer is a security gateway or the IKE peer is behind an NAPT, only outbound packets with a protocol value of TCP, UDP, or ICMP are supported over the UDP-encapsulated ESP tunnel.
7	Inbound ICMP packet	The tunnel over which the packet was received cannot be found for the filter rule that the ICMP packet matched.	This could be the result of a policy mismatch between the peers.
8	Outbound ICMP packet	Unable to locate the tunnel to use for the outbound packet. The outbound ICMP packet is not in response to an inbound packet.	When the IKE peer is a security gateway or the IKE peer is behind an NAPT, an outbound ICMP packet can be sent only over a UDP-encapsulated ESP tunnel in response to an inbound packet. For example, an Echo response can be sent in response to an Echo Request. Or an ICMP Port Unreachable message can be sent in response to an inbound UDP packet.
9	Outbound ICMP packet	Unable to locate the tunnel to use for the outbound packet. The outbound ICMP packet cannot use the same tunnel as the inbound request.	When the IKE peer is a security gateway or the IKE peer is behind an NAPT, an outbound ICMP packet can be encapsulated and sent over a tunnel if the following are true: <ul style="list-style-type: none"> • The outbound packet is in response to an inbound packet and, • The tunnel used for the inbound packet can be used for the outbound packet If, for example, separate tunnels are negotiated for UDP and ICMP traffic, an outbound ICMP port unreachable packet cannot be sent over the same tunnel as the inbound UDP packet that triggered the ICMP outbound packet. When the IKE peer is a security gateway or the IKE peer is behind an NAPT and UDP-encapsulated ESP tunnels are being used, consideration should be given to using tunnels that encompass all protocols.
10	Inbound or outbound TCP packet	Unable to accept the TCP packet because the IPSec policy for the TCP connection has changed. The connection was initiated as clear text traffic but is now using a UDP-encapsulated tunnel or vice versa.	When a TCP connection traverses a NAT, the connection must be restarted after a filter policy change that causes the connection's traffic to change from IPSec-protected traffic to clear text, or from clear text to IPSec-protected traffic.
11	Outbound packet	Unable to determine the local host public address for use in the IP header of the inner packet.	When the IKE peer is a security gateway and the NAT is in front of the local host, an outbound packet can be encapsulated and sent over a tunnel only if a packet has first been received inbound over the tunnel. Data must be initiated from the client behind the security gateway.

<i>rsn</i> value	Affected packet	Explanation	Comments
12	Inbound TCP or UDP packet	An internal error occurred when attempting to create a NAT Resolution Filter.	

ifcname is the interface name

frag specifies whether the packet is a fragment. The value is Y if the packet is a fragment, or N if the packet is not a fragment.

System action: The packet is dropped and TCP/IP processing continues.

Operator response: If the *rsn* value is 10, restart the TCP connection. Otherwise, contact the system programmer.

System programmer response: Unless a specific response is based on the *rsn* value shown in the following table, ensure that the filters and tunnel are defined correctly on the sending and receiving systems. Use the **ipsec** command to display filter and tunnel information.

<i>rsn</i> value	System programmer response
1	Contact the IBM Software Support Center.
2	Determine the cause of the storage shortage. See z/OS Communications Server: IP Diagnosis Guide information about storage shortages.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD0832I Packet denied by NAT Traversal Processing: 07/05/2007 16:19:44.39 filter rule= ipsec-2 ext= 1
      sipaddr= 9.42.130.185 dipaddr= 10.1.1.1 proto= tcp(6) sport= 1026 dport= 80 --
      Interface= 9.1.1.1 (I) secclass= 255 dest= local len= 284 vpnaction= DynAction rsn= 4
      ifcname= TRLE1AL fragment= N
```

Procedure name: trmd_ipsec_log

EZD0833I **Packet denied, tunnel mismatch:** *timestamp filter rule= rulename ext= instance sipaddr= sipaddr*
dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir) dest= dest len= len tunnelID=
tunID decap_tunnelID=decap_tunID ifcname= ifcname fragment= frag

Explanation: An inbound IP packet matched the indicated filter rule but was denied because the packet was not encapsulated as specified in the filter rule. For this message to be written, the matched filter rule must have **IpFilterLogging** set to yes or logdeny.

timestamp is the stack timestamp that indicates the time at which the IP packet was denied by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslog message timestamp.

rulename is the filter rule name. If the IP packet matched a dynamic filter rule, the rule name of the corresponding anchor filter rule will be displayed; otherwise, the rule name of the matching filter rule will be displayed.

- In the policy agent configuration file, *rulename* is the name specified on an **IpFilterRule** statement.

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- When configured with the IBM Configuration Assistant for z/OS Communications Server *rulename* corresponds to the name of a Connectivity Rule in the GUI. *rulename* also contains a numeric suffix appended to the Connectivity Rule name to guarantee uniqueness.

instance is the rule name extension that indicates which instance of the rule name was matched.

sipaddr is the source IP address.

dipaddr is the destination IP address.

proto is the protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

ifcaddr is the interface address over which the packet was received or sent.

dir is **I** if packet is inbound, **O** if packet is outbound.

dest is **local** if a local destination or **routed** if being routed.

len is the packet length.

tunID is the tunnel ID for the tunnel specified by the filter rule. A value of N/A indicates that the filter rule permits the IP packet without IPSec protection.

decap_tunID is the tunnel ID for the tunnel used to decapsulate the IP packet. A value of N/A indicates that the IP packet was not IPSec encapsulated.

ifcname is the interface name

frag specifies whether the packet is a fragment. The value is **Y** if the packet is a fragment, or **N** if the packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: Ensure that the filters and tunnel are defined correctly on the sending and receiving systems. Use the **ipsec** command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax.

Module: EZATRZOS

Example:

```
EZD0821I Packet denied, no tunnel: 07/05/2007 16:19:44.39 filter rule= ipsec-2 ext= 1
      sipaddr= 9.42.130.185 dipaddr= 10.1.1.1 proto= tcp(6) sport= 80 dport= 1026 --
      Interface= 9.1.1.1 (0) secclass= 255 dest= local len= 284 vpnaction= DynAction
      ifcname= TRLE1AL fragment= N
```

Procedure name: trmd_ipsec_log

EZD0834I Encapsulation failed: *timestamp* **sipaddr=** *sipaddr* **dipaddr=** *dipaddr* **proto=** *proto* **vpnaction=** *vpnaction* **tunnelID=** *tunID* **rsn=***rsn* **ICSF Return Code=** *return_code* **ICSF Reason Code =** *reason_code* **AHSPI=** *AHindex* **ESP SPI=** *ESPindex*

Explanation: The IPSec packet cannot be encapsulated and is discarded.

In the message text:

timestamp

Indicates when the encapsulation failure occurred. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

sipaddr

The source IP address.

dipaddr

The destination IP address.

proto

The protocol. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ICMPv6(58)
- OSPF(89)

- IPIP(94)
- The protocol number

vpnaction

The *vpnaction* name.

- If configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnaction* name corresponds to the name of the security level in the GUI. The *vpnaction* name also contains a suffix that is appended to the security level name to guarantee uniqueness.
- If configured in the Policy Agent configuration file, the *vpnaction* value is one of the following:
 - If the tunnel is a manual tunnel, the *vpnaction* value is the name specified on the IpManVpnAction statement.
 - If the tunnel is a dynamic tunnel, the *vpnaction* value is the name specified on the IpDynVpnAction statement. If a tunnel is not found, the *vpnaction* value is N/A.

tunID

The tunnel ID. If the *vpnaction* value is N/A, a tunnel with matching end points and security parameter indices (spi) could not be found.

rsn

The specific reason encapsulation failed. The *rsn* value is one of the following:

<i>rsn</i> value	Explanation	Comments
1	Encryption error	An error occurred while trying to encrypt an outbound packet.
2	AH authentication error	An error was encountered when trying to authenticate an outbound packet. This problem might also be caused by a failure in an ICSF service. If so, the specific failure will be reported on the ICSF Return Code and ICSF Reason Code fields.
3	ESP authentication error	An error was encountered when trying to authenticate an outbound packet. This problem might also be caused by a failure in an ICSF service. If so, the specific failure will be reported on the ICSF Return Code and ICSF Reason Code fields.
4	Maximum packet exceeded	The addition of ESP headers will cause the maximum packet size to be exceeded.
5	Lifesize exceeded	The number of bytes in the outbound packet will cause the lifesize specification to be exceeded for the tunnel.
6	Unknown authentication algorithm	An internal error occurred while authenticating the packet.
7	Unknown encryption algorithm	An internal error occurred while encrypting the packet.
8	No tunnel found	A tunnel was not found for the specified tunnel ID.
9	Sequence numbers were not obtained	Sequence numbers could not be obtained from the coupling facility for a distributed tunnel.
10	IP header not valid	The IP header of the packet being encapsulated does not contain the same source and destination IP address as specified in the tunnel; transport mode is in effect.
13	Storage shortage	Storage to complete the request is not currently available. Until the storage shortage is relieved, encapsulation will fail.
24	Encryption failure in ICSF Service	The ICSF Return Code and the ICSF Reason Code fields contain the return and reason codes that were returned from the ICSF service.
25	ICSF is not available	Either ICSF is not active or it has not completed initialization.

<i>rsn value</i>	Explanation	Comments
26	Version mismatch	The IP version of the packet did not match the IP version of the tunnel.
27	Encapsulation using transport mode not valid for routed traffic	Encapsulation using transport mode was requested but the packet that is being processed is a routed packet. This is most likely the result of a policy definition error. For manual tunnels, this might occur if routed traffic matches a filter rule referencing an IpManVpnAction statement that specified the transport method HowToEncap. For IPv6, this might occur if a routing header contains an intermediate hop that routed the packet back through the packet's originating system. The tunnel endpoints matched the packet; however, the packet has been routed to this system.
28	Sequence number wrapped	The sequence number has wrapped, which indicates that the tunnel has expired. The tunnel will be deleted.

return_code

The return code value, in hexadecimal format, returned from the ICSF service.

reason_code

The reason code value, in hexadecimal format, returned from the ICSF service.

AHindex

The AH security parameter index. If the failure occurred before the AH SPI was known, then n/a is displayed.

ESPindex

the ESP security parameter index If the failure occurred before the ESP SPI was known, then n/a is displayed.

System action: The packet is discarded and TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: The response is based on the *rsn* value, as shown in the following table.

<i>rsn value</i>	System programmer response
1, 2, 3	If the problem is transient, no action is required. For manual tunnels, verify that the security parameters and encryption keys on the IpManVpnAction statement are correctly defined. When configured with the IBM Configuration Assistant for z/OS Communications Server, the IpManVpnAction name corresponds to the name of the security level in the GUI. The IpManVpnAction name also contains a suffix that is appended to the security level name to guarantee uniqueness. For more details about the IpManVpnAction statement, see the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Otherwise, ensure that the tunnel is defined correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options. If the problem was due to an ICSF failure, then see the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.
4	Contact the IBM Software Support Center.
5, 28	If the problem is transient, no action is required. Otherwise, ensure that the tunnel is defined and activated correctly on the sending and receiving systems. Use the ipsec command to display filter and tunnel information. The ipsec command can also be used to refresh or activate a tunnel. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.
6, 7, 8	Contact the IBM Software Support Center.

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rsn value	System programmer response
9	If the problem is transient, no action is required. Verify that z/OS VTAM is active and that the Coupling Facility is available and connected.
10	Contact the IBM Software Support Center.
13	Determine the cause of the storage shortage.
24	See the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.
25	Start ICSF if it is not active.
26	Contact the IBM Software Support Center.
27	Ensure that the IPsec policy is defined correctly. Ensure that the filter rules for routed traffic do not reference VPN actions that request transport mode. Use the ipsec command to display filter and tunnel information. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZATRMD

EZD0835I IPv6 filters defined but IPv6 IPSECURITY support not enabled

Explanation: IPv6 IP filters were defined in the Policy Agent IP filter policy, but IPv6 IPSECURITY is not enabled on the IPCONFIG6 statement in the TCP/IP profile.

System action: IPv6 IP filters are discarded and IPv6 traffic is not subject to IP filtering. TCP/IP processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine whether IPv6 IP filtering is necessary. If not, no action is necessary. If IPv6 IP filtering is necessary, enable it by coding the IPSECURITY option on the IPCONFIG6 statement in the TCP/IP profile. Restart the TCP/IP stack for this change to take effect. See the information about the IPCONFIG6 statement in the z/OS Communications Server: IP Configuration Reference for more information about specifying IP security for a stack.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPsec

Module: ezatrzos.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: Not applicable.

EZD0836I Packet permitted: timestamp sipaddr= sipaddr dipaddr= dipaddr proto= proto type= type code= code Interface= ifcaddr (dir) secclass= secclass dest= dest len= len tunnelID= tunID ifcname= ifcname embsipaddr= embsipaddr embdipaddr= embdipaddr embproto=embproto tag1 tag2 tag3

Explanation: An ICMP error packet did not match a filter rule but was permitted based on information in the embedded packet that caused the error. For an inbound packet, the packet was received over a tunnel and the selectors in the embedded headers matched the selectors for the tunnel. For an outbound packet, the original packet for which the ICMP message was generated was received over a tunnel and the outbound ICMP packet will be encapsulated using this tunnel. For this message to be issued, the IPFilterPolicy policy must have filter logging enabled.

In the message text:

timestamp

The stack timestamp that indicates the time at which the IP packet was handled by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

sipaddr

The source IP address.

dipaddr

The destination IP address.

proto

The protocol from the packet. Possible values are:

- ICMP(1)
- ICMPv6(58)

type

The ICMP or ICMPv6 type.

code

The ICMP or ICMPv6 code.

ifcaddr

The interface address over which the packet was received or sent.

dir

The possible values are 1 if the packet is inbound or 0 if the packet is outbound.

secclass

The security class assigned to the interface. Security class is a numeric value in the range 0 - 255.

dest

The possible values are local if the destination is local or routed if the destination is being routed.

len

The packet length.

tunID

The tunnel ID.

ifcname

The interface name.

embipaddr

The source IP address from the embedded IP header.

embipaddr

The destination IP address from the embedded IP header.

embproto

The protocol from the embedded IP header. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPV6(135)
- Unknown
- The protocol number

EZD0837I

tag1

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the typ.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port.
- If the *proto* value is any value not previously mentioned, *tag2* is **--** which indicates that the data is not applicable.

tag3

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **--** which indicates that the data is not applicable.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable

Example:

```
EZD0836I Packet permitted: 09/11/2007 15:23:06.95 sipaddr= 10.11.2.4 dipaddr= 10.81.2.2 proto= icmp(1)
  type= 3 code= 1 Interface= 10.11.2.4 (0) secclass= 255 dest= local len= 56 tunnelID= Y4
  ifcname= MPC4124L embsipaddr= 10.81.2.2 embdipaddr= 10.81.8.8 embproto= udp(17) sport= 1050
  dport= 10173 --
```

EZD0837I **Defensive filter packet denied messages limited:** *date time filter_rule= rulename filter_ext= instance filter_sipaddr= sipaddr / sip_prefix_length filter_dipaddr= dipaddr / dip_prefix_length filter_proto= proto tag1 tag2 filter_fragmentsonly= fragments_only filter_dir= dir filter_routing= routing suppressed_count= count*

Explanation: This message is issued when limiting of filter match messages was requested for a defensive filter and at least one "packet denied" message (EZD1721I) for the defensive filter was suppressed during the preceding five minutes.

In the message text:

date

The date on which this message was issued. This date is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

time

The time at which this message was issued. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX ipsec command.

instance

The rule name extension.

sipaddr / sip_prefix_length

The source IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all source IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all source IPv6 addresses.

dipaddr / dip_prefix_length

The destination IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all destination IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all destination IPv6 addresses.

proto

The protocol specification for the defensive filter rule. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- The protocol number
- ALL

tag1

The *tag1* value varies depending on the *proto* value.

If the *proto* value is ICMP or ICMPv6, the *tag1* value is type= followed by the ICMP or ICMPv6 type, or followed by the value all.

If the *proto* value is TCP or UDP, the *tag1* value is sport= followed by the source port range. For example, sport= 1024 - 65535. For a defensive filter that applies to all source ports the *tag1* value is sport= 1 - 65535.

If the *proto* value is any value not previously mentioned, the *tag1* value is -- which indicates that the data is not applicable.

tag2

The *tag2* value varies depending on the protocol.

If the *proto* value is ICMP or ICMPv6, the *tag2* value is code= followed by the ICMP or ICMPv6 code, or followed by the value all.

If the *proto* value is TCP or UDP, the *tag2* value is dport= followed by the destination port range. For example, dport= 21 - 21. For a defensive filter that applies to all destination ports, the *tag2* value is dport= 1 - 65535.

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If the *proto* value is any value not previously mentioned, the *tag2* value is -- which indicates that the data is not applicable.

fragments_only

The fragment specification for the defensive filter rule. Possible values are:

- yes - The defensive filter rule applies only to fragments.
- no - The defensive filter rule does not apply only to fragments.

dir

The direction specified for the defensive filter rule. Possible values are inbound and outbound.

routing

The routing specified for the defensive filter rule. Possible values are local, routed, and either.

count

The number of "packet denied" messages (EZD1721I) for the defensive filter that were suppressed during the preceding five minutes.

System action: TCP/IP processing continues.

Operator response: No action is needed.

System programmer response: No action is needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: *

Descriptor code: *

Automation: Not applicable for automation.

Example:

```
EZD0837I Defensive filter packet denied messages limited: 11/28/2011 16:35:55.42 filter_rule=
Block_10_UDP_301 filter_ext= 1 filter_sipaddr= 10.8.8.0 / 24 filter_dipaddr= 0.0.0.0 / 0
filter_proto= udp(17) sport= 301 - 301 dport= 1 - 65535 filter_fragmentsonly= no
filter_dir= inbound filter_routing= local suppressed_count= 125
```

EZD0838I **Defensive filter packet would have been denied messages limited:** *date time filter_rule= rulename filter_ext= instance filter_sipaddr= sipaddr / sip_prefix_length filter_dipaddr= dipaddr / dip_prefix_length filter_proto= proto tag1 tag2 filter_fragmentsonly= fragments_only filter_dir= dir filter_routing= routing suppressed_count= count*

Explanation: This message is issued when limiting of filter match messages was requested for a defensive filter and at least one "packet would have been denied" message (EZD1722I) for the defensive filter was suppressed during the preceding five minutes.

In the message text:

date

The date on which this message was issued. This date is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

time

The time at which this message was issued. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX ipsec command.

instance

The rule name extension.

sipaddr/sip_prefix_length

The source IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all source IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all source IPv6 addresses.

dipaddr/dip_prefix_length

The destination IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all destination IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all destination IPv6 addresses.

proto

The protocol specification for the defensive filter rule. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- The protocol number
- ALL

tag1

The *tag1* value varies depending on the *proto* value.

If the *proto* value is ICMP or ICMPv6, the *tag1* value is type= followed by the ICMP or ICMPv6 type, or followed by the value all.

If the *proto* value is TCP or UDP, the *tag1* value is sport= followed by the source port range. For example, sport= 1024 - 65535. For a defensive filter that applies to all source ports the *tag1* value is sport= 1 - 65535.

If the *proto* value is any value not previously mentioned, the *tag1* value is -= which indicates that the data is not applicable.

tag2

The *tag2* value varies depending on the protocol.

If the *proto* value is ICMP or ICMPv6, the *tag2* value is code= followed by the ICMP or ICMPv6 code, or followed by the value all.

If the *proto* value is TCP or UDP, the *tag2* value is dport= followed by the destination port range. For example, dport= 21 - 21. For a defensive filter that applies to all destination ports, the *tag2* value is dport= 1 - 65535.

If the *proto* value is any value not previously mentioned, the *tag2* value is -= which indicates that the data is not applicable.

fragments_only

The fragment specification for the defensive filter rule. Possible values are:

- yes - The defensive filter rule applies only to fragments.
- no - The defensive filter rule does not apply only to fragments.

dir

The direction specified for the defensive filter rule. Possible values are inbound and outbound.

routing

The routing specified for the defensive filter rule. Possible values are local, routed, and either.

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count

The number of "packet would have been denied" messages (EZD1722I) for the defensive filter that were suppressed during the preceding five minutes.

System action: TCP/IP processing continues.

Operator response: No action is needed.

System programmer response: No action is needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: *

Descriptor code: *

Automation: Not applicable for automation.

Example:

```
EZD0838I Defensive filter packet would have been denied messages limited: 11/28/2011 16:35:55.42
filter_rule= Block_10_UDP_301 filter_ext= 1 filter_sipaddr= 10.8.8.0 / 24
filter_dipaddr= 0.0.0.0 / 0 filter_proto= udp(17) sport= 301 - 301 dport= 1 - 65535 filter_fragmentsonly= no
filter_dir= inbound filter_routing= local suppressed_count= 125
```

EZD0839I Connection reset: date time filter rule= rulename ext= instance sipaddr= sipaddr dipaddr= dipaddr sport= sport dport= dport Interface= ifcaddr seclass= seclass ifcname= ifcname

Explanation: A TCP connection traversing a Shared Memory Communications over Remote Direct Memory Access (SMC-R) link matched the indicated filter rule and was reset. TCP connections that traverse SMC-R links and match a deny filter rule or a filter rule that specifies the use of IP security are reset. For this message to be written, the matched filter rule must have IpFilterLogging set to yes.

In the message text:

date

The date on which this message was issued. This date is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

time

The time at which this message was issued. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The filter rule name. If the TCP connection matched a dynamic filter rule, the rule name of the corresponding anchor filter rule is displayed; otherwise, the rule name of the matching filter rule is displayed.

- In the policy agent configuration file, *rulename* is the name specified on the IpFilterRule statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rulename* corresponds to the name of a Connectivity Rule in the GUI. *rulename* also contains a suffix appended to the Connectivity Rule name to guarantee uniqueness.

instance

The rule name extension that indicates which instance of the rule name was matched.

sipaddr

The source IP address of the TCP connection.

dipaddr

The destination IP address of the TCP connection.

sport

The source port of the TCP connection.

dport

The destination port of the TCP connection.

ifcaddr

The interface address over which the TCP connection was established.

secclass

The security class assigned to the interface. Security class is a numeric value in the range of 0 - 255.

ifcname

The name of the interface.

System action: TCP/IP processing continues.

Operator response: No action is needed.

System programmer response: No action is needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD0839I Connection reset: 10/23/2012 15:40:17.54 filter rule= OSX_Rule ext= 2 sipaddr= 172.18.0.1 dipaddr= 172.18.0.2 sport = 8080 dport = 1026 Interface= 172.18.0.1 secclass= 255 ifcname= QDIOX4101
```

EZD0851I Unable to open message catalog cat:: errno errno (description) errnojr errnojr - Default messages will be used

Explanation: An attempt was made to open the command message catalog cat in the message catalog directory, but the catalog could not be opened for the specified reason. The default location for the message catalog is set by the NLSPATH environment variable to be NLSPATH=/usr/lib/nls/msg/%L/%N.

cat is the name of the catalog the **ipsec** command attempted to open.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing continues. Default messages will be used.

Operator response: If you want to use the message catalog, correct the indicated error. If the default messages are acceptable, no action is necessary.

System programmer response: If you want to use the message catalog, correct the indicated error. If the default messages are acceptable, no action is necessary.

Module: ipsec.c

Procedure name: command_init

EZD0852I • EZD0855I

EZD0852I Unknown option *opt*

Explanation: Command parsing detected an unrecognized option.

opt is the unknown option.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0853I Option *opt* is missing required data

Explanation: The option identified by *opt* required input data, but none was specified on the command.

opt is the specified option.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0854I Cannot parse option *opt*

Explanation: The system cannot determine how to parse *opt*.

opt is the option that could not be parsed.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0855I Option *option* value length exceeds limit of *limit* characters

Explanation: The option value specified exceeds the character limit.

option is the option that was specified.

limit is the maximum number of characters allowed for the option value.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0856I Option *-opt* does not support value *val*

Explanation: The identified option requires a specific set of values and the specified value does not belong to that set.

opt is the option specified.

val is the unsupported value.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0857I Primary option not specified

Explanation: The **ipsec** command requires a primary option but none was provided.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0858I Primary option *-opt1* does not support option *-opt2*

Explanation: The secondary option *opt2* is not allowed with the primary option *opt1*.

opt1 is the primary option of the command.

opt2 is the unsupported option that was used with *opt1*.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0859I Requester is not authorized to perform the request

Explanation: Different functions of the **ipsec** command require authorization with the system Access Control Facility. The requester does not have authority to perform the requested action.

System action: The **ipsec** command processing ends.

Operator response: This error is often caused by entering the wrong stack name with the -p option. Check the syntax, and if the problem persists, contact the system programmer to receive appropriate authority to use the **ipsec** command.

System programmer response: Give the user the appropriate authority to use the **ipsec** command. See the

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information about managing network security in z/OS Communications Server: IP System Administrator's Commands for more information about the RACF® permission required by the **ipsec** command.

Module: ipsec.c

Procedure name: None.

EZD0860I Stack *stackname* is not available : errno *errno* (*description*) errnojr *errnojr*

Explanation: The identified stack could not be reached.

stackname is the stack that is unavailable.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Ensure that the specified stack is valid and operational on the system.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0861I Stack *stackame* is not configured for IPSECURITY

Explanation: The identified stack is known to the system, but is not configured for IPSECURITY. The **ipsec** command interacts only with IPSECURITY stacks.

stackame is the name of the stack that is not configured for IPSECURITY.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer to determine whether the specified stack is intended to have IPSECURITY.

System programmer response: Check the profile for the specified stack to insure that IPSECURITY is configured correctly. See the z/OS Communications Server: IP Configuration Reference for more information about specifying IPSECURITY for a stack.

Module: ipsec.c

Procedure name: None.

EZD0862I A system error kept the request from completing : errno *errno* (*description*) errnojr *errnojr*

Explanation: The system failed to complete a request due to a system error as indicated by the *errno* information provided.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: The error might be transient and reissuing the request might succeed. If the error persists, contact the system programmer.

System programmer response: Trace or log entries might give more information about the nature of the error. Use *errno*, *description*, and *errnojr* to fix the problem.

Module: ipsec.c

Procedure name: None.

EZD0863I File system access error : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: The request required a file system access that could not be completed.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (ernos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: The requester might not have the authority to perform the specified **ipsec** command action. Contact the system programmer to check authorization or about potential problems with the file system.

System programmer response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands for information about **ipsec** command requirements.

Module: ipsec.c

Procedure name: None.

EZD0864I Memory could not be obtained to complete the request

Explanation: Memory could not be obtained to hold the system information that is being collected to satisfy the request.

System action: The **ipsec** command processing ends.

Operator response: The error might be transient and reissuing the request might succeed. If the error persists, contact the system programmer.

System programmer response: Trace or log entries might give more information about the nature of the error. Ensure that there is enough memory available on the system.

Module: ipsec.c

Procedure name: None.

EZD0865I Could not set up signal handler : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: An error occurred during the establishment of a signal handler in support of the command request.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (ernos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the error indicated by *errno*, *errnojr*, or *description*. It might also be helpful to reissue the command with the debug (-d) option.

Module: ipsec.c

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Procedure name: None.

EZD0866I Stack *stackname* is not available - but request is allowed to continue

Explanation: A reload/default filter function was requested for the specified stack, but this stack is not active on the system.

stackname is the name of the stack that is not available.

System action: The **ipsec** command is allowed to continue, but because the stack is unknown, the command might have no effect.

Operator response: Verify that the specified stack name is valid and reissue the command.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0867I The ipsec command is not APF authorized

Explanation: The **ipsec** command is an APF-authorized application, but the version of the executable does not have the APF bit set.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the **ipsec** command is installed correctly. Use the extattr command to ensure that the APF-authorized attribute is set to **on**.

Module: ipsec.c

Procedure name: None.

EZD0868I Name length exceeds limit of *limit* and is ignored - name starts with *partialname*

Explanation: A name was found to exceed the maximum length allowed.

limit is the maximum length allowed for the name.

partialname is the beginning of the string that exceeded the allowable length.

System action: The **ipsec** command continues using the other names in the command specification.

Operator response: Correct the name and reissue the command.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0869I Invalid tunnel ID *tunnelID* is ignored

Explanation: The tunnel ID that was specified in the **-a** option is not in a valid format.

- The first character must be M, Y, or K, depending on the **ipsec** command that was issued:

-m command

A manual tunnel ID must be specified, and the first character must be M.

-y command

A dynamic tunnel ID must be specified, and the first character must be Y.

-k command

An IKE tunnel ID must be specified and the first character must be K.

-f command

Either a manual or dynamic tunnel ID can be specified and the first character can be either M or Y.

- The remaining characters must be numeric values in the range of 0–4294967295.

tunnelID is the tunnel ID that is not valid.

System action: Processing continues.

Operator response: Correct the tunnel ID and reissue the **ipsec** command.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0870I Primary option *-opt1* conflicts with primary option *-opt2*

Explanation: Only one primary option can be specified.

opt1 and *opt2* are the primary option values that are in conflict.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0871I All selection criteria were found in error

Explanation: The **ipsec** command could not complete because all selection criteria entries were incorrect. Message EZD0869I is also issued for each name that is not valid.

System action: The **ipsec** command processing ends.

Operator response: Correct the specified names as indicated in the EZD0869I messages.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0872I Scope *value* conflicts with selection criteria

Explanation: The command as specified conflicts with the indicated scope value.

value is the specified scope and is either **current**, **policy**, or **profile**.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0873I Function *function* conflicts with option *-option*

Explanation: The function that the **ipsec** command is attempting to perform does not allow the specified option.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP

EZD0875I • EZD0877I

System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0875I Selection criteria option *opt1* conflicts with selection criteria option *opt2*

Explanation: On any command request, only one type of selection criteria option can be specified.

opt1 and *opt2* are the selection criteria option values in conflict.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0876I Invalid *type* *data* specified

Explanation: The IP Traffic Test option for the **ipsec -t** command contains an incorrect value.

type is the type of option that is incorrect. Possible values are:

- **SourceIpAddress**
- **DestIpAddress**
- **Protocol**
- **SourcePort**
- **DestinationPort**
- **Direction**
- **SecClass**

data is the incorrect data that was specified.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands for information about the correct values for the IP Traffic Test option of the **ipsec** command. Correct the IP Traffic Test option and reissue the command.

System programmer response: None.

Module: ipsec.c

Procedure name: do_traffictest

EZD0877I *subfield* required for specified *option*

Explanation: The IP Traffic Test option that was identified in the message for the **ipsec -t** command requires additional subfield data.

subfield is the name of the field that is missing data.

option is the IP Traffic Test option that requires the additional data.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands for information about the correct syntax for the IP Traffic Test option of the **ipsec**

command. Correct the IP Traffic Test option and reissue the command.

System programmer response: None.

Module: ipsec.c

Procedure name: do_traffictest

EZD0878I Excessive -t argument *arg* encountered

Explanation: Following -t, the traffic test command takes a number of positional arguments as indicated by the syntax diagram. This message is issued because the specification of positional arguments does not follow the requirements of the syntax.

arg is the excessive data.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands for information about the correct syntax for the IP Traffic Test option of the **ipsec** command. Correct the IP Traffic Test option and reissue the command.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0879I ipsec *function* cannot be issued while default policy is active

Explanation: The requested ipsec function cannot be issued against default policy.

function is the requested ipsec function.

System action: The **ipsec** command processing ends.

Operator response: If this command is required, see the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell for information about switching from the default policy.

System programmer response: None.

Module: ipsec.c

Procedure name: do_manual

EZD0880I No filters exist under the specified scope

Explanation: No filters exist for the requested scope.

System action: The **ipsec** command processing ends.

Operator response: None.

System programmer response: None.

Module: ipsec.c

Procedure name: do_filters

EZD0881I Connect error for IKE daemon connection : errno *errno* (*description*) errnojr *errnojr*

Explanation: An error occurred during a connect to the IKE daemon.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained

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in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Ensure that the IKE daemon is running and use *errno*, *description*, and *errnojr* to fix the problem.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

EZD0882I Write error on IKE daemon connection : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: An error occurred during a write operation to the IKE daemon.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Ensure that the IKE daemon is running and use *errno*, *description*, and *errnojr* to fix the problem.

System programmer response: None.

Module: ipsec.c

Procedure name: request_iked

EZD0883I Read error on IKE daemon connection : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: An error occurred during a read operation to the IKE daemon.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Ensure that the IKE daemon is running and use *errno*, *description*, and *errnojr* to fix the problem.

System programmer response: None.

Module: ipsec.c

Procedure name: request_iked

EZD0884I Illegal data received over IKE daemon connection

Explanation: The data that was read over the IKE daemon connection was not in the expected format.

System action: The **ipsec** command processing ends.

Operator response: Data might have been corrupted in transmission. Try the command again.

System programmer response: None.

Module: ipsec.c

Procedure name: request_iked

EZD0885I Options -opt1 and -opt2 cannot be specified together

Explanation: The **ipsec** command was issued with the two indicated options. These options cannot be specified together.

opt1 and *opt2* are the names of the options that were incorrectly specified together.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: validity_check

EZD0886I Function *function* conflicts with option -*opt optvalue*

Explanation: The specified option value is not valid for the function specified.

function is the primary function the **ipsec** command was attempting to perform.

opt is the option that was specified.

optvalue is the option value that was not valid.

System action: The **ipsec** command processing ends.

Operator response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: validity_check

EZD0887I IKE daemon could not process the request due to an internal error

Explanation: A request was made to the IKE daemon that could not be completed.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that covers the time of the command failure. If available, provide a CTRACE for component SYSTCPIK.

Module: ipsec.c

Procedure name: None.

EZD0888I IKE daemon could not process the request - stack *stackname* is unknown to IKE daemon

Explanation: The command specifies a stack that cannot be verified by the IKE daemon.

stackname is the name of the stack that cannot be verified.

System action: The **ipsec** command processing ends.

Operator response: Ensure that the stack name as specified is correct in the current system configuration. From the operator console, use the **d tcip** command to list all available stacks.

System programmer response: None.

Module: ipsec.c

Procedure name: None.

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EZD0889I Could not create IKE daemon home directory path : errno errno (description) errnojr errnojr

Explanation: Users of the **ipsec** command must have the authority to access the IKE daemon home directory. *path* is the path of the IKE daemon home directory.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer.

System programmer response: See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and group access control requirements.

Module: ipsec.c

Procedure name: None.

EZD0890I Could not open code page converters : errno errno (description) errnojr errnojr

Explanation: Command execution requires a code page converter of IBM-1047 (EBCDIC) and a code page converter for the local code page.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Verify that code page converters are available for IBM-1047 and for the local code page. See the information about code page conversion in z/OS UNIX System Services User's Guide for more information about specifying code converters.

Module: ipsec.c

Procedure name: None.

EZD0891I Code page conversion failed and is ignored for name

Explanation: The **ipsec** command encountered a name that could not be converted.

name is the name that could not be converted.

System action: The **ipsec** command processing continues.

Operator response: Contact the system programmer.

System programmer response: See the information about code page conversion in z/OS UNIX System Services User's Guide for more information about specifying code page converters.

Module: ipsec.c

Procedure name: None.

EZD0892I Signal *signum* received - command ends

Explanation: A system signal was received and forced the **ipsec** command to end. See z/OS UNIX System Services Command Reference for more information about signals.

signum identifies the signal that was received.

System action: The **ipsec** command processing ends.

Operator response: The condition might be temporary. Try the command again. It might be helpful to specify the debug (-d) option on the command specification. If the failure persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that covers the time of the command failure. If available, provide a CTRACE for component SYSTCPIK.

Module: ipsec.c

Procedure name: None.

EZD0893I -*opt1* option can only be specified with the -*opt2* option

Explanation: The **ipsec** command was issued with -*opt2* specified, but without the required -*opt1* option specified. *opt1* is the **ipsec** command option that was specified.

opt2 is the required **ipsec** command option that is missing.

System action: The **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command with both -*opt1* and -*opt2* specified. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: validity_check

EZD0894I More than one value specified for the -*opt* option

Explanation: Only one value can be specified for the indicated **ipsec** command option.

opt is the **ipsec** command option that was specified.

System action: The **ipsec** command processing ends.

Operator response: Remove extraneous values and reissue the **ipsec** command. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: ipsec.c

Procedure name: parse_args

EZD0895I Incorrect -*opt* option value *value* is ignored

Explanation: An incorrect option value was specified and ignored.

opt is the **ipsec** command option that was specified.

value is the value that was specified for the ipsec option.

System action: The **ipsec** command continues using other specified values, if any, or the default value, if any.

Operator response: Specify an option value in the accepted value range and reissue the **ipsec** command. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

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System programmer response: None.

Module: ipsec.c

Procedure name: parse_args

EZD0896I An IPv6 address was specified with a stack *stackname* that was not enabled for IPSECURITY

Explanation: The request specified an IPv6 address associated with the stack specified by the *stackname* value, but this stack does not have IPSECURITY defined in its IPCONFIG6 statement.

System action: The **ipsec** command processing ends.

Operator response: Contact the system programmer to determine whether the specified stack is intended to have IP security for its IPv6 configuration.

System programmer response: Check the profile for the specified stack to insure that IP security is configured correctly on the IPCONFIG6 statement. See the information about the IPCONFIG6 statement in the z/OS Communications Server: IP Configuration Reference for more information about specifying IP security for a stack.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ipsec.c

EZD0897I Two addresses were specified that are not in the same address family

Explanation: IP security is supported between two endpoints when both endpoints are IPv4 or both endpoints are IPv6. IP security is not supported between endpoints of different address families.

System action: The **ipsec** command processing ends.

Operator response: Issue the **ipsec** command request with two IPv4 addresses or two IPv6 addresses.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP

Module: ipsec.c

EZD0898I IKE daemon could not process the request due to a Security Association negotiation failure

Explanation: A refresh or activation request could not be completed because of an error with the Security Association negotiation. The error might be a problem with the configuration or an internal error with the IKE daemon.

System action: The **ipsec** command processing ends.

System programmer response: Look at the syslog daemon syslog file that covers the time of the command failure. The negotiation failure might be caused by a configuration problem or by an internal error. Messages that see policy might indicate that the request failed because of the policy configuration. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy. If the failure is caused by an IKE daemon internal error, contact IBM software support services and provide a syslog daemon syslog file that covers the time of the command failure. If available, provide a CTRACE for component SYSTCPIK. See the information about diagnosing IKE daemon problems in z/OS Communications Server: IP Diagnosis Guide for more information about CTRACE.

User response: Contact the system programmer.

Module: ipsec.c

Procedure name: None.

EZD0902I Peer certificate failed validation - System SSL CMS error : *gsk_rc* *description*

Explanation: A call to the System SSL Certificate Management Services (CMS) API to validate the peer certificate returned an error.

gsk_rc is the hexadecimal CMS status code. See the information about the CMS status codes in z/OS Cryptographic Services System SSL Programming.

description describes the meaning of *gsk_rc*.

System action: The operation being performed fails; IKE daemon processing continues.

Operator response: Use *gsk_rc* and *description* to correct the error.

System programmer response: None.

Module: pki390.cpp

Procedure name: None.

EZD0903I Peer certificate failed authentication - System SSL CMS error : *gsk_rc* *description*

Explanation: A call to the System SSL Certificate Management Services (CMS) API to authenticate the peer certificate returned an error.

gsk_rc is the hexadecimal CMS status code. See the information about the CMS status codes in z/OS Cryptographic Services System SSL Programming.

description describes the meaning of *gsk_rc*.

System action: The operation being performed fails; IKE daemon processing continues.

Operator response: Use *gsk_rc* and the description provided to fix the error.

System programmer response: None.

Module: pki390.cpp

Procedure name: None.

EZD0904I IKE CONFIGURATION FILE *fname* COULD NOT BE OPENED OR FILE DOES NOT EXIST

Explanation: The Internet Key Exchange (IKE) daemon could not open the file name that was specified for IKE configuration.

fname is the name of the file that the IKE daemon could not open.

System action: If an error occurs during IKE startup, the IKE daemon configuration file processing is ended and the IKE daemon ends. If the error occurs due to a MODIFY REFRESH command, IKE daemon configuration file processing is ended, but the IKE daemon remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Verify that the file name provided is correct and that the file exists. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement and IKE daemon configuration file.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0905I IKE configuration file *fname* does not contain an IkeConfig statement

Explanation: The Internet Key Exchange (IKE) daemon configuration file must specify an IkeConfig statement to indicate that there are IKE configuration parameters.

fname is the name of the IKE daemon configuration file.

System action: If the error occurs during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs due to a MODIFY REFRESH command, IKE daemon configuration file processing

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ends, but the IKE daemon remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Ensure that IkeConfig statement is specified in the configuration file. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement and IKE daemon configuration file.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0906I Unknown IKE configuration file parameter *pname* on line *linenum*

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains a parameter that is not recognized by the IKE daemon.

In the message text:

pname

The unknown parameter.

linenum

The line of the configuration file where the parameter was found.

System action: If the error occurred during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurred as the result of a MODIFY REFRESH command, the IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Change the parameter specified by the *pname* value to a valid IKE parameter or remove that parameter. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD0906I Unknown IKE configuration file parameter junk on line 17

EZD0907I Missing value for IKE configuration file parameter *pname* on line *linenum*

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains a parameter *pname* that requires a parameter value and no value was specified.

In the message text:

pname

The parameter name that is missing a value.

linenum

The line of the configuration file where the parameter was found.

System action: If the error occurs during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Provide a value for the parameter specified by the *pname* value. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and valid parameters for the parameter specified by the *pname* value.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD0907I Missing value for IKE configuration file parameter NSSWaitRetries on line 7
```

EZD0908I IKE configuration file parameter *pname* does not support value *val* on line *linenum*

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains a parameter *pname* that contains an unsupported value *val*.

In the message text:

pname

The parameter name.

val

The unsupported parameter value.

linenum

The line of the configuration file where the parameter was found.

System action: If the error occurs during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Insert a supported value for the parameter specified by the *pname* value. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and supported values for the parameter specified by the *pname* value.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD0908I IKE configuration file parameter NSSWaitLimit does not support value 301 on line 7
```

EZD0909I INCORRECT SYNTAX ON MODIFY COMMAND OPTION *opt*

Explanation: The MODIFY command that was entered could not be parsed because of syntax problems. The failure occurred while parsing *opt*.

opt is the command option that was specified with the MODIFY command that is incorrect.

System action: The MODIFY command is rejected. IKE daemon configuration retains all values prior to the MODIFY REFRESH command.

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Operator response: See the information about the MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information the correct syntax of the MODIFY command.

System programmer response: None.

Module: mdfysrvr.c

Procedure name: None.

EZD0910I IKE configuration file was not specified - using defaults for all IKE configuration parameters

Explanation: No Internet Key Exchange (IKE) daemon configuration file was found.

System action: The IKE daemon will use default values for all IKE daemon configuration parameters; the IKE daemon continues.

Operator response: If the intention was to use an IKE daemon configuration file, see the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0911I IKE CONFIG PROCESSING COMPLETE USING FILE *fname*

Explanation: The Internet Key Exchange (IKE) daemon configuration file processing completed using file *fname*.

fname is the file name of the IKE daemon configuration file.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0912I IKE configuration file contains more than one instance of non-repeatable parameter *parm* - value of last specified parameter will be used

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains more than one instance of a non-repeatable parameter *parm*.

parm is the non-repeatable parameter that was specified more than once.

System action: The value of the last specified parameter will be used; IKE daemon processing continues.

Operator response: If this message was unexpected, see the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and which parameters are repeatable or non-repeatable.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0913I IKE configuration file parsing error - *explanation*

Explanation: The Internet Key Exchange (IKE) daemon encountered an error while parsing the IKE daemon configuration file. Possible errors are:

- **Unexpected end of file (EOF) encountered.**
- **Syntax errors in the IKE daemon configuration file.**

explanation describes the IKE daemon configuration file parsing error.

System action: If the error occurs during IKE daemon startup, IKE daemon configuration file processing is ends, and the IKE daemon ends. If the error occurs due to a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE daemon configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Use *explanation* to fix the problem. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD0915I IKE DAEMON INITIALIZED WITH WARNINGS

Explanation: The Internet Key Exchange (IKE) daemon initialized with non-fatal errors.

System action: IKE daemon processing continues.

Operator response: Examine the syslog for errors that occurred during the IKE daemon initialization that has the same message instance number as this message for more information. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System programmer response: None.

Module: main.cpp.

Procedure name: None.

EZD0917I Could not find applicable KeyExchangeRule - LocalIp : LSIP RemoteIp : RSIP LocalID : LSID RemoteID : RSID

Explanation: The Internet Key Exchange (IKE) daemon could not find an applicable KeyExchangeRule statement for the specified classification. The classification consists of the local security endpoint IP address (*LSIP*), remote security endpoint IP address (*RSIP*), local security endpoint identity (*LSID*), and remote security endpoint identity (*RSID*). If the remote system is behind a NAT, ensure that the RemoteSecurityEndpoint location in the KeyExchangeRule is the public address of the remote system.

System action: The Security Association (SA) activation failed; IKE daemon processing continues.

Operator response: Add a suitable KeyExchangeRule statement for the classification to the IPSec policy, if necessary. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD0918I ICSF service CSNBSYE failed for AES encryption : return code = *rc* reason code = *rsn*

Explanation: The Integrated Cryptographic Service Facility (ICSF) service returned an error when called to perform AES encryption.

In the message text:

rc The hexadecimal return code returned from the ICSF function call.

rsn

The hexadecimal reason code returned from the ICSF function call.

System action: The operation being performed fails; IKE daemon processing continues.

Operator response: Verify that ICSF is running. See the information about the ICSF and TSS return and reason Codes information in z/OS Cryptographic Services ICSF Application Programmer's Guide for the meaning of the *rc* and *rsn* values and for specific actions to be taken.

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System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: aes_obj.cpp

EZD0919I Local security endpoint IP address cannot be determined from IP address range (*ip_range*) errid = *errid*

Explanation: While attempting to activate a dynamic tunnel, the IKE daemon could not determine the local security endpoint IP address for the tunnel. Usually this is caused by specifying IP addresses and the RemoteIpGranularity and LocalIpGranularity parameters on the IpLocalStartAction statement in the configuration policy that resolve to ranges of IP addresses.

ip_range is the address range from which the IKE daemon was trying to obtain the endpoint location.

errid is a unique error ID for the occurrence of this message.

System action: The dynamic tunnel activation failed; IKE daemon processing continues.

Operator response: Review and alter the IPSec configuration as necessary in order for the IKE daemon to be able to determine a local IP address. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy. After you review your configuration, if you believe that the IKE daemon should be able to determine the source IP address, contact the system programmer.

System programmer response: Contact IBM software support services with the *errid* and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policymgr.cpp

Procedure name: PMGet_Phase1Rule

EZD0920I Remote security endpoint IP address cannot be determined from IP address range (*ip_range*) errid = *errid*

Explanation: While attempting to activate a dynamic tunnel, the IKE daemon failed to determine the remote security endpoint IP address for the tunnel.

ip_range is the address range from which the IKE daemon was trying to obtain the endpoint location.

errid is a unique error ID for the occurrence of this message.

System action: The dynamic tunnel activation failed; IKE daemon processing continues.

Operator response: Review and alter the IPSec configuration as necessary. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy. After you review your configuration, if you believe that the IKE daemon should be able to determine the source IP address, contact the system programmer.

System programmer response: Contact IBM software support services with the *errid* and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policymgr.cpp

Procedure name: PMGet_Phase1Rule

EZD0922I INTERNAL ERROR *errid* - *value1* | *value2* | *value3*

Explanation: The Internet Key Exchange (IKE) daemon detected an internal error.

Additional diagnostic messages that have the same message instance number might be issued. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

errid is a unique ID for this error.

value1 is optional error information.

value2 is optional error information.

value3 is optional error information.

System action: Results are unpredictable. One or more address space dumps are produced with dump titles that match the message text.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK. If available, provide any dumps associated with this message.

Module: Numerous.

Procedure name: None.

EZD0923I IKE HAS RECEIVED THE STOP COMMAND

Explanation: The Internet Key Exchange (IKE) daemon received the STOP command.

System action: The IKE daemon ends.

Operator response: None.

System programmer response: None.

Module: mdvfsrvr.c

Procedure name: None.

EZD0924I Transform *transform_id* : unable to store Diffie-Hellman group (*DH_group_id*) reason (*reason*)

Explanation: An IKE negotiation failed because the server was unable to store the specified Diffie-Hellman (DH) group identifier during the verification of the transforms in a proposal. This was caused by an unsupported protocol or group descriptor.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

DH_group_id is the DH group ID. Only groups 1, 2, 5, and 14 are supported.

reason is either **protocol** or **descriptor**, which indicates whether the error was with the protocol or the group descriptor.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that only valid protocols and DH groups were specified.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, oakley_lf.cpp

Procedure name: None.

EZD0925I Transform *transform_id* : unsupported life-type attribute (*lifetype_id*)

Explanation: An IKE negotiation failed because the value specified for the life-type attribute is not in seconds or kilobytes.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

EZD0926I • EZD0927I

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

lifetype_id is the ID type of the unsupported life-type attribute.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint ensure that their life-type values are specified as seconds or kilobytes.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, gen.cpp, oakley_lf.cpp

Procedure name: None.

EZD0926I Transform *transform_id* : key length specified for fixed key length algorithm or the algorithm is not supported

Explanation: An IKE negotiation failed because a key length is specified for an algorithm that has a fixed key length or the algorithm is unsupported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that their transform algorithms are specified correctly.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, oakley_lf.cpp

Procedure name: None.

EZD0927I Transform *transform_id* : life value not specified for life-type attribute

Explanation: An IKE negotiation failed because a transform specified a life-type attribute with no corresponding life value.

Additional diagnostic messages with the same message instance number will be issued to identify the impacted security association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that they specified life values for all life-type attributes.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, gen.cpp, oakley_lf.cpp

Procedure name: None.

EZD0928I Transform *transform_id* : unsupported attribute tag (*attribute_tag*)

Explanation: An IKE negotiation failed because a transform specified an attribute that is not known for the specified transform.

Additional diagnostic messages with the same message instance number will be issued to identify the impacted security association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

attribute_tag is the ID that represents the unknown attribute.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that all the transforms are specified correctly.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, gen.cpp, oakley_lf.cpp

Procedure name: None.

EZD0929I Transform *transform_id* : attribute length (*attr_length*) incorrect size for attribute (*attribute*)

Explanation: An IKE negotiation failed because a transform specified an attribute length that is the incorrect size for the specified attribute.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

attr_length is the length of this attribute in bytes.

attribute is a string representation of the attribute. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about transform attributes.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that their transforms are specified correctly.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, oakley_lf.cpp, gen.cpp

Procedure name: None.

EZD0930I Transform *transform_id* : unable to read attribute

Explanation: An IKE negotiation failed because the length calculated for the next attribute is larger than the remaining attribute string.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

EZD0931I • EZD0933I

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that their transforms are configured correctly.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp, oakley_lf.cpp

Procedure name: None.

EZD0931I Transform *transform_id* : no encapsulation mode specified

Explanation: An IKE negotiation failed because the specified transform does not specify tunnel or transport mode.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement. Phase 2 transforms specify the encapsulation mode on the HowToEncap statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint verify that they specified tunnel or transport mode for this negotiation.

System programmer response: None.

Module: ah_lf.cpp, esp_lf.cpp

Procedure name: None.

EZD0932I Transform *transform_id* : no authentication algorithm specified

Explanation: An IKE negotiation failed because the specified transform does not specify an authentication algorithm.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint ensure that an authentication algorithm is specified for each transform.

System programmer response: None.

Module: gen.cpp, ah_lf.cpp

Procedure name: None.

EZD0933I Transform *transform_id* : no hash algorithm specified

Explanation: An IKE negotiation failed because the specified transform does not specify a hash algorithm.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value that is used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference.

Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Request that the administrator of the remote security endpoint ensure that a hash algorithm is specified for each transform.

System programmer response: None.

Module: gen.cpp, oakley_lf.cpp

Procedure name: None.

EZD0934I Unsupported exchange type (*xchg_id*) for phase 1 security association

Explanation: An IKE negotiation failed because the IKE daemon encountered an unsupported exchange type.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted security association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

xchg_id is the number that identifies the exchange type that was not valid.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that a supported exchange type is used in negotiations.

Module: policy.cpp

Procedure name: None.

EZD0935I No local policy data available

Explanation: An IKE negotiation failed because the IKE daemon found no suites for matching proposals.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Check the local policy and ensure that it exists and is valid. Local policies are specified on KeyExchangeAction and IpDataOffer Statements. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD0936I Phase 2 IDs must be IP type addresses

Explanation: An IKE negotiation failed because the identities exchanged during a phase 2 Security Association (SA) negotiation were not IP-type addresses.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that phase 2 IDs are IP-type addresses.

EZD0937I • EZD0938I

Module: oakley_phaseII.cpp, policy.cpp

Procedure name: None.

EZD0937I Could not add certificate with label (*label*) to the supported certificate authority list

Explanation: The IKE server could not find a certificate with the specified label on the key ring identified by the Key ring setting for the z/OS Image. This label was defined to be in the specified Key Ring database. In the IKE daemon configuration file, this label corresponds to the SupportedCertAuth parameter of the IkeConfig statement.

label is the label of this certificate.

System action: The IKE server will ignore the label; IKE daemon processing continues.

Operator response: Verify that the label is correct.

When configured without the IBM Configuration Assistant for z/OS Communications Server:

- Verify that the label specified on the SupportedCertAuth parameter of the IkeConfig statement is correct.
- Verify that the key ring identified by the KeyRing parameter of the IkeConfig statement is correct.

See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement.

When configured with the IBM Configuration Assistant for z/OS Communications Server:

- Verify that a certificate with that label is connected to the key ring identified by the Key ring database configured on the IPSec: IKE Daemon Settings panel.
- Verify that the key ring database name and location are configured correctly.

See the online helps in the GUI for additional information.

System programmer response: None.

Module: cacache.cpp

Procedure name: None.

EZD0938I Unsupported algorithm (*algorithm*) found in transform

Explanation: The IKE negotiation failed because the algorithm specified in a transform is not supported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

algorithm

The numerical value of the unsupported algorithm. Supported algorithms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 algorithms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement. Go to the <http://www.iana.org/assignments/isakmp-registry> website for additional information about algorithm number assignments.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that all hash, encryption, and authentication algorithms are specified correctly for all transforms.

Module: ipsecklen.cpp, oakley_mf.cpp

Procedure name: None.

EZD0939I Bad proposal layout for protocol (*protocol_id*)

Explanation: An IKE negotiation failed because the proposal layout for the specified protocol is not valid. Possible reasons for the error are too many suites in an offer or a proposal that is too long or too short.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

protocol_id is the ID of the protocol.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: policy.cpp

Procedure name: None.

EZD0940I Wrong security parameter index(SPI) size (*SPI_size_exp* / *SPI_size*) for protocol (*protocol_id*) in proposal (*proposal*)

Explanation: An IKE message failed to be processed because an SPI size was not valid.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

SPI_size_exp is the expected SPI size.

SPI_size is the SPI size found.

protocol_id is the protocol ID.

proposal is the proposal number or -1 if this message was not part of an SA negotiation.

System action: Contact the system programmer.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: doi.cpp, infoXchg.cpp, policy.cpp

Procedure name: None.

EZD0941I More than 1 object in proposal reply for protocol (*protocol_id*)

Explanation: An IKE negotiation failed because more than one transform was specified in a reply or more than one proposal was chosen on a match of an offered proposal.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

object is either **suite** or **transform**. If *object* is **suite**, then more than one proposal was chosen by the remote security endpoint. If *object* is **transform**, then more than one transform was specified for a proposal.

protocol_id is the protocol ID.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that only one proposal is accepted from an offer and only one transform is specified in a proposal.

EZD0942I • EZD0944I

Module: policy.cpp

Procedure name: None.

EZD0942I Duplicate protocol (*protocol*) found in proposal (*proposal_num*)

Explanation: An IKE daemon negotiation failed because the reply proposal contains more than one transform with the specified protocol.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

protocol is the protocol ID.

proposal_num is the proposal number.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that they do not specify the same protocol more than once in a single proposal.

Module: policy.cpp

Procedure name: None.

EZD0943I Proposal (*proposal_num*) contains too few bytes (*bytes*)

Explanation: An IKE negotiation failed because the proposal does not contain enough data.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

proposal_num is the proposal number.

bytes is the number of bytes missing from the proposal.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: policy.cpp

Procedure name: None.

EZD0944I Transform *transform_id* : duplicate attribute (*attribute*)

Explanation: An IKE negotiation failed because a transform specified the same attribute more than the allowed number of times.

Additional diagnostic messages with the same message instance number will be issued to identify the impacted security association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

attribute is the attribute that was duplicated. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about transform attributes.

System action: This SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that all attributes are specified correctly. With the exception of the life-value tag, attributes can be specified only once in a single transform.

Module: gen.cpp

Procedure name: None.

EZD0945I No proposal specified or proposal is empty

Explanation: An IKE negotiation failed because a proposal does not exist or contains no data.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: policy.cpp

Procedure name: None.

EZD0946I Protocol mismatch : IpDataOffer (*offer_num*) requires (*reqd_proto*) but proposal (*prop_num*) includes (*prop_proto*)

Explanation: An IKE phase 2 negotiation encountered a protocol mismatch.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

offer_num is the number of an IpDataOffer referenced from an IpDynVpnAction. The number corresponds to the order of the references in the IpDynVpnAction. Therefore, the first IpDynVpnOffer referenced from the IpDynVpnAction would have number 1 in this message.

reqd_proto is the description of the protocols configured in the IpDataOffer indicated by the *offer_num* value. Possible values include AH, ESP, or AH+ESP. AH+ESP indicates that the combination of AH and ESP are required.

prop_num is the proposal number from the remote security endpoint.

prop_proto is the description of the protocols proposed in the proposal indicated by *prop_num*. Possible values include AH, ESP, or AH+ESP. AH+ESP indicates that the combination of AH and ESP was proposed.

System action: The IKE negotiation might succeed if a different proposal is found and accepted. If an acceptable proposal is not found, the IKE negotiation fails. If the negotiation fails, message EZD1022I will be issued, which will identify the IpDynVpnAction that referenced the IpDataOffer indicated by the *offer_num* value. IKE daemon processing continues.

Operator response: If the proposal that contains the mismatch is the one that should be accepted, take one of the following actions:

- Alter the local policy to accept the protocols in this proposal.
- Contact the system programmer.

System programmer response: If the proposal that contains the mismatch is the one that should be accepted, notify the administrator of the remote security endpoint that you received a protocol mismatch and ask the administrator to ensure that they alter the remote configuration to propose the correct protocols.

Module: policy.cpp

Procedure name: None.

EZD0948I IKE DETECTED MODIFY COMMAND ERROR : *error*

Explanation: While processing a MODIFY command, the IKE daemon received an error.

error is the error that was detected. Possible values are:

NO VERB

Indicates a required verb parameter was not specified on the MODIFY command.

TOO LONG

Indicates that the MODIFY command syntax was too long.

ZERO LENGTH

Indicates that the MODIFY command was missing required parameters.

INVALID COMMAND

Indicates that a verb that was not valid was used on the MODIFY command.

System action: The command is ignored; IKE daemon processing continues.

Operator response: Check the command syntax, and try the request again. If the command was too long, try using abbreviations where possible.

System programmer response: None.

Module: mdfyrvr.cpp

Procedure name: None.

EZD0950I IKE CANNOT RETRIEVE MODIFY COMMAND DATA

Explanation: The Internet Key Exchange (IKE) daemon encountered an error while attempting to retrieve MODIFY command data from the communications area.

System action: The IKE daemon was unable to process the MODIFY command.

Operator response: Try the request again. If the failure persists, look for other OS messages about the failure.

System programmer response: None.

Module: mdfyrvr.c

Procedure name: None.

EZD0951I No proposal data to lay out

Explanation: An IKE negotiation failed because the IKE daemon found no valid proposals.

System action: The Security Association (SA) negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received an empty proposal and ask the administrator to ensure that their policy is configured correctly.

Module: layout.cpp

Procedure name: None.

EZD0952I Error on ioctl call (*ioctl*) : *errno* | *errnojr* | *errortext*

Explanation: The system was unable to successfully perform the specified ioctl call.

ioctl is the ioctl call that was called.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

errortext provides further information about why the ioctl call that was called failed or it describes the meaning of *errno*.

System action: The operation being performed failed; IKE daemon processing continues.

Operator response: Verify that the system stacks are started and operating correctly and reissue the command. If the error persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: isakmp_base_sa.cpp, simple_net.cpp, stackobj.cpp

Procedure name: None.

EZD0953I Filter installation failed due to conflict with existing filter

Explanation: An IKE negotiation failed because the IKE daemon was unable to install a dynamic filter in the TCP/IP stack due to a conflict with an existing filter. This error occurs whenever an existing dynamic filter overlaps the new filter partially, or whenever an existing filter exactly matches the new filter. Because of the conflict, the stack cannot determine which filter should take precedence, so the new filter is rejected.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Change the properties of the tunnel so that the dynamic filter does not conflict with an existing dynamic filter, and restart the negotiation. If the error persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: stackobj.cpp

Procedure name: None.

EZD0954I Transform *transform_id* : no encryption algorithm specified

Explanation: An IKE negotiation failed because the specified transform does not specify an encryption algorithm.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that an encryption algorithm is specified for each transform.

Module: gen.cpp, oakley_lf.cpp

Procedure name: None.

EZD0956I Transform *transform_id* : no Diffie-Hellman group identifier specified

Explanation: An IKE negotiation failed because the specified transform did not specify a Diffie-Hellman (DH) group identifier.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted

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Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to verify that they have a DH group specified for each transform.

Module: oakley_lf.cpp

Procedure name: None.

EZD0957I Phase 1 Security Association *p1_said* created successfully but an error at the coupling facility makes it unavailable for takeover

Explanation: The indicated Security Association (SA) was created and is fully functional. However, when the phase 1 information was passed into the coupling facility, an error occurred. This phase 1 SA is not available for takeover.

p1_said is the ID of the specified SA.

System action: The SA is not available for takeover; IKE daemon processing continues.

Operator response: See the information about diagnosing sysplex-wide Security Association (WSA) problems in z/OS Communications Server: IP Diagnosis Guide for information about correcting the problem at the coupling facility. After correcting the problem at the coupling facility, you can manually refresh the SA using the **ipsec** command to make it available for takeover. See the information about the managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options. Alternatively, you can wait for the SA to be refreshed automatically according to the configured lifetime or lifesize settings.

System programmer response: None.

Module: phase1.cpp

Procedure name: None.

EZD0958I Unsupported protocol (*protocol_id*) for phase *phase* Security Association negotiation

Explanation: An IKE negotiation failed because the server encountered a protocol that is not valid in the current Security Association (SA) negotiation phase. Phase 1 negotiation supports only the IKE protocol and phase 2 supports only the ESP and AH protocols.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

protocol_id is the numerical value that identifies the unsupported protocol.

phase is the phase (1 or 2) that the negotiation was in when the error occurred.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to verify that they are using only the supported protocols for SA negotiations that are listed in **Explanation** above.

Module: doi.cpp, policy.cpp

Procedure name: None.

EZD0959I Proposal (*proposal*) using protocol (*protocol_id*) is out of order - last proposal was *last_proposal*

Explanation: An IKE negotiation failed because the current proposal number is out of order. Proposals must be processed in monotonically increasing order.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

proposal is the proposal number.

protocol_id is the protocol ID.

last_proposal is the number of the last proposal.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal out of order and ask the administrator to ensure that their proposal configuration is correct.

Module: policy.cpp

Procedure name: None.

EZD0960I Phase 1 proposal contains non-IKE protocol

Explanation: An IKE negotiation failed because the current phase 1 proposal contains a non-IKE protocol. During phase 1, the only protocol allowed is IKE.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a phase 1 message with a non-IKE protocol specified and to verify that their proposal configuration is correct.

Module: policy.cpp

Procedure name: None.

EZD0961I Proposal contains *number* extra bytes

Explanation: An IKE negotiation failed because the current proposal contains extra data.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

number is the number of extra bytes that the proposal contains.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a proposal that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: policy.cpp

Procedure name: None.

EZD0962I Responder mode in phase 1 policy does not match initiator mode (*mode*)

Explanation: The IKE negotiation failed because the mode specified for the responder in the policy database is not compatible with the role specified by the initiator of the Security Association (SA) negotiation.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

mode is the mode that this negotiation requires. *mode* is either **main** or **aggressive**.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: When configured without the IBM Configuration Assistant for z/OS Communications Server, check the HowToRespond parameter in the KeyExchangeAction statement corresponding to this phase I negotiation. If the mode reported in *mode* should be allowed, change the HowToRespond parameter to allow *mode*. Otherwise, notify the administrator of the remote security endpoint that your policy does not allow this mode of negotiation. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the TCP/IP stack and check the Responder Mode setting on the Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel. If the mode reported in *mode* should be allowed, change the Responder Mode setting to allow *mode*. Otherwise, notify the administrator of the remote security endpoint that your policy does not allow this mode of negotiation. See the online helps in the GUI for additional information.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD0963I INTERNAL ERROR *errid* - UNABLE TO OBTAIN MEMORY OF SIZE *size*

Explanation: The Internet Key Exchange (IKE) daemon was unable to obtain the required amount of memory storage.

errid is a unique ID for this error.

size is the amount of storage the server attempted to obtain.

System action: Results are unpredictable.

Operator response: Ensure that there is enough memory available on the system and try the operation again.

System programmer response: None.

Module: Numerous

Procedure name: None.

EZD0964I IKE CANNOT KILL MAIN THREAD : *errno* | *errnojr* | *description*

Explanation: The Internet Key Exchange (IKE) daemon received a STOP command but was unable to kill the main thread. The most likely reason is that the MAIN thread no longer exists.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description describes the meaning of *errno*.

System action: The command failed.

Operator response: None.

System programmer response: None.

Module: mdfrsrvr.c

Procedure name: None.

EZD0965I Validity check or authentication failure occurred using a shared key

Explanation: A validity check failure or authentication failure occurred on a message for a phase 1 Security Association configured for shared key authentication. This indicates a likely mismatch between the locally configured shared key value and the shared key value configured on the remote security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA) including the applicable KeyExchangeRule statement. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Confirm that the configured shared Key value matches the value configured on the remote security endpoint.

When configured without the IBM Configuration Assistant for z/OS Communications Server, confirm that the SharedKey value on the applicable KeyExchangeRule statement matches the key value that is configured on the remote security endpoint. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the KeyExchangeRule statement and the SharedKey parameter.

When configured with the IBM Configuration Assistant for z/OS Communications Server, confirm that the Shared Key value on the applicable Connectivity Rule matches the key value that is configured on the remote security endpoint. See the online helps in the GUI for additional information.

System programmer response: None.

Module: oakley_kep.cpp

Procedure name: None.

EZD0966I IKE CANNOT INITIALIZE MODIFY COMMAND QUEUE

Explanation: The Internet Key Exchange (IKE) daemon was unable to initialize the MODIFY command queue.

System action: The MODIFY command service is not available; IKE daemon processing continues.

Operator response: If you require the MODIFY command service, restart the IKE daemon. If the problem persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPK.

Module: mdfrsrvr.c

Procedure name: None.

EZD0967I IKE RELEASE *ver.rel.mod* SERVICE LEVEL *level* CREATED ON *date*

Explanation: This message is issued when the IKE daemon is started.

ver.rel.mod is the z/OS version, release, and modification level.

level is the service level of the IKE daemon.

date is the date this version of the IKE daemon was created.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: fw_initterm.c

Procedure name: None.

EZD0968I • EZD0970I

EZD0968I Unknown or incorrect address type (*address_type*) in Security Association address

Explanation: The specified address type in the SA is unsupported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

address_type

The number of the unsupported address type

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Request that the administrator of the remote security endpoint check their policy and ensure that only supported addresses are being used.

Module: sa_addr.cpp

Procedure name: None.

EZD0969I Proposal too short or security parameter index (SPI) size too large (*reason*)

Explanation: An IKE negotiation failed because the proposal does not contain enough data or the SPI size in the transform is too large.

Additional diagnostic messages with the same message instance number will be issued identifying the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

reason indicates which parameter was incorrect. *reason* is either **spi** or **proposal**.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a payload that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: policy.cpp

Procedure name: None.

EZD0970I C/C++ runtime library function call function failure : errid - errno | errnojr | description

Explanation: A C/C++ run-time library function call returned an error. This error should not occur during normal processing.

function is the function call that failed. See the z/OS XL C/C++ Runtime Library Reference for more information.

errid is a unique ID for this error.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description describes the meaning of *errno*.

System action: The operation being performed failed; IKE daemon processing continues.

Operator response: Correct the error indicated by *errno*, *errnojr*, and *description* and restart the IKE daemon if necessary.

System programmer response: None.

Module: cp_convert.c, fw_initterm.c, fwmsgq.c, main.cpp, sa.cpp, simple_net.cpp, simple_timer.cpp,

simple_ureq.cpp, stackmgr.cpp, stckobj.cpp, syslogc.c, verifyq.cpp

Procedure name: None.

EZD0971I Trying to use phase 2 Security Association but phase 1 key exchange is not complete

Explanation: The Internet Key Exchange (IKE) daemon attempted to send a notification with a phase 2 security association (SA), but the phase 1 key exchange is not complete.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The message cannot be sent until the phase 1 key exchange is complete; the IKE daemon continues.

Operator response: None.

System programmer response: None.

Module: doi.cpp

Procedure name: None.

EZD0973I Responder-Lifetime notification payload received for *phase* security association and is ignored

Explanation: The Internet Key Exchange (IKE) daemon received a Responder-Lifetime notification message. The Internet Key Exchange (IKE) daemon ignores Responder-Lifetime notification messages and maintains the original lifetime value.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

phase is either 1 for an IKE Security Association or 2 for a dynamic Security Association.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: doi.cpp, oakley_phaseII.cpp

Procedure name: None.

EZD0974I Attribute length (*attribute_length*) is not valid - expected (*valid_length*)

Explanation: The Internet Key Exchange (IKE) daemon received a notification message with an incorrect attribute length.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

attribute_length is the length that was received.

valid_length is the length that was expected.

System action: The message request failed; IKE daemon processing continues.

Operator response: Notification messages are not critical to IKE operation, but if this message is seen repeatedly, notify the administrator of the remote security endpoint that you are receiving messages that are not valid.

System programmer response: None.

Module: doi.cpp

Procedure name: None.

EZD0975I Unknown message type (*message_type*)

Explanation: The Internet Key Exchange (IKE) daemon received a message type that is not supported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

message_type is the number of the message type received.

System action: The message cannot be processed; IKE daemon processing continues.

Operator response: None. However if this message is seen often, contact the system programmer.

System programmer response: None. However if this message is seen often, notify the administrator of the remote security endpoint that you are receiving messages that are not valid.

Module: doi.cpp

Procedure name: None.

EZD0977I IKE CANNOT START BECAUSE IT IS ALREADY RUNNING

Explanation: There can be only one active Internet Key Exchange (IKE) daemon. A second IKE daemon cannot be started when one is already running.

System action: The IKE daemon that attempted to start ends; the running IKE daemon continues.

Operator response: Use the STOP command to stop the active IKE daemon and try the request again.

System programmer response: None.

Module: fw_initterm.c

Procedure name: None.

EZD0978I Initiator must specify exchange type

Explanation: An IKE negotiation failed because the initiator of the negotiation did not specify an exchange type. The initiator must specify whether to use main or aggressive mode.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the remote security endpoint that you received a request to start a negotiation, but the exchange type was not specified.

Module: policy.cpp

Procedure name: None.

EZD0979I Refresh of phase 1 Security Association *p1_SA_ID* could not be performed

Explanation: The Internet Key Exchange (IKE) daemon could not refresh the specified phase 1 Security Association (SA) because the IKE message queue could not be accessed.

Additional diagnostic messages that have the same message instance value will be issued to further identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

p1_SA_ID is the phase 1 SA ID of this SA.

System action: The SA is not refreshed; IKE daemon processing continues.

Operator response: No action is required, but the SA will expire after the normal lifetime or life-size has been exceeded. To refresh the SA manually, use the **ipsec -k refresh** command.

See the information about the managing network security information in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: isakmp_base_sa.cpp

Procedure name: None.

EZD0980I No transform specified in Key Exchange Protocol initialization

Explanation: The Internet Key Exchange (IKE) daemon received a message to start a Key Exchange Protocol (KEP) but no transform was specified.

System action: The request failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to verify that their policy is configured correctly.

Module: genkep.cpp

Procedure name: None.

EZD0981I Unable to set ID - ID mismatch

Explanation: The Internet Key Exchange (IKE) daemon could not set the ID of a security endpoint because the data did not match what was expected. This might occur when initiating a phase 1 security association (SA) negotiation and the responder used a different identity than was expected based on local configuration.

Additional diagnostic messages that have the same message instance number will be issued to further identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request failed; IKE daemon processing continues.

Operator response: Verify that the LocalSecurityEndpoint and RemoteSecurityEndpoint statements have valid identity strings and are defined correctly. Review the configuration of the IKE peer to confirm that it uses the same identity as is locally configured.

System programmer response: None.

Module: doi.cpp

Procedure name: None.

EZD0982I Payload length error

Explanation: The Internet Key Exchange (IKE) daemon encountered a payload that was not the correct size.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request failed and the SA negotiation might fail; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a payload that was not valid and ask the administrator to ensure that their policy is configured correctly.

Module: isakmp_base_sa.cpp, oakley_kep.cpp, pksig.cpp, simple_ureq.cpp

Procedure name: None.

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EZD0983I Unknown request type (*request_id*)

Explanation: The Internet Key Exchange (IKE) daemon received a request to perform an unknown action. *request_id* is the number that identifies the request.

System action: The request failed; IKE daemon processing continues.

Operator response: Ensure that the request entered is valid and try the operation again.

System programmer response: None.

Module: anchor_ureq.cpp, simple_ureq.cpp

Procedure name: None.

EZD0984I IKE function *locid* - *function failed* : *val1* | *val2* | *val3*

Explanation: An IKE function did not complete successfully because of an error condition in the function specified. Additional diagnostic messages that have the same message instance number will be issued to further identify the error. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

locid identifies the location of this error.

function is the IKE function that did not complete successfully.

val1 is internal error information or 0 if not available.

val2 is internal error information or 0 if not available.

val3 is internal error information or blank if not available.

System action: The specified function failed; IKE daemon processing continues.

Operator response: Look for other messages that have the same message instance number and follow the instructions documented in those messages. Because these messages are usually the result of other errors that are being encountered, they can be turned off by not setting the VERBOSE bit in the IkeSyslogLevel parameter on the IkeConfig statement. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement and IKE daemon configuration file.

System programmer response: None.

Module: various

Procedure name: None.

EZD0985I No proposal chosen

Explanation: An IKE negotiation failed because no proposal in the offer was accepted by the local security endpoint. Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Change the local policy configuration or ask the remote security end point administrator to change their policy so that a proposal can be accepted.

When configured without the IBM Configuration Assistant for z/OS Communications Server, see the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, see the online helps in the GUI for additional information.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD0986I IKE IS NOT APF AUTHORIZED

Explanation: An attempt was made to start the Internet Key Exchange (IKE) daemon application, but the application is not APF authorized. APF authorization is required to execute the IKE daemon.

System action: The IKE daemon ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the IKE daemon resides in an APF-authorized library.

Module: fw_initterm.c

Procedure name: None.

EZD0987I Certificate payload or request received but certificates are not supported

Explanation: The Internet Key Exchange (IKE) daemon encountered a certificate payload or a certificate request in a message, but the server is not configured to support certificates.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The certificate cannot be used and the negotiation will probably fail; the IKE daemon continues.

Operator response: If you want RSA signature authentication, verify that the Key ring name setting is correct. Otherwise, ensure that the remote security endpoint administrator uses the shared key method of authentication.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the Key ring database setting is specified on the IkeConfig statement with the KeyRing parameter. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement.

When configured with the IBM Configuration Assistant for z/OS Communications Server, the Key ring database name is configured on the IPSec: IKE Daemon Settings panel. See the online helps in the GUI for additional information.

System programmer response: None.

Module: oakley_kep.cpp

Procedure name: None.

EZD0988I Rcookie is zero - message ID is non-zero

Explanation: During an IKE message exchange, the IKE daemon received a message that had an Rcookie with a value of 0, but the message ID was nonzero. A nonzero message ID indicates a phase 2 negotiation, in which case the Rcookie is required to be nonzero.

System action: The message was not processed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about the error and ask the administrator to ensure that their policy is configured correctly.

Module: anchor_msg.cpp

Procedure name: None.

EZD0989I Transform transform_id : Diffie-Hellman group (DH_group) is not supported

Explanation: The Internet Key Exchange (IKE) daemon detected a Diffie-Hellman (DH) group that is not supported. Only groups 1, 2, 5, and 14 are supported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted

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Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

DH_group is the ID of the unsupported DH group. DH groups are specified on the DHGroup parameter on a KeyExchangeOffer Statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about the error and ensure that their DH group identifiers are specified correctly.

Module: gen.cpp

Procedure name: None.

EZD0990I The IKE daemon is set up to support RSA signature mode of authentication for stack *stackname* using the local keyring

Explanation: The Internet Key Exchange (IKE) daemon successfully accessed the SAF key ring to support the RSA signature mode of authentication. This key ring was specified by the KeyRing parameter of the IkeConfig statement.

In the message text:

stackname

The name of the stack for which RSA signature mode of authentication is available.

System action: The IKE daemon will support RSA signature mode of authentication for the stack indicated by the *stackname* value; the IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: cert_mgr.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD0990I The IKE daemon is set up to support RSA signature mode of authentication for stack TCPCS
using the local keyring

EZD0991I Transform *transform_id* : unsupported authentication type (*auth_type*) for phase 1 Security Association

Explanation: An IKE phase 1 Security Association (SA) negotiation failed because the authentication type is not supported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement.

auth_type is the number of the unsupported authentication type. The valid authentication types are PreshareKey and RsaSignature, which are specified on the HowToAuthPeers parameter of an KeyExchangeOffer statement.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that only pre-shared keys or RSA signature is being used for peer authentication.

Module: gen.cpp

Procedure name: None.

EZD0992I IKE daemon running swappable : **errno** *errno* (*description*) **errnojr** *errnojr*

Explanation: An error occurred when the IKE daemon attempted to set itself as non-swappable.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojr) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: IKE daemon processing continues as a swappable process.

Operator response: None.

System programmer response: Running the process as swappable might affect the IKE daemon performance. Correct the problem, if possible, and restart the IKE daemon.

Module: main.cpp

Procedure name: None.

EZD0993I Transform *transform_id* : Unable to layout protocol transform header

Explanation: An IKE negotiation failed because the server cannot build the transform header for the specified protocol. This error is due to either the transform header being empty or a memory allocation failure.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

transform_id is the value used to identify this transform in an IKE proposal. Supported transforms for IKE SAs are described in Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Phase 1 transforms are specified on a KeyExchangeOffer statement, and phase 2 transforms are specified on an IpDataOffer statement. Phase 2 transforms specify the encapsulation mode on the HowToExcav statement.

protocol is a string representing the protocol. *protocol* is either AH, ESP, or OAKLEY.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: If the error was due to a memory allocation failure, fix the error and try again. Otherwise, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPK.

Module: ah_lf.cpp, esp_lf.cpp, oakley_lf.cpp

Procedure name: None.

EZD0994I Unable to initialize anchor

Explanation: During initialization, the IKE daemon was unable to initialize the anchor that is the main IKE control object.

Additional diagnostic messages that have the same message instance number will be issued to identify the error. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The IKE daemon ends.

Operator response: See the **User or Operator response** in the other messages that have the same message instance number to correct the error.

System programmer response: None.

Module: main.cpp

Procedure name: None.

EZD0995I Phase 1 Security Association *sa_id* is expired

Explanation: The Internet Key Exchange (IKE) daemon detected a request to access a phase 1 Security Association (SA) that has expired.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

sa_id is the phase 1 SA ID.

System action: The request failed; IKE daemon processing continues.

Operator response: To satisfy the request, the SA must be refreshed or re-started. Use the **ipsec -k refresh** or **ipsec -k activate** command to refresh or activate a phase 1 SA. See the information about the managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: oakley_kep.cpp, sa.cpp

Procedure name: None.

EZD0996I Unsupported payload type (*type*)

Explanation: The Internet Key Exchange (IKE) daemon detected a payload of an unsupported type.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

type is the numerical representation of the unsupported payload type.

System action: The request failed because the message was not processed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received an unsupported payload type and ask the administrator to ensure that their policy is configured correctly.

Module: msg.cpp, oakley_kep.cpp

Procedure name: None.

EZD0998I Unable to authenticate IKE message

Explanation: An IKE request or negotiation failed because the hash verification of the message failed.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The IKE request or SA negotiation failed; IKE daemon processing continues.

Operator response: Try the operation again. If errors continue, contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you are receiving messages that you are unable to authenticate and ask the administrator to ensure that they are using a valid hash algorithm.

Module: oakley_kep.cpp

Procedure name: None.

Chapter 12. EZD1xxxx messages

EZD1005I Too many life attributes specified

Explanation: The Internet Key Exchange (IKE) daemon received a request to modify the life of a security association (SA) and detected an attribute list that contains too many attributes. Valid attributes are LIFE-TYPE and LIFE SIZE.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received this message and ask the administrator to verify that their policy is configured correctly.

Module: oakley_kep.cpp

Procedure name: None.

EZD1006I No relevant payload was received

Explanation: The Internet Key Exchange (IKE) daemon detected a message that does not contain a payload required to handle the current request.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted security association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request failed and the SA negotiation might fail; IKE daemon processing continues.

Operator response: If the SA negotiation fails, notify the administrator of the remote security endpoint that you received a payload containing no relevant information.

System programmer response: None.

Module: oakley_kep.cpp, phase1.cpp

Procedure name: None.

EZD1007I Received message is not encrypted

Explanation: The Internet Key Exchange (IKE) daemon detected a message that was not encrypted but should have been.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a message that should have been encrypted but was not and ask the administrator to ensure that their policy is configured correctly.

Module: oakley_kep.cpp

Procedure name: None.

EZD1008I *errid System SSL CMS call function failure : gsk_rc description*

Explanation: A call to the System SSL Certificate Management Services (CMS) API returned an error. This error should not occur during normal processing.

errid is the unique ID for this error.

function is the API call that failed. The System SSL CMS API is documented in z/OS Cryptographic Services System SSL Programming.

gsk_rc is the hexadecimal CMS status code. See the information about the CMS status codes in z/OS Cryptographic Services System SSL Programming.

description describes the meaning of *gsk_rc*.

System action: The operation being performed fails; IKE daemon processing continues.

Operator response: Use *gsk_rc* and the description provided to fix the error.

System programmer response: None.

Module: asn_utils.cpp, cacache.cpp, cert_rep.cpp, certcache.cpp, pki390.cpp, key_agree.c

Procedure name: None.

EZD1009I Received message is a replay message

Explanation: The Internet Key Exchange (IKE) daemon detected a message that was already processed.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The message is not processed; IKE daemon processing continues.

Operator response: Replays are not errors and can be caused by lost packets, network congestion. Usually, no action is required. If there are a large number of replays, notify the administrator of the remote security endpoint that you are receiving a large number of replays.

System programmer response: None.

Module: oakley_kep.cpp, oakley_phaselII.cpp, phase1.cpp

Procedure name: None.

EZD1010I IKE message exchange is in unknown state (*state*) for *mode* phase *phase* Security Association

Explanation: The Internet Key Exchange (IKE) daemon detected a message that cannot be processed for a security association (SA) in the current state.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

state is the current state of the SA negotiation. *state* is either **unknown** or **wait for key exchange**.

mode is the mode in which the daemon is acting. *mode* is either **initiator** or **responder**.

phase is the phase of this SA. *phase* is either **1** or **2**.

System action: The message cannot be processed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you are receiving messages that are not valid for the *state* and *mode* that is current for this SA negotiation and ask the administrator to ensure that their policy is configured correctly.

Module: oakley_phaselII.cpp, phase1.cpp

Procedure name: None.

EZD1011I Duplicate phase 2 payload payload encountered

Explanation: The Internet Key Exchange (IKE) daemon detected a payload that was already received or received more payloads of this type than expected.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

payload is the type of duplicate payload. *payload* can be one of the following:

- Key Exchange
- ID
- NONCE

System action: The message was not processed; IKE daemon processing continues.

Operator response: If a large number of these messages are issued, notify the administrator of the remote security endpoint that you are receiving duplicate messages.

System programmer response: None.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1012I Unexpected payload type (*payload*)

Explanation: The Internet Key Exchange (IKE) daemon detected a payload type that is not supported or not expected in the current stage of processing.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

payload is the type of payload found. *payload* is one of the following:

- Key Exchange
- ID
- NONCE
- other

System action: The message was not processed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received an unexpected payload type and ask the administrator to ensure that their policy is configured correctly.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1013I Unexpected phase 2 message - not a replay

Explanation: The Internet Key Exchange (IKE) daemon received a message during phase 2 processing that was not expected and was not a replay message.

System action: The message is ignored; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you are receiving unexpected phase 2 messages during this Security Association negotiation and ask the administrator to verify that their policy is configured correctly.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1014I No payload payload received

Explanation: During an IKE message exchange, the IKE daemon received a message indicating that a payload of the specified type should have already been processed, but the payload had not been received in any previous message.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

payload is the type of payload received. *payload* can be one of the following:

- NONCE
- ID
- Key Exchange
- Common

System action: The message is not processed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you did not receive the payload mentioned above and ask the administrator to verify that their policy is configured correctly.

Module: oakley_phaseII.cpp, phase1.cpp, sa.cpp

Procedure name: None.

EZD1015I Unknown object (value)

Explanation: The Internet Key Exchange (IKE) daemon encountered an object that is not supported.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

object is the type of object being operated on. *object* can be one of the following:

- DOI
- notify type
- transform
- authAlg

value is the numerical representation of the object value.

System action: If object is DOI or notify type, the notification was not processed. Otherwise, the SA negotiation failed. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you are receiving data that is not valid in IKE messages and ask the administrator to ensure that their policy is configured correctly.

Module: infoXchg.cpp, oakley_phaseII.cpp

Procedure name: None.

EZD1018I Could not resolve hostname for InitiateToLocation (hostname)

Explanation: The Internet Key Exchange (IKE) daemon failed to resolve the specified host name.

hostname is the host name that could not be resolved.

System action: The request failed; IKE daemon processing continues.

Operator response: Verify that the host name is correct and that your domain name server is working correctly.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the host name setting is configured on the InitiateToLocation parameter of a LocalStartAction statement. See the information about the Policy

Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the InitiateToLocation parameter.

When configured with the IBM Configuration Assistant for z/OS Communications Server, to verify that the host name setting is correct, edit the corresponding Connectivity Rule in the GUI. For Host to Gateway or Gateway to Gateway topologies, this setting is found on the Remote Security End Point panel. For Host to Host or Gateway to Host, this setting is found on the Advanced IPSec: Dynamic Tunnels: Local Activation panel. See the online helps in the GUI for additional information.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1019I Could not open certificate repository (*name*) (*description*) (*gsk_rc*)

Explanation: The Internet Key Exchange (IKE) daemon was unable to open the certificate repository identified by the key ring database setting.

name is the name of the certificate repository (key ring database) that IKE was unable to open.

description describes the meaning of *gsk_rc*.

gsk_rc is the hexadecimal Certificate Management Services (CMS) status code. See the information about the CMS status codes in z/OS Cryptographic Services System SSL Programming.

System action: The IKE daemon will not support RSA signature mode authentication; IKE daemon processing continues.

Operator response: Ensure that the repository name is defined correctly and that the user under which the IKE daemon was started is authorized to access the repository.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the certificate repository name is set on the KeyRing parameter of the IkeConfig statement. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information.

When configured with the IBM Configuration Assistant for z/OS Communications Server, the certificate repository name is set in the key ring database name located in the IPSec: IKE Daemon Settings panel.

System programmer response: None.

Module: cert_rep.cpp

Procedure name: None.

EZD1020I Incorrect payload size (*payload_length* / *length-expected*)

Explanation: The Internet Key Exchange (IKE) daemon detected a payload that is not the correct size for the expected payload type.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

payload_length is the length of the payload received.

length-expected is the length the payload should have been.

System action: The request failed; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that you received a payload with an incorrect size and ask the administrator to verify that their policy is configured correctly.

Module: msg.cpp, oakley_phaseII.cpp

Procedure name: None.

EZD1021I No proposal chosen with KeyExchangeRule (rule) and KeyExchangeAction (action)

Explanation: An IKE phase 1 negotiation failed because no proposal in the offer was accepted by the local security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

rule is the rule name.

- In the policy agent configuration file, *rule* is the name of a KeyExchangeRule statement in the policy agent configuration.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rule* corresponds to the name of a Connectivity Rule. *rule* also contains a suffix appended to the Connectivity Rule name to guarantee uniqueness.

action is the action name.

- In the policy agent configuration file, *action* is the name of a KeyExchangeAction statement in the policy agent configuration file.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *action* corresponds to the name of a Connectivity Rule. The rule name also contains a numeric suffix appended to the Connectivity Rule name to guarantee uniqueness.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: This message will be accompanied by one or more EZD1093I messages. See the **User or Operator Response** in EZD1093I for information about resolving this negotiation failure.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1022I No proposal chosen with IpFilterRule (rule) and IpDynVpnAction (action)

Explanation: An IKE phase 2 negotiation failed because no proposal in the offer was accepted by the local security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

rule is the name of a filter rule.

- In the policy agent configuration file, *rule* is the name of a IpFilterRule statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *rule* is the name of a Connectivity Rule in GUI. *rule* also contains a numeric suffix appended to the Connectivity Rule name to guarantee uniqueness.

action is the action name.

- In the policy agent configuration file, *action* is the name specified on the applicable IpDynVpnAction statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, the action name corresponds to the name of the security level in the GUI. The action name also contains a numeric suffix appended to the security level name to guarantee uniqueness.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: This message will be accompanied by one or more EZD1093I messages. See the **User or Operator Response** in EZD1093I for information about resolving this negotiation failure.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1025I Cannot be an initiator of a phase 2 Security Association negotiation

Explanation: The local IKE daemon is attempting to initiate a phase 2 security association (SA), and the local policy specifies that it can only act as a responder.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Check the server's configuration for phase 2 activation.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the IKE daemon's phase 2 initiation role is set on the Initiation parameter in the IpDynVpnAction statement for this SA. If the local IKE server should be able to initiate the negotiation for this SA, then change the server's Initiation role in the appropriate IpDynVpnAction statement to **LocalOnly** or **Either**. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the GUI and check the Advanced IPSec: Dynamic Tunnel: How to Activate panel to see if local activation of phase 2 tunnels is allowed. See the online helps in the GUI for additional information.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1026I Cannot be a responder in a phase 2 Security Association negotiation

Explanation: The local IKE daemon is attempting to respond to a phase 2 security association (SA) negotiation request and the local policy specifies that it can act only as an initiator.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Check the server's configuration for phase 2 activation.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the IKE daemon's phase 2 initiation role is set on the Initiation parameter in the IpDynVpnAction statement for this SA. If the local IKE server should be able to be a responder in the negotiation for this SA, then change the server's Initiation role in the appropriate IpDynVpnAction statement to **RemoteOnly** or **Either**. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the GUI and check the Advanced IPSec: Dynamic Tunnels: How to Activate panel to see if remote activation of phase 2 tunnels is allowed. See the online helps in the GUI for additional information.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1027I Unsupported security endpoint identity type *id_type*

Explanation: An IKE request or negotiation failed because a security endpoint identity of an unsupported type was encountered. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for descriptions of LocalSecurityEndpoint and RemoteSecurityEndpoint statements.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

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id_type is the security endpoint identity type.

System action: The IKE request or SA negotiation failed; IKE daemon processing continues.

Operator response: Ensure that the initiator's and the responder's IDs are defined correctly and try the request again.

System programmer response: None.

Module: pki390.cpp, fwconvert.c

Procedure name: None.

EZD1029I Certificate usage value (*usage_value*) not supported

Explanation: An IKE negotiation failed because the certificate usage value is not supported. The values currently supported are the integer representation of the digital signature flag or **any**. This error occurred when verifying the signature of the remote IKE daemon certificate.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

usage_value is the number that represents the certificate usage value.

System action: The certificate could not be verified and the message was not processed; IKE daemon processing continues.

Operator response: Ensure that the certificates of the responder of the IKE exchange are configured correctly. This error might be due to the remote security endpoint sending an unsupported certificate; ensure the remote security endpoint is using valid certificates.

System programmer response: None.

Module: asn_utils.cpp

Procedure name: None.

EZD1030I The IKE daemon is not set up to support RSA signature mode of authentication for stack *stackname* using the local keyring

Explanation: The Internet Key Exchange (IKE) daemon encountered an error while processing certificates located on the specified SAF key ring.

In the message text:

stackname

The name of the stack for which RSA signature mode of authentication is not available.

System action: The IKE daemon will not support RSA signature mode of authentication for the stack indicated by the *stackname* value; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If RSA signature authentication is to be used, verify that the key ring database name is correct.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the key ring database setting is specified on the IkeConfig statement with the KeyRing parameter. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement and the IKE daemon configuration file.

When configured with the IBM Configuration Assistant for z/OS Communications Server, the key ring database name is configured on the IPSec: IKE Daemon Settings panel. See the online helps in the GUI for additional information.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: cert_mgr.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1030I The IKE daemon is not set up to support RSA signature mode of authentication for stack TCPCS using the local keyring

EZD1031I DVIPA *dvipa_addr* added to the IKE daemon for stack *stackname*

Explanation: The Internet Key Exchange (IKE) daemon received an event from the TCP/IP stack to add a dynamic virtual IP address (DVIPA). The IKE daemon successfully added the DVIPA address to the stack indicated.

dvipa_addr is the dynamic virtual IP address that was added.

stackname is the stack to which the DVIPA was added.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: anchor.cpp

Procedure name: None.

EZD1032I DVIPA *dvipa_addr* deleted from the IKE daemon for stack *stackname*

Explanation: The Internet Key Exchange (IKE) daemon received an event from the TCP/IP stack to delete a dynamic virtual IP address (DVIPA). The IKE daemon successfully deleted the DVIPA address from the stack indicated.

dvipa_addr is the dynamic virtual IP address that was deleted.

stackname is the stack from which the DVIPA was deleted.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: anchor.cpp

Procedure name: None.

EZD1033I IKE configuration file parameter *pname* contains value *val* which exceeds the maximum allowed character length *max_len* on line *linenum*

Explanation: The IKE configuration file contains a parameter that contains a value that exceeds the maximum character length allowed.

In the message text:

pname

The parameter name.

val

The parameter value that has a length that is too long.

max_len

The maximum character length allowed for the parameter value.

linenum

The line of the configuration file where the parameter was found.

System action: If the error occurs during IKE startup, IKE configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE configuration file processing ends, but

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IKE remains active. IKE configuration retains all values configured prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Replace the value for the parameter specified by the *pname* value with one that does not exceed maximum length.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1033I IKE configuration file parameter SupportedCertAuth contains value A2345678901234567890123 which exceeds the maximum allowed character length 32 on line 6
```

EZD1034I Phase 1 Security Association for DVIPA *dvipa_addr* is already re-established with its remote security endpoint *ip_addr*

Explanation: The Internet Key Exchange (IKE) daemon already re-established the phase 1 Security Association (SA) with its remote security endpoint. This phase 1 SA already existed prior to the dynamic virtual IP address (DVIPA) takeover or giveback.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

dvipa_addr is the dynamic virtual IP address.

ip_addr is the IP address of the remote security endpoint.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: anchor_ureq.cpp

Procedure name: None.

EZD1035I Certificate cannot be used for RSA signature mode of authentication

Explanation: IKE encountered a certificate that cannot be used for RSA signature mode of authentication; the IKE daemon currently supports only RSA signing IKEv1.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The certificate cannot be used and the negotiation will fail if the certificate is an end-entity certificate; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about the error and ask the administrator to verify that certificate sent to the IKE daemon for IKEv1 are using RSA signature mode. The administrator of the remote security endpoint should also verify that the key usage and the extended key usage extensions of the certificates that were sent support the creation and verification of digital signatures in an IKE flow. When the key usage extension is present, either the digital signature bit or the nonrepudiation bit must be set. When the key usage extension is present it must allow either any usage or usage with IKE.

Module: pki390.cpp

Procedure name: None.

EZD1036I Phase 2 Security Association for DVIPA *dvipa_address* is not re-established with remote security endpoint *ip_addr*

Explanation: The Internet Key Exchange (IKE) daemon detected that the phase 2 Security Association (SA) for the dynamic virtual IP address (DVIPA), was not re-established with its remote security endpoint. An error might have occurred during the phase 2 SA negotiation process.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

dvipa_address is the dynamic virtual IP address.

ip_addr is the IP address of the remote security endpoint.

System action: The IKE phase 2 SA was not re-established for the DVIPA; IKE daemon processing continues.

Operator response: Check the IKE log for an entry indicating what the phase 2 SA negotiation error might be. Also, try to manually establish a phase 2 SA with the remote security endpoint by issuing the **ipsec -y activate** command.

See the information about the managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: phaseII_sa.cpp

Procedure name: None.

EZD1037I The IKE daemon has no matching certificate entry for the specified LocalSecurityEndpoint identity (*id_string*) and certificate authority (*X.500_string*)

Explanation: The IKE message cannot be processed because no matching certificate entry was found. This error occurred while searching for a certificate that matched the LocalSecurityEndpoint ID and was signed by the CA that was requested by the remote security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

id_string is a string representation of the LocalSecurityEndpoint ID.

X.500_string is the certificate authority.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Verify that the Local Security Endpoint Identity is correct. If it is correct, obtain a certificate with the expected ID of the local IKE server. When the certificate is obtained, add it to the IKE key ring with RACDCERT.

When configured without the IBM Configuration Assistant for z/OS Communications Server, the Local Security Endpoint is set on the LocalSecurityEndpoint statement. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the LocalSecurityEndpoint statement.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the GUI and verify that the Local Security Endpoint Identity is correct. See the online helps in the GUI for additional information.

System programmer response: None.

Module: pk1390.cpp

Procedure name: None.

EZD1038I Remote security endpoint's certificate is not valid because the security association's lifetime is not in the certificate's lifetime

Explanation: The Internet Key Exchange (IKE) daemon could not verify that the remote security endpoint certificate timeframe was valid. The current time is either before the certificate notBefore time value, or the lifetime of the Security Association (SA) is beyond the certificate notAfter time value.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The certificate cannot be used, and the SA negotiation will probably fail; IKE daemon processing continues.

Operator response: Verify that the remote security endpoint CA certificate was received. Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to verify that this certificate is valid and has a lifetime at which includes the current timeframe.

Module: pki390.cpp

Procedure name: None.

EZD1039I IKE configuration file repeatable parameter *pname* was specified more than the allowed maximum of *max_num* times

Explanation: The IKE configuration file contains a repeatable parameter that was specified more times than is allowed.

pname is the repeatable parameter name.

max_num is the maximum number of times this repeatable parameter is allowed to be specified.

System action: If the error occurs during IKE startup, IKE configuration file processing ends, and the IKE daemon ends. If the error occurs due to a MODIFY REFRESH command, IKE configuration file processing ends, but IKE remains active. IKE configuration retains all values prior to the MODIFY REFRESH command.

Operator response: Change the IKE configuration file so that *pname* is specified no more than the value of *max_num*. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file.

System programmer response: None.

Module: ike_config.cpp

Procedure name: None.

EZD1040I Phase *phase* Security Association retransmit timeout src IP : *src_spec* dest IP : *dest_spec* src port : *src_port* dest port : *dest_port* protocol : *protocol*

Explanation: The Internet Key Exchange (IKE) daemon exhausted the retransmit limit set for a single phase 1 or phase 2 message retransmission.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

phase is the phase (1 or 2) of this SA.

src_spec is the local security endpoint IP specification.

dest_spec is the remote security endpoint IP specification.

src_port is the source port.

dest_port is the destination port.

protocol is the protocol this SA used.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: This might occur if there are network problems or the remote security endpoint is not responding. Take corrective action if necessary, and try the negotiation again. If failures continue, ensure that the remote security endpoint is responding.

System programmer response: None.

Module: retrans.cpp

Procedure name: None.

EZD1041I Error encountered when sending ike_event between src IP : src_spec dest IP : dest_spec src port : src_port dest port : dest_port protocol : protocol - errno | errnojr | description

Explanation: The Internet Key Exchange (IKE) daemon detected an error while transmitting or retransmitting a message to a remote security endpoint.

- When configured without the IBM Configuration Assistant for z/OS Communications Server, messages will be transmitted based on the IkeRetries and IkeInitWait parameters on the IkeConfig statement. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the IkeConfig statement.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, messages will be retransmitted based on the Advanced: Phase 1 IKE key negotiation retry tuning and Phase 2 IKE data negotiation retry tuning settings in the corresponding Image in the GUI. See the online helps in the GUI for additional information.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

ike_event

The type of message sent.

src_spec

The local security endpoint address specification.

dest_spec

The remote security endpoint address specification.

src_port

The source port.

dest_port

The destination port.

protocol

The protocol being used.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description

Describes the meaning of the *errno* value.

System action: The message was not successfully transmitted; IKE daemon processing continues.

Operator response: This might occur if there are network problems or the remote security endpoint is not responding. Take corrective action if necessary, and try the negotiation again. If failures continue, ensure that the remote security endpoint is responding.

EZD1042I • EZD1044I

System programmer response: None.

Module: infoXchg.cpp, phase1.cpp, phaseII_sa.cpp, retrans.cpp, sa.cpp

Procedure name: None.

EZD1042I IKE CONFIGURATION FILE ERROR : MODIFY REFRESH COMMAND IS REJECTED - IKE DAEMON IS USING CONFIGURATION VALUES PRIOR TO COMMAND

Explanation: An error occurred while processing the IKE configuration file during a MODIFY REFRESH command. The MODIFY REFRESH command is rejected and the IKE daemon uses all the configuration values that were specified prior to the command.

System action: MODIFY REFRESH command is rejected.

Operator response: Correct the configuration file error and re-enter the MODIFY REFRESH command.

System programmer response: None.

Module: mdfyrsrvr.c

Procedure name: None.

EZD1043I Unable to open message catalog (*catalog_name*) *errno* | *errnojr* | *description* - default messages will be used

Explanation: The specified message catalog cannot be opened. This might occur if the catalog is missing, corrupted, or has incorrect permissions. This might also occur if the IKE daemon cannot find the catalog because environment variables or paths are set up incorrectly on the system. The NLSPATH environment variable is used to set the location of the message catalog. By default, this variable is set to /usr/lib/nls/msg/%L/%N.

catalog_name is the name of the catalog that the IKE daemon attempted to open.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description describes the meaning of *errno*.

System action: IKE daemon processing continues and will use internal default messages instead of messages from the external message catalog.

Operator response: If you want to use the external message catalog, correct the indicated error and restart the IKE daemon. If the default messages are acceptable, no action is necessary. See the information about the NLSPATH environment variable in z/OS UNIX System Services Programming Tools.

System programmer response: None.

Module: fwutil.c

Procedure name: None.

EZD1044I The ID (*id_X.500_string*) sent by the remote security endpoint in the ID payload does not match the subject name or any of the subject alternate names in the certificate used by the remote security endpoint to generate its signature

Explanation: The IKE negotiation will probably fail because the identities in the ID payload and in the certificate do not match. This mismatch occurred during verification of the remote security endpoint identity while using digital signature mode authentication.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

id_X.500_string is the X.500 string from the ID payload.

System action: The certificate cannot be used and the negotiation will probably fail; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint about this error and ask the administrator to ensure that they are using a certificate that matches the identity they are sending.

Module: pki390.cpp

Procedure name: None.

EZD1045I IKE INITIALIZATION ERROR : *error_data*

Explanation: An error occurred while the Internet Key Exchange (IKE) daemon was initializing.

error_data is an explanation of the error that occurred.

System action: The IKE daemon ends.

Operator response: Use the error explanation provided and other messages in syslog with the same message instance number to fix the error and restart the IKE daemon.

System programmer response: None.

Module: fw_initterm.c, ike_config.cpp

Procedure name: None.

EZD1046I IKE INITIALIZATION COMPLETE

Explanation: The Internet Key Exchange (IKE) daemon successfully completed initialization.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: main.cpp

Procedure name: None.

EZD1049I IKE INITIALIZATION FAILURE

Explanation: The Internet Key Exchange (IKE) daemon failed to initialize.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The IKE daemon ends.

Operator response: Check for other messages in syslog with the same message instance number to indicate the reason for the failure. If the problem can be corrected, start the IKE daemon again. If the problem continues, notify the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: fw_initterm.c

Procedure name: None.

EZD1051I Phase 1 Security Association for DVIPA *DVIPA_addr* is not re-established with remote security endpoint *ip_addr*

Explanation: During a dynamic virtual IP address (DVIPA) takeover or giveback, the IKE daemon detected that the phase 1 Security Association (SA) for the specified DVIPA address was not re-established with its remote security endpoint. An error might have occurred during the phase 1 SA negotiation process.

EZD1052I • EZD1054I

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

DVIPA_addr is the dynamic virtual IP address.

ip_addr is the IP address of the remote security endpoint.

System action: The IKE phase 1 SA was not re-established for the DVIPA; IKE daemon processing continues.

Operator response: Check the logs for an entry indicating what the phase 1 SA negotiation error is.

System programmer response: None.

Module: sa.cpp

Procedure name: None.

EZD1052I Phase 1 Security Association for DVIPA *DVIPA_addr* is re-established with remote security endpoint *ip_addr*

Explanation: During a dynamic virtual IP address (DVIPA) takeover or giveback, the IKE daemon successfully re-established the phase 1 Security Association (SA) with the specified remote security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

DVIPA_addr is the dynamic virtual IP address.

ip_addr is the IP address of the remote security endpoint.

System action: The IKE phase 1 SA is re-established for the DVIPA.

Operator response: None.

System programmer response: None.

Module: phase1.cpp

Procedure name: None.

EZD1053I Discontiguous subnet mask *mask* is prohibited

Explanation: Discontiguous subnet masks, for example 255.0.0.255, are not permitted to be proposed in a Security Association (SA) negotiation.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

mask is the discontiguous subnet mask that is rejected by the IKE daemon.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Ensure that all IKE peers configure contiguous subnet masks for tunnel negotiations.

System programmer response: None.

Module: config_adapter.cpp

Procedure name: None.

EZD1054I Request to *request* could not be completed

Explanation: The Internet Key Exchange (IKE) daemon did not successfully complete the request specified.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

request is the request that could not be completed. *request* is one of the following:

- establish phase 1 Security Association
- establish phase 2 Security Association
- activate phase 2 Security Association
- refresh Security Association
- refresh phase 2 Security Association
- expire Security Association
- handle stack stop
- activate on-demand Security Association
- complete asynchronous verification request
- repopulate phase 1 Security Association
- complete DVIPA event
- display Security Association information
- activate auto-activate Security Association
- deactivate Security Association
- update policy

System action: The request failed; IKE daemon processing continues.

Operator response: See other messages that have the same message instance number to correct the problem, and try the operation again.

System programmer response: None.

Module: anchor_ureq.cpp

Procedure name: None.

EZD1055I IKE TERMINATION COMPLETE

Explanation: The Internet Key Exchange (IKE) daemon terminated successfully.

System action: The IKE daemon ends.

Operator response: None.

System programmer response: None.

Module: main.cpp

Procedure name: None.

EZD1057I Unsupported configuration : *endpoint* **data endpoint address** is specified as a *type* for a transport mode Security Association initiated mode

Explanation: A data endpoint was specified as an IP subnet or IP address range for a transport mode Security Association (SA). Only single IP address types are supported.

endpoint is either **local** or **remote**.

address is the base address value specified in the configuration policy.

type indicates whether the configuration specified subnet or range.

mode indicates whether the SA was initiated locally or remotely.

System action: The dynamic tunnel activation fails; IKE daemon processing continues.

Operator response: If you want a single SA to protect traffic for an IP subnet or IP address range, then configure a tunnel mode SA. If the message indicates that the SA was initiated locally, then change the local configuration. If the message indicates that the SA was initiated remotely, then the configuration on the remote system must be changed. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring dynamic tunnels.

System programmer response: None.

EZD1058I • EZD1062A

Module: policy.cpp

Procedure name: None.

EZD1058I IKE STATUS FOR STACK *stackname* IS UP

Explanation: The Internet Key Exchange (IKE) daemon has detected a status change for a stack. The IKE daemon can establish security associations only for a stack with status UP. The IKE daemon might detect a stack status change for several reasons such as normal termination of the stack while the IKE daemon is running.

stackname is the name of the stack that has changed status.

System action: IKE daemon processing continues.

Operator response: If the status change is unexpected, check the log for related messages from the IKE daemon or the stack.

System programmer response: None.

Module: stackobj.cpp

Procedure name: None.

EZD1059I IKE CONNECTED TO PAGENT

Explanation: The Internet Key Exchange (IKE) daemon connected to the Policy Agent (PAGENT).

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1060I IKE CONNECTION TO PAGENT FAILED

Explanation: The Internet Key Exchange (IKE) daemon failed to connect to the Policy Agent (PAGENT).

System action: The IKE daemon ends.

Operator response: Start PAGENT before starting the IKE daemon.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1061I IKE CONNECTING TO PAGENT

Explanation: The Internet Key Exchange (IKE) daemon is connecting to the Policy Agent (PAGENT).

System action: The IKE daemon waits for the PAGENT connection to complete.

Operator response: None.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1062A IKE RETRYING CONNECTION TO PAGENT [FOR *max_wait* SECONDS]

Explanation: The Internet Key Exchange (IKE) daemon is trying the connection to the Policy Agent (PAGENT) again.

max_wait is the maximum amount of time, in seconds, that the IKE daemon will continue to try connecting to

PAGENT again. The absence of this information indicates that the IKE daemon will keep trying indefinitely.

System action: IKE daemon processing continues to try the connection to PAGENT again.

Operator response: Confirm that PAGENT is started.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1063I IKE DISCONNECTING FROM PAGENT

Explanation: The Internet Key Exchange (IKE) daemon is disconnecting from the Policy Agent (PAGENT).

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1064I MODIFY COMMAND OPTION (*opt*) IS NOT SUPPORTED

Explanation: The MODIFY command option *opt* is not a supported option for the IKE daemon.

opt is the option that is not supported.

System action: The IKE configuration file processing ended, but the IKE daemon remains active. The IKE configuration retains all values prior to the MODIFY command.

Operator response: See the information about the MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information the correct syntax of the MODIFY command.

System programmer response: None.

Module: mdphysrvr.c

Procedure name: None.

EZD1065I IKE daemon could not establish a socket for port *port* for stack *stackname*

Explanation: The Internet Key Exchange (IKE) daemon was unable to establish a socket for the specified port and stack. To negotiate security associations for an IPSECURITY stack, the IKE daemon must be able to establish sockets on ports 500 and 4500 for the stack.

port is the port for which the IKE daemon was trying to establish a socket. Possible values are 500 or 4500.

stackname is the name of the stack for which the socket could not be established.

System action: The IKE daemon is unable to negotiate security associations for the given stack.

Operator response: Check syslog for other messages that indicate errors that might prevent the IKE daemon from establishing the specified socket and contact the system programmer.

System programmer response: Ensure that ports 500 and 4500 are not reserved for use by another application.

Module: simple_net.cpp

Procedure name: None.

EZD1066I IKE MODIFY COMMAND ACCEPTED

Explanation: The Internet Key Exchange (IKE) daemon started processing a MODIFY command.

System action: IKE daemon processing continues to process the MODIFY command.

Operator response: None.

EZD1067I • EZD1069I

System programmer response: None.

Module: mdfrsrvr.c

Procedure name: None.

EZD1067I IKE configuration file parameter (*pname*) is non-refreshable on line *linenum*

Explanation: The IKE configuration file parameter *pname* cannot be refreshed using the MODIFY command.

In the message text:

pname

The parameter that cannot be refreshed.

linenum

The line of the configuration file where the parameter was found.

System action: The IKE daemon configuration processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1067I IKE configuration file parameter (KeyRing) is non-refreshable on line 5

EZD1068I IKE POLICY UPDATED FOR STACK *stackname*

Explanation: IKE policy lists were successfully updated for the specified stack. An EZD1070I message can be found in syslog for any of the IKE policy lists that were updated (up to 5 lists can be updated).

stackname is the name of the stack that had a policy update.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: policymgr.cpp

Procedure name: PMAdd_PolicyCacheForStack

EZD1069I IKE POLICY UPDATE FAILED FOR STACK *stackname*

Explanation: An IKE policy list failed to be successfully built, therefore none of the policy list changes will be performed for this stack. This message indicates that the IKE policy lists were not updated because a failure was detected when building an IKE policy list. All the policy lists that were successfully built will be deleted and this stack will use the prior policy information. Also, an EZD1071I message can be found in syslog for the IKE policy list that could not be built. There might be EZD1070I messages for each of the IKE policy lists that were successfully built (these lists are deleted when the build error is detected for an IKE policy list).

stackname is the name of the stack for which the policy update failed.

System action: IKE policy information will not be updated; IKE daemon processing continues.

Operator response: You can use the MODIFY REFRESH command to modify the PAGENT policy information, which will cause the IKE daemon to receive an asynchronous notification of the changes to policy information. Then

verify that an EZD1068I message is reported on the console or in syslog to indicate that the IKE policy information was successfully updated for this stack. If the problem persists, contact the system programmer.

System programmer response: The failure might be the result of IKED not having RACF authority to access the policies. See Steps for authorizing the IKE daemon to RACF in z/OS Communications Server: IP Configuration Guide for more information. Otherwise, contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policymgr.cpp

Procedure name: PMConnect function or policyAsync exit

EZD1070I IKE policy list *policy-list-name* updated for stack *stackname*

Explanation: An IKE policy list was successfully updated. This message will be displayed in syslog for all policy lists that the IKE daemon successfully updated. EZD1068I will be sent to the console and syslog when all lists were successfully updated. This message might be issued when a subsequent policy list fails to be updated (for which an EZD1071I message will be recorded), and an EZD1069I message will be sent to the console and to the syslog. In a failure case, all the previously successfully built policy lists indicated by the EZD1070I message will be deleted.

policy-list-name is the name of the IKE policy list and has one of the following values:

- KeyExchangeRule
- IpDynVpnAction
- IpLocalStartAction
- LocalDynVpnRule
- AutoActLocalDynVpnRule

stackname is the TCP/IP stack name for which this IKE policy is being updated.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: policycache.cpp

Procedure name: PCBuild_KeyExchangeRule_List(), PCBuild_IpDynVpnAction_List(),
PCBuild_IpLocalStartAction_List(), PCBuild_LocalDynVpnRule_List(), PCBuild_AutoActLocalDynVpnRule_List()
functions

EZD1071I IKE policy list *policy-list-name* update failed for stack *stackname*

Explanation: An error was detected when attempting to build an IKE policy list. This message will be displayed in syslog for the policy lists for which the error was detected, followed by EZD1069I (sent to the console and syslog), to indicate that the IKE policy lists were not updated. All the previous IKE policy lists that were successfully built, which are indicated by an EZD1070I message, will be deleted.

policy-list-name is the name of the IKE policy list and has one of the following values:

- KeyExchangeRule
- IpDynVpnAction
- IpLocalStartAction
- LocalDynVpnRule
- AutoActLocalDynVpnRule

stackname is the stack name for which this IKE policy is being updated.

System action: IKE policy information is not updated; IKE daemon processing continues.

Operator response: Use the MODIFY REFRESH command to modify the PAGENT policy information, which will cause the IKE daemon to receive an asynchronous notification of the changes to policy information. Then verify that an EZD1068I message is reported on the console or syslog to indicate that the IKE policy information was successfully updated for this stack. If the problem persists, contact the system programmer.

EZD1072I • EZD1074I

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policycache.cpp

Procedure name: PCBuild_KeyExchangeRule_List(), PCBuild_IpDynVpnAction_List(),
PCBuild_IpLocalStartAction_List(), PCBuild_LocalDynVpnRule_List(), PCBuild_AutoActLocalDynVpnRule_List()
functions

EZD1072I Unable to find Security Association by cookies (*initiator_cookie / responder_cookie*) between (*local_ip / remote_ip*)

Explanation: The Internet Key Exchange (IKE) daemon was unable to locate a Security Association (SA) in the SA table with the specified cookie pair.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

initiator_cookie is the 8-byte hexadecimal value of the initiator cookie.

responder_cookie is the 8-byte hexadecimal value of the responder cookie.

local_ip is the local IP address.

remote_ip is the remote IP address.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: This error might be caused by receiving an incorrect cookie from the remote security endpoint when the IKE daemon is recycled during an SA negotiation or when additional messages are received after an SA is deactivated. If none of these actions happened, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: anchor_msg.cpp

Procedure name: None.

EZD1073I Error reading ipsec command request : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: The Internet Key Exchange (IKE) daemon detected an error reading an **ipsec** command request.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The command request ends; IKE daemon processing continues.

Operator response: This error might be caused by a temporary restraint on resources; try the command again.

System programmer response: None.

Module: simple_cmd_req.cpp

Procedure name: None.

EZD1074I Error writing ipsec command response : *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: The Internet Key Exchange (IKE) daemon detected an error writing an **ipsec** command response.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description describes the meaning of *errno*.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The command request ends; IKE daemon processing continues.

Operator response: This error might be caused by a temporary restraint on resources; try the command again.

System programmer response: None.

Module: simple_cmd_req.cpp

Procedure name: None.

EZD1075I Received ISAKMP error notification message : *err_msg_type*

Explanation: The Internet Key Exchange (IKE) daemon received an ISAKMP error notification message. This error indicates that a Security Association (SA) negotiation failure occurred.

err_msg_type is the type of ISAKMP error notification received.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Use the *err_msg_type* value to identify the failure and verify that the security policy is specified correctly.

See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

Module: infoXchg.cpp

Procedure name: None.

EZD1076I The function *function* returned error code *ec* while processing distinguished name [*dn*]

Explanation: An error was encountered while processing a distinguished name (DN).

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

function is the name of the function that returned an error.

ec is the error code from the function specified. For a list of common error codes returned by these functions, see the z/OS Cryptographic Services System SSL Programming.

dn is the distinguished name that is being processed if the function returning the error was gsk_dn_to_name().

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: These errors are usually caused by incorrectly formed DNs. See RFC 2253 for more information about forming DNs and check the DNs in your policy configuration file for incorrect characters (such as surrounding double quotes) and try the operation again. See Appendix A, "Related protocol specifications," on page 783 for directions on how to get a copy of the RFC.

System programmer response: None.

Module: fwconvert.cpp

Procedure name: None.

EZD1077I Could not find the IpDynVpnAction named *name*

Explanation: An IKE negotiation failed because the IKE daemon was unable to find the IpDynVpnAction specified.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

EZD1079I • EZD1082I

name is the IpDynVpnAction that could not be found.

System action: The Security Association negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policymgr.cpp

Procedure name: None.

EZD1079I IKE POLICY PURGED FOR STACK *stackname*

Explanation: IKE policy lists have been successfully purged for the specified stack.

stackname is the name of the stack that had a policy purge.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1081I Could not find the IpLocalStartAction named *name*

Explanation: An IKE negotiation failed because the IKE daemon was unable to find the IpLocalStartAction specified.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

name is the IpLocalStartAction that could not be found.

System action: The Security Association negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide a CTRACE for component SYSTCPIK.

Module: policymgr.cpp

Procedure name: None.

EZD1082I Could not find the LocalDynVpnRule named *name*

Explanation: An IKE negotiation failed because the IKE daemon was unable to find the LocalDynVpnRule specified.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

name is the LocalDynVpnRule that could not be found.

System action: The Security Association negotiation fails; IKE daemon processing continues.

Operator response: Ensure that the LocalDynVpnRule name matches a configured LocalDynVpnRule. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the LocalDynVpnRule statement.

System programmer response: None.

Module: policymgr.cpp

Procedure name: None.

EZD1083I Local policy (*p1_action_name*) does not allow local initiation of a phase 1 Security Association negotiation

Explanation: The local IKE daemon is attempting to initiate a phase 1 Security Association (SA) negotiation, but the local policy specifies that it cannot be the initiator.

p1_action_name is the name of the action.

- In the policy agent configuration file, *p1_action_name* is the name of the KeyExchangeAction statement associated with this negotiation.
- When configured with the IBM Configuration Assistant for z/OS Communications Server, *p1_action_name* corresponds to the name of a Connectivity Rule in the GUI. *p1_action_name* also contains a numeric suffix appended to the Connectivity Rule name to guarantee uniqueness.

System action: The SA negotiation failed; IKE daemon processing continues.

Operator response: Check the IKE daemon's initiation role for this SA.

When configured without the IBM Configuration Assistant for z/OS Communications Server, if the local IKE daemon should be able to initiate the negotiation for this SA, then change the daemon's HowToInitiate parameter in the appropriate KeyExchangeAction statement to **main** or **aggressive**. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, if the local IKE daemon should be able to initiate the negotiation for this SA, then edit the corresponding Connectivity Rule GUI and change the Initiator mode setting on the Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel to either **Main** or **Aggressive**. See the online helps in the GUI for additional information.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1085I A message was discarded because it was received from a remote peer behind an NAPT - src IP : *sourceIP* src port : *sourceport* dest IP :*destIP* dest port : *destport*

Explanation: The Internet Key Exchange (IKE) daemon is not permitted to allow a Security Association (SA) with a remote peer behind a network address port translation (NAPT). Therefore, any IKE message received from a remote peer with a source port other than 500 or 4500 will be discarded.

sourceIP is the source IP address.

sourceport is the source port.

destIP is the destination IP address.

destport is the destination port.

System action: The IKE message from the remote peer will be discarded; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that the IKE daemon cannot accept messages from a peer behind an NAPT.

Module: simple_net.cpp

Procedure name: None.

EZD1086I Negotiating a phase 1 Security Association due to a remote security endpoint IP address change - original IP address / port : *origip* / *origport* changed IP address / port : *changedip* / *changedport*

Explanation: A new phase 1 Security Association (SA) is being negotiated because an IP address change was detected for a remote security endpoint. This occurrence is usually related to a re-boot of the NAT device. If this new phase 1 negotiation completes successfully, then all of the previous SAs with the remote security endpoint are deleted. If this negotiation successfully completes, message EZD1087I will be issued, or if the negotiation fails, message EZD1102I will be issued.

EZD1087I • EZD1088I

origip is the IP address of the established SA.

origport is the port of the established SA.

changedip is the new IP address.

changedport is the new port.

System action: A new phase 1 SA is negotiating; IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: sa.cpp

Procedure name: None.

EZD1087I Negotiation of a phase 1 Security Association due to a remote security endpoint IP address change succeeded - original IP address / port : *origip* / *origport* new IP address / port : *newip* / *newport*

Explanation: This message indicates that the phase 1 Security Association (SA) being negotiated in response to a remote security endpoint IP address change succeeded. This message is associated with a previously issued EZD1086I message.

origip is the IP address of the previously established SA.

origport is the port of the previously established SA.

newip is the new IP address.

newport is the new port.

System action: Negotiation of the phase 1 SA succeeds; IKE daemon processing continues.

Operator response: Contact the system programmer if this message is seen often.

System programmer response: If this message is seen often, determine the cause of the IP address change. It might be caused by a reboot of the NAT device in front of the remote peer or by an expired NAT mapping. Notify the administrator of the remote security endpoint about the error. If the change is caused by an expired NAT mapping, the administrator of the remote security endpoint should take action to prevent future NAT mapping expirations.

Module: oakley_kep.cpp

Procedure name: None.

EZD1088I IKE received an unsupported *identity address type* (*idtype* - *idtypestr*) for a Security Association traversing a NAT

Explanation: An identity address must be specified as a single IPv4 address.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

identity

Possible values are:

IDci The identity address type of the initiator.

IDcr The identity address type of the responder.

NAT-OA

The NAT original address.

idtype

The number of the identity address type that is not supported. These values are defined in RFC2407. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

idtypestr

The identity address type that is not supported. If the identity address type is not known, the value of *idtypestr* is Unknown.

System action: The phase 2 SA negotiation fails; IKE daemon processing continues.

System programmer response: Ensure that only single IPv4 addresses are specified as data endpoints when traversing a NAT. Notify the administrator of the remote security endpoint and ask the administrator to ensure that only single IPv4 addresses are specified as data endpoints when traversing a NAT.

User response: Contact the system programmer.

Module: oakley_phaseII.cpp

Example: None.

EZD1089I A tunnel mode Security Association traversing a NAT does not have its local IPSec traffic endpoint residing on this node

Explanation: During the negotiation of a tunnel mode Security Association (SA), it was determined that the local IPSec traffic endpoint did not end on this z/OS node. z/OS is providing NAT Traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations.

System action: The tunnel mode SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Alter the local policy configuration so that the local IPSec traffic endpoint is local to this z/OS.

When configured without the IBM Configuration Assistant for z/OS Communications Server, in the policy agent configuration file, this IP address is the IpSourceAddr parameter on the IpFilterRule. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the GUI and ensure the local data endpoint address is one that is local to the TCP/IP stack. Gateway-to-host and gateway-to-gateway topologies are not supported for NAT. See the online helps in the GUI for additional information.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1090I Initiation of a phase 2 Security Association negotiation for a new dynamic tunnel failed because the remote security endpoint is a security gateway

Explanation: When traversing a NAT, a local initiation of a phase 2 Security Association (SA) for a new dynamic tunnel with a remote security endpoint that is a security gateway is not supported. To use this configuration, the remote security endpoint must be the initiator. z/OS is providing NAT traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations.

System action: The phase 2 SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that it must be the initiator when using this configuration.

Module: sa.cpp

Procedure name: None.

EZD1092I

EZD1092I Protocol error encountered during phase *phase* message processing *rsn=rsn* - message discarded

Explanation: A protocol error occurred during IKE message processing. The *rsn* field provides more information about the received message.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

phase is 1 or 2 indicating the phase of negotiation when the error occurred.

rsn is the reason code that provides additional information about the received message. Possible values are:

- 1 The first payload in the quick mode (phase 2) message was not a hash payload.
- 2 The second payload in message 1 or 2 of a quick mode (phase 2) exchange was not a Security Association payload.
- 3 A quick mode (phase 2) message was not encrypted.
- 4 The received message contained unexpected payloads or was missing payloads that are required by RFC 2409 (The Internet Key Exchange).
- 5 The received message did not contain the required number of NAT-OA payloads.
- 6 The received message contained too many NAT-OA payloads.
- 7 The received message utilized an unexpected port.
- 9 The message length indicated in the ISAKMP header of the message is too large.
- 10 The received message is missing a required key exchange, NONCE payload, or both.
- 11 The received message is missing a required ID payload.
- 12 The received message is missing a required hash or signature payload.
- 13 The received message contains Diffie-Hellman information that is too long.
- 17 The received message did not contain an expected certificate payload.
- 101 The received message is too short to be a valid ISAKMP message.
- 102 The received message is too large to buffer.
- 103 The received message contains a next payload field that is unrecognized.
- 104 The received message does not contain a valid ISAKMP major and minor version.
- 105 The received message's exchange type is not supported.
- 106 The received message contains no payloads.
- 107 The received message contains a payload that is shorter than the reported size.
- 108 The received message contains a payload that is longer than the reported size.
- 109 The received message contains a payload with no data.
- 110 The received message contains a payload that is not the correct payload size.
- 111 The received message contains an incorrect SPI size.
- 112 The received message contains non-zero data in a field that must be set to 0.
- 113 The received message contains an unsupported Domain Of Interpretation (doi) value.
- 114 The received message contains an unsupported situation value.
- 115 The received message contains an unsupported protocol value.
- 116 The received message contains an unsupported ID type value.
- 117 The received message contains an unsupported certificate type value.
- 118 The received phase 1 message 1 contains encrypted data.

- 120 The received message contains an SA payload without a required hash payload.
- 121 The received message contains non-SA payloads before the first SA payload.
- 122 The received message does not contain a proposal payload in the required order.
- 123 The received message does not contain a transform payload in the required order.
- 124 The received message contains an incorrect size for the ID type received.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that a protocol error has occurred.

Module: oakely_phaseII.cpp

Procedure name: None.

EZD1093I Policy mismatch : statement (state_num) requires parameter (parameter) with value (policy_val) but proposal (prop_num) value is (prop_val)

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because there was a mismatch in the configured policy. IKE daemon processing continues to the next proposal. If no proposals are accepted, the Security Association negotiation will fail. This will be indicated by an EZD0985I, EZD1021I, or EZD1022I message later in syslog.

statement indicates whether the mismatched parameter was configured on the KeyExchangeOffer, IpDataOffer, or IpDynVpnAction statement in the policy configuration file.

When configured with the IBM Configuration Assistant for z/OS Communications Server:

- The KeyExchangeOffer statements are located on the corresponding Connectivity Rule's Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel. Use the KeyExchangeRule name from message EZD1021I to identify the Connectivity Rule.
- The IpDataOffer statement is located in the corresponding security level. However, if the parameter is HowToEncap, this setting is located on the Connectivity Rule's Advanced IPSec: Dynamic Tunnels: OnDemand Granularity / Encapsulation Mode panel. Use the DynVpnAction name from message EZD1022I to identify the security level. Use the IpFilerRule name from message EZD1022I to identify the Connectivity Rule.
- The IpDynVpnAction statement corresponds to the security level in the GUI. Use the DynVpnAction name from message EZD1022I to identify the corresponding security level.

state_num is the number of a statement referenced from the policy. The number corresponds to the order of the references in the policy. Therefore, the first statement referenced from the policy would have number 1 in this message.

parameter is the parameter that encountered a mismatch. If parameter is ExtendedSequenceNumbers, this value is not configurable in z/OS policy. For all other values of parameter, see the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the parameter specified, or "No" if the parameter is ExtendedSequenceNumbers.

policy_val is the value that is configured in the policy.

prop_num is the number of the proposal that is being compared. The number corresponds to the order of proposals in an offer received. Therefore, the first proposal received in an offer would have number 1 in this message.

prop_val is the value contained in the proposal for this parameter.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; IKE daemon processing continues.

Operator response: If the proposal that contains the mismatch is the one that should be accepted, either alter the local policy to accept the value in this proposal or notify the administrator of the remote security endpoint about the mismatch and ask the administrator to alter the remote configuration to propose the correct values.

EZD1094I • EZD1096I

See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1094I IKE STATUS FOR STACK *stackname* IS DOWN

Explanation: The Internet Key Exchange (IKE) daemon detected a status change for a stack. The IKE daemon can establish Security Associations only for a stack with status UP. The IKE daemon might detect a stack status change for several reasons such as normal termination of the stack while the IKE daemon is running.

stackname is the name of the stack that has changed status.

System action: IKE daemon processing continues.

Operator response: If the status change is unexpected, check the log for related messages from the IKE daemon or the stack.

System programmer response: None.

Module: stackobj.cpp

Procedure name: None.

EZD1095I Unsupported configuration : *location* data endpoint *dataaddr* does not match security endpoint *endptaddr* for a transport mode Security Association initiated *method*

Explanation: The IP address for the data endpoint must be the same as the IP address for the security endpoint when using a transport mode Security Association (SA).

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

location describes the data endpoint. The possible values are **local** and **remote**.

dataaddr is the data endpoint IP address.

endptaddr is the security endpoint IP address.

method describes how the SA was initiated. The possible values are **locally** and **remotely**.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: If the data endpoint and security endpoint are different, use a tunnel mode SA; otherwise change the configuration so that the data endpoint and security endpoint addresses match. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

Module: policy.cpp

Procedure name: None.

EZD1096I Local IP address *addr* is not available

Explanation: The source address used for a Security Association (SA) negotiation must be an address owned by the stack. If the local address is a distributed DVIPA, then the stack must be acting as the distributor.

addr is the source address for the attempted negotiation.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: If the SA negotiation was locally activated, verify that the IP address is local to this stack. Use the Netstat HOME/-h command to view the list of IP addresses local to this stack. See the information about the

Netstat HOne/-h in z/OS Communications Server: IP System Administrator's Commands for information about displaying the Netstat HOME/-h report.

When configured without the IBM Configuration Assistant for z/OS Communications Server, check for LocalDynVpnRule statements with LocalIp or LocalIpRef parameters that specify an IP address that is not local to this stack and, if necessary, correct the policy. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, edit the corresponding Connectivity Rule in the GUI and verify that the local IP address is local to this stack. If your local data endpoint is a single IP address, verify that it is local to this stack. If the local data end point value is an asterisk (*), verify that your Advanced IPSec: Dynamic Tunnels: Local Activation Settings are correct and contain only IP addresses local to this stack. See the online helps in the GUI for additional information.

System programmer response: None.

Module: anchor_ureq.cpp

Procedure name: None.

EZD1097I Phase 2 Security Association for DVIPA *dvipa_addr* is re-established with remote security endpoint *ip_addr*

Explanation: During a DVIPA takeover or giveback, the IKE daemon successfully re-established the phase 2 Security Association (SA) with the specified remote security endpoint.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

dvipa_addr is the dynamic virtual IP address.

ip_addr is the IP address of the remote security endpoint.

System action: The IKE phase 2 SA is re-established for the DVIPA; IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: phaseII_sa.cpp

Procedure name: None.

EZD1098I Protocol error encountered during phase *phase* message processing *rsn=rsn* - negotiation continues

Explanation: A protocol error occurred during IKE message processing. The *rsn* field provides more information about the received message.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

phase is 1 or 2 indicating the phase of the negotiation when the error occurred.

rsn is the reason code that provides additional information about the received message. Possible values are:

- 1 A NAT-D payload received contained an invalid hash length. NAT detection cannot be performed.
- 2 The use of NAT traversal was agreed to but the remote security endpoint did not send the minimum number of NAT-D payloads required.

System action: The SA negotiation continues; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that a protocol error has occurred.

Module: oakley_kep.cpp

EZD1099I • EZD1101I

Procedure name: None.

EZD1099I A message generated dump has been created titled : *title*

Explanation: An IKE daemon message generated an address space dump. The message that generated the dump appears immediately after this message in the system log.

title is the text associated with the dump. The title contains the message number and associated message text that caused the dump to be generated.

System action: After the dump is created, IKE daemon processing continues processing.

Operator response: Contact the system programmer.

System programmer response: Capture the system log and the generated dump. Contact IBM software support services to analyze this data.

Module: fwutil.c

Procedure name: None.

EZD1100I A message generated dump was suppressed for message : *message_number*

Explanation: An IKE daemon message attempted to generate an address space dump. However, no more than two message-generated dumps can be created in a 15 minute period. Due to this criteria, the dump was suppressed. The message that attempted to generate the dump appears immediately after this message in the system log.

message_number is the message number of the message that attempted to generate the dump.

System action: IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Capture the system log and any message-generated dumps that were created earlier. Contact IBM software support services to analyze this data.

Module: fwutil.c

Procedure name: None.

EZD1101I NAT detected and no valid IpDataOffers found

Explanation: This message is issued when no valid IpDataOffers are found during a negotiation traversing a NAT. When a NAT is being traversed, all IpDataOffers utilizing the AH protocol are ignored. To negotiate a security association (SA) in a NAT traversal environment, at least one Data Offer that does not contain authentication with AH must be configured.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Ensure that at least one data offer does not contain authentication with AH.

When configured without the IBM Configuration Assistant for z/OS Communications Server, ensure that at least one IpDataOffer has ESP or DoNot configured on the HowToAuth parameter in the configuration policy. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

When configured with the IBM Configuration Assistant for z/OS Communications Server, ensure that the security level in the GUI contains at least one Data Offer that either does not use Authentication or uses Authentication with the ESP authentication protocol. See the online helps in the GUI for additional information.

Module: policy.cpp

Procedure name: None.

EZD1102I Negotiation of a phase 1 Security Association due to a remote security endpoint IP address change failed - original IP address / port : *origip* / *origport* failed IP address / port : *filaedip* / *failedport*

Explanation: This message indicates that a phase 1 Security Association (SA) being negotiated in response to a detected remote security endpoint IP address change failed. The changed IP address (*filaedip*) that caused the negotiation might be caused by a reboot of the NAT device in front of the remote security endpoint or an expired NAT mapping. The changed IP address (*filaedip*) might also be caused by a packet with an address that is not valid. This message is associated with a previously issued EZD1086I message.

origip is the IP address of the established SA.

origport is the port of the established SA.

filaedip is the IP address of the failed negotiation.

failedport is the port of the failed negotiation.

System action: Negotiation of the phase 1 SA fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Check other messages in the system log with this IP address to determine the cause of the failure. If necessary, notify the administrator of the remote security endpoint about this error

Module: anchor_ureq.cpp, oakley_kep.cpp, oakley_phaselII.cpp, sa.cpp

Procedure name: None.

EZD1103I Informational exchange ignored because phase 1 Security Association is still being negotiated

Explanation: This message is issued when an informational exchange message is received over a phase 1 Security Association that is still in the process of negotiation.

System action: The informational exchange message is discarded; IKE daemon processing continues.

Operator response: None.

System programmer response: None.

Module: infoxchg.cpp

Procedure name: None.

EZD1104I IKE detected a NAT while initiating a new dynamic tunnel using only tunnel mode IpDataOffers with a non-z/OS peer

Explanation: The Internet Key Exchange (IKE) daemon is initiating a tunnel-mode Security Association (SA) for a new dynamic tunnel with a non-z/OS peer. The SA traverses a NAT. There might be problems with interoperability with the non-z/OS peer for a tunnel-mode SA. z/OS is providing NAT Traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

System action: The SA negotiation continues.

Operator response: If the SA negotiation fails or if data cannot be successfully sent over the SA, contact the system programmer.

System programmer response: Determine whether there is an interoperability concern that caused the SA negotiation or data to fail. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

A possible solution is to use transport-mode IpDataOffers. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

Module: oakley_phaselII.cpp

Procedure name: None.

EZD1105I IKE detected a NAT while initiating a new dynamic tunnel using both tunnel and transport mode IpDataOffers with a non-z/OS peer

Explanation: The Internet Key Exchange (IKE) daemon is attempting to initiate a phase 2 Security Association (SA) for a new dynamic tunnel with a non-z/OS peer. The SA traverses a NAT. Both tunnel-mode and transport-mode IpDataOffers are proposed. If the peer selects a tunnel-mode proposal, interoperability issues might exist with the non-z/OS peer. z/OS is providing NAT Traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

System action: The SA negotiation continues.

Operator response: If the SA negotiation fails or if data cannot be successfully sent over the SA, contact the system programmer.

System programmer response: If the SA negotiation fails or if data cannot be successfully sent over the SA, see the information about IP security in z/OS Communications Server: IP Configuration Guide to determine if there is an interoperability concern that caused the SA negotiation or data to fail. Contact the remote peer's administrator to understand any interoperability considerations for the non-z/OS platform.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1106I Tentative KeyExchangeRule (*tentativeKER*) and final KeyExchangeRule (*finalKER*) preshared keys do not match

Explanation: When using HowToAuthPeers PresharedKey, the SharedKey parameters on the tentative and final KeyExchangeRule statements must match. The initial KeyExchangeRule statement is found by matching on local and remote IP addresses, while the final match also takes the remote ID into account.

In the message text:

tentativeKER

The initial KeyExchangeRule statement that was found by matching only IP addresses

finalKER

The final KeyExchangeRule statement that was found by matching IP addresses and the remote ID

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Change the policy configuration so the final rule will be matched tentatively and finally. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

Module: doi.cpp

Procedure name: None.

EZD1107I IKE detected a NAT while initiating a narrow Security Association negotiation for a new dynamic tunnel with a non-z/OS peer

Explanation: The Internet Key Exchange (IKE) daemon is attempting to initiate a narrow phase 2 Security Association (SA) for a new dynamic tunnel with a non-z/OS peer. The SA traverses a NAT. A narrow SA is an SA negotiated for specific ports, protocol, or both. Interoperability issues might exist with the non-z/OS peer when z/OS initiates a narrow phase 2 SA. z/OS is providing NAT Traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the information about IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations.

System action: The SA negotiation continues.

Operator response: If the SA negotiation fails, contact the system programmer.

System programmer response: If the SA negotiation fails, see the information about IP security in z/OS Communications Server: IP Configuration Guide to determine if there is an interoperability concern that caused the

phase 2 SA negotiation to fail. Contact the remote peer's administrator to understand any interoperability considerations for the non-z/OS platform.

Module: oakley_phaseII.cpp

Procedure name: None.

EZD1108I Unable to retransmit message - associated phase 1 security association has expired

Explanation: The Internet Key Exchange (IKE) daemon attempted to retransmit a message using a phase 1 security association (SA) that is expired. This might occur in a NAT environment when the IP address of the remote security endpoint is remapped.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages.

System action: The message was not retransmitted and the SA negotiation failed; the IKE daemon continues.

Operator response: Verify that the required tunnels are activated, and if necessary, activate or refresh any required tunnels using the **ipsec** command. See the information about the managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

Module: retrans.cpp

Procedure name: None.

EZD1109I ICSF service CSNBSYD failed for AES decryption : return code = *rc* reason code = *rsn*

Explanation: The Integrated Cryptographic Service Facility (ICSF) service returned an error when called to perform AES decryption.

In the message text:

rc The hexadecimal return code returned from the ICSF function call.

rsn

The hexadecimal reason code returned from the ICSF function call.

System action: The operation being performed fails; IKE daemon processing continues.

Operator response: Verify that ICSF is running. See the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the meaning of the *rc* and *rsn* values and for specific actions to be taken.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: aes_obj.cpp

Example: None.

EZD1110I An IPv6 address was configured in an IP Security policy file for *stackname* that was not configured with IPCONFIG6 IPSECURITY

Explanation: The Internet Key Exchange (IKE) daemon attempted to retrieve an IpFilterRule from the specified stack. An IPv6 address was configured in an IP Security policy file, but this stack does not have IPCONFIG6 IPSECURITY configured.

In the message text:

stackname

The name of the TCP/IP stack.

EZD1111I • EZD1112I

System action: The request to retrieve the IpFilterRule fails; the IKE daemon continues.

Operator response: Contact the system programmer to determine whether the specified stack is intended to have IPCONFIG6 IPSECURITY configured.

System programmer response: If you want IPCONFIG6 IPSECURITY to be enabled for the specified stack, update the TCP/IP profile accordingly. Otherwise, correct the IP Security Policy file.

See the information about the IPCONFIG6 statement in z/OS Communications Server: IP Configuration Reference for more information about specifying IP security for a stack.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: stackObj.cpp

Routing code: *

Descriptor code: *

Example: Not applicable.

EZD1111I KeyExchangeRule *rulename* cannot specify a multicast address

Explanation: An IKE negotiation using the KeyExchangeRule rule specified by the *rulename* value cannot continue because one or both of the addresses defined in the KeyExchangeRule rule is a multicast address. The security endpoints for an IKE negotiation can be specified as unicast addresses or they can use a restricted wildcard specification.

In the message text:

rulename

The name of the KeyExchangeRule rule involved in the negotiation.

System action: The IKE negotiation fails; the IKE daemon continues.

Operator response: None.

System programmer response: Change the addresses specified by the KeyExchangeRule rule in the local policy. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: policymgr.cpp

Example: None.

EZD1112I IpFilterRule *rulename* cannot specify a multicast address

Explanation: An IKE negotiation using the IpFilterRule rule specified by the *rulename* value cannot continue because one or both of the addresses defined in the IpFilterRule rule is a multicast address. The data endpoints for a dynamic tunnel can be specified as unicast addresses or they can use a restricted wildcard specification.

In the message text:

rulename

The name of the IpFilterRule rule involved in the negotiation.

System action: The IKE negotiation fails; the IKE daemon continues.

Operator response: None.

System programmer response: Change the addresses specified by the IpFilterRule rule in the local policy. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: policymgr.cpp

Example: None.

EZD1113I A delete message is being sent with LocalIp ANY for phase 1 security association *p1sa_id* (LocalIp : *local_ip* RemoteIp : *remote_ip*)

Explanation: A delete message is being sent to the IKE peer to terminate the phase 1 Security Association identified by the *p1sa_id* value between the local IP address specified by the *local_ip* value and the remote IP address specified by the *remote_ip* value. However, the local stack has already deleted its end of the tunnel. To insure that the delete message can be sent, the *local_ip* value is set to the value ANY (INADDR_ANY for IPv4 or IN6ADDR_ANY for IPv6).

In the message text:

p1sa_id
The phase 1 SA ID.

local_ip
The local IP address.

remote_ip
The remote IP address.

System action: The IKE daemon continues.

Operator response: With a source address value ANY, it is possible that the IKE peer might not handle the delete message. Some IKE implementations might require the source IP address as part of the tunnel identification process. If this message was received after the manual deletion of a DVIPA address, then use the **ipsec** command to deactivate tunnels that involve DVIPA addresses prior to manually deleting the DVIPA.

See the information about the managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: infoXchg.cpp

Example: Not applicable.

EZD1114I Policy mismatch : statement *state_num* requires parameter *parameter* that is not supported by proposal *prop_num*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because there was a mismatch in the configured policy. The IKE daemon continues to the next proposal. If no proposals are accepted, the Security Association negotiation will fail. This will be indicated by an EZD0985I, EZD1021I, or EZD1022I message later in syslog.

In the message text:

statement

Indicates whether the mismatched parameter was configured on the KeyExchangeOffer, IpDataOffer, or IpDynVpnAction statement in the policy configuration file.

EZD1115I

When configured with the IBM Configuration Assistant for z/OS Communications Server:

- The KeyExchangeOffer statements are located on the corresponding connectivity rule's Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel. Use the KeyExchangeRule name from message EZD1021I to identify the connectivity rule. The IpDataOffer statement is located in the corresponding security level. However, if the parameter is HowToEncap, this setting is located on the connectivity rule's Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel. Use the DynVpnAction name from message EZD1022I to identify the security level. Use the IpFilerRule name from message EZD1022I to identify the connectivity rule.
- The IpDynVpnAction statement corresponds to the security level in the IBM Configuration Assistant for z/OS Communications Server. Use the DynVpnAction name from message EZD1022I to identify the corresponding security level.

state_num

The number of a statement referenced from the policy. The number corresponds to the order of the references in the policy. Therefore, the first statement referenced from the policy would have number 1 in this message.

parameter

The parameter that encountered a mismatch. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the parameter specified.

prop_num

The number of the proposal that is being compared. The number corresponds to the order of proposals in an offer received.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; the IKE daemon continues.

System programmer response: If the proposal that contains the mismatch is the one that should be accepted, either alter the local policy to accept the value in this proposal or notify the administrator of the remote security endpoint about the mismatch and ask the administrator to alter the remote configuration to propose the correct values. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Contact the system programmer.

Module: policy.cpp

Procedure name: None.

EZD1115I Policy mismatch : Proposal *prop_num* requires parameter *parameter* that is not supported by statement *state_num*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because there was a mismatch in the configured policy. The IKE daemon continues to the next proposal. If no proposals are accepted, the Security Association negotiation will fail. This will be indicated by an EZD0985I, EZD1021I, or EZD1022I message later in syslog.

In the message text:

prop_num

The number of the proposal that is being compared. The number corresponds to the order of proposals in an offer received.

parameter

The parameter that encountered a mismatch. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the parameter specified.

statement

Indicates whether the mismatched parameter was configured on the KeyExchangeOffer, IpDataOffer, or IpDynVpnAction statement in the policy configuration file.

When configured with the IBM Configuration Assistant for z/OS Communications Server:

- The KeyExchangeOffer statements are located on the corresponding connectivity rule's Advanced IPSec: Dynamic Tunnels: Key Exchange Settings panel. Use the KeyExchangeRule name from message EZD1021I to identify the connectivity rule. The IpDataOffer statement is located in the corresponding security level. However, if the parameter is HowToEncap, this setting is located on the connectivity rule's Advanced IPSec:

Dynamic Tunnels: Key Exchange Settings panel. Use the DynVpnAction name from message EZD1022I to identify the security level. Use the IpFilerRule name from message EZD1022I to identify the connectivity rule.

- The IpDynVpnAction statement corresponds to the security level in the IBM Configuration Assistant for z/OS Communications Server. Use the DynVpnAction name from message EZD1022I to identify the corresponding security level.

state_num

The number of a statement referenced from the policy. The number corresponds to the order of the references in the policy. Therefore, the first statement referenced from the policy would have number 1 in this message.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; the IKE daemon continues.

System programmer response: If the proposal that contains the mismatch is the one that should be accepted, either alter the local policy to accept the value in this proposal or notify the administrator of the remote security endpoint about the mismatch and ask the administrator to alter the remote configuration to propose the correct values. See the information about the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Contact the system programmer.

Module: policy.cpp

Procedure name: None.

EZD1116I IKE detected an NAPT in front of the remote security endpoint while initiating a new phase *phase* tunnel

Explanation: The Internet Key Exchange (IKE) daemon attempted to initiate a new Security Association (SA) with a remote security endpoint that is behind a NAT performing port translation (NAPT). The z/OS IKE daemon cannot initiate such a Security Association but can respond to negotiations with a remote security endpoint behind an NAPT.

A new SA of this configuration type is not supported because there might be problems with future negotiations and traffic flow. See the information about NAT traversal considerations in z/OS Communications Server: IP Diagnosis Guide for more information. z/OS is providing NAT traversal support for a defined group of configurations where z/OS is running IKE. A description of the supported configurations is provided in configuration scenarios supported for NAT traversal in z/OS Communications Server: IP Configuration Guide.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

phase

The phase (1 or 2) that the negotiation was in when the error occurred.

System action: The negotiation fails and all associated SAs are removed; IKE daemon processing continues.

Operator response: The z/OS IKE daemon can respond only to negotiations with a remote security endpoint behind an NAPT. Contact the administrator of the remote security endpoint to initiate the negotiation for this SA.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: phase1.cpp

Example: None.

EZD1117I Initiation of a phase 2 negotiation with a remote security endpoint behind an NAPT is prohibited - the pending phase 2 request was deleted

Explanation: A request to initiate a phase 2 Security Association (SA) with a remote security endpoint behind a NAT performing port translation (NAPT) was deleted. A new SA of this configuration type is not supported because there might be problems with future negotiations and traffic flow. See the information about NAT traversal considerations in z/OS Communications Server: IP Diagnosis Guide for more information.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The request for the phase 2 negotiation is deleted; IKE daemon processing continues.

Operator response: The z/OS IKE daemon can respond only to phase 2 negotiations with a remote security endpoint behind an NAPT. Request that the administrator of the remote security endpoint initiate the SA for this negotiation.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: phase1.cpp

Example: None.

EZD1118I Missing required keyword *keyword* for IKE configuration file parameter *pname* on line *linenum*

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains a parameter that requires a keyword that was not found

In the message text:

keyword

The keyword that was not found.

pname

The parameter that requires a keyword.

linenum

The line in the IKE daemon configuration file on which the error was found.

System action: If the error occurs during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE configuration retains all values configured prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Specify the required keyword *keyword* and any value that is required for that keyword. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and valid parameters for the keyword specified by the *keyword* value.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1118I Missing required keyword Identity for IKE configuration file parameter NetworkSecurityServer on line 14

EZD1119I Missing required parameter *pname* for statement *sname* in IKE configuration file *fname* on line *linenum*

Explanation: Line *linenum* of the IKE daemon configuration file *fname* contains a statement *sname* that requires a parameter *pname* that was not found.

In the message text:

pname

The name of the missing parameter.

sname

The name of the statement that requires the parameter.

fname

The name of the IKE daemon configuration file.

linenum

The line in the IKE daemon configuration file on which the error was found.

System action: If the error occurs during IKE startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active. IKE configuration retains all values configured prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Specify the required parameter and any value that is required for that parameter. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and valid parameters for the statement specified by the *sname* value.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1119I Missing required parameter ServiceType for statement NssStackConfig in
IKE configuration file /etc/security/iked.conf on line 21

EZD1120I IKE configuration file contains more than one IkeConfig statement - values in last specified statement will be used

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains more than one instance of the IkeConfig statement. Only one IkeConfig statement per IKE daemon configuration file is supported. The last instance encountered will be used.

System action: The values specified in the last IkeConfig statement are used. The IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If this message was unexpected, see the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and which statements and parameters are repeatable or non-repeatable.

User response: None.

Problem determination: None.

EZD1121I • EZD1122I

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1121I IKE configuration file contains more than one `NssStackConfig` statement for stack *sname* - values in last specified statement will be used

Explanation: The Internet Key Exchange (IKE) daemon configuration file contains more than one instance of the `NssStackConfig` statement for the same stack name. The `NssStackConfig` statement is a repeatable statement, but it is repeatable only for unique stack names.

In the message text:

sname

The name of the stack for which multiple `NssStackConfig` statements were specified.

System action: The values of the last specified `NssStackConfig` statement are used for the specified stack; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If this message was unexpected, see the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and which statements and parameters are repeatable or non-repeatable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1122I Error initializing NMI - monitoring support is not available

Explanation: An error during the startup of the IPSec network management interface (NMI) prevents the IKE daemon from accepting NMI requests.

Additional diagnostic messages that have the same message instance number will be issued to further identify the error. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The IKE daemon continues without NMI support.

Operator response: Not applicable.

System programmer response: If NMI support is needed, fix the underlying problem as indicated by other messages that have the same message instance number and restart the IKE daemon.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: main.cpp

Routing code: 10

Descriptor code: 12

Example:

```
Message instance 1: EZD0970 "EZD0970I C/C++ runtime library function call
    pthread_create failure : 0001 - 12 | 01370010 | Not enough memory available
Message instance 1: EZD1122I Error initializing NMI - monitoring support is not available
```

EZD1123I NMI connection from user *username* closed - *num_conn* connections remain open

Explanation: A network management interface (NMI) connection has been closed. Some connections might remain open. NMI supports a maximum of 50 open connections.

In the message text:

username

The user name from the closed NMI connection.

num_conn

The total number of NMI connections from all users that remain open.

System action: The IKE daemon continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module:

Routing code: 10

Descriptor code: 12

Example:

```
EZD1123I NMI connection from user user33 closed - 10 connections remain open
```

EZD1124I NMI connection received from user *username* - *num_conn* connections open

Explanation: A new network management interface (NMI) connection was received and is ready to handle requests. NMI supports a maximum of 50 open connections.

In the message text:

username

The user name from the NMI connection that was received.

num_conn

The total number of NMI connections from all users that are open.

System action: The IKE daemon continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module:

Routing code: 10

Descriptor code: 12

Example:

```
EZD1124I NMI connection received from user user33 - 10 connections open
```

EZD1125I • EZD1126I

EZD1125I SERVAUTH check for user *username* and profile *profile* failed during an NMI request

Explanation: A SERVAUTH check for the specified user failed when the IKE daemon was verifying access to the specified resource profile while processing a Network Management Interface (NMI) request.

In the message text:

username

The user name of the NMI client that issued the request

profile

The SERVAUTH profile being checked for the user for this NMI request.

System action: The NMI request is not processed and the connection remains open; the IKE daemon continues.

Operator response: Not applicable.

System programmer response: If the user should be allowed to access the specified resource, grant READ access to the specified profile in the SERVAUTH class. See the information about the IPSec network management interface access control in z/OS Communications Server: IP Configuration Guide for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module:

Routing code: 10

Descriptor code: 12

Example:

```
EZD1125I SERVAUTH check for user user33 and profile EZB.NETMGMT.MVS052.MVS052.IKED.DISPLAY
failed during an NMI request
```

EZD1126I Unable to send NMI message because of a memory shortage

Explanation: The Internet Key Exchange (IKE) daemon is unable to send a network management interface (NMI) message because there is not enough memory to build some of the required internal structures. Message EZD0963I is issued prior to this message to indicate the amount of memory that was being requested when the failure occurred.

System action: The NMI message is not sent and a termination message is sent over the connection on which the request was received. The IKE daemon continues.

Operator response: Free some memory and try the operation again. See the information about the diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module:

Routing code: 10

Descriptor code: 12

Example:

```
EZD1126I Unable to send NMI message because of a memory shortage
```

EZD1127I NMI connection from user *username* closed - maximum number of NMI connections open

Explanation: The network management interface (NMI) closed a new connection from the specified user because the maximum number of connections are already open. NMI supports a maximum of 50 open connections.

In the message text:

username

The user name from the NMI connection that was closed.

System action: An NMI termination message is sent over the new connection and the connection is closed; the IKE daemon continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Wait and try the request again when connections might be available.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module:

Routing code: 10

Descriptor code: 12

Example:

EZD1127I NMI connection from user33 closed - maximum number of NMI connections open

EZD1128I IKE STATUS FOR STACK *stackname* IS ACTIVE WITHOUT POLICY

Explanation: The Internet Key Exchange (IKE) daemon detected a status change for the specified stack. The IKE daemon can establish Security Associations only after message EZD1058I has been issued for a given stack. The IKE daemon can provide Network Monitoring Interface (NMI) support for a stack after message EZD1128I or message EZD1058I has been issued for a given stack. The IKE daemon might detect a stack status change for several reasons, such as encountering an *NssStackConfig* statement in the *IkeConfig* file. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the *NssStackConfig* statement.

In the message text:

stackname

The name of the stack for which a status change has been detected.

System action: The IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1128I IKE STATUS FOR STACK TCPCS IS ACTIVE WITHOUT POLICY

EZD1129I RACF PassTicket generation failed

Explanation: The Internet Key Exchange (IKE) daemon could not generate the RACF PassTicket required to connect to the network security services (NSS) server.

System action: The connection request to the NSS server fails; the IKE daemon continues. Certificate and remote management services will not be available to the unauthorized client stack.

Operator response: Contact the system programmer.

System programmer response: See the information about IP security in z/OS Communications Server: IP Configuration Guide for information about PassTicket configuration for an NSS client.

For specific information about PassTickets, see the z/OS Security Server RACF Security Administrator's Guide.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackObj.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1130I A *response_type* response message with correlator ID *corr_id* from the NSS server was discarded because a matching request was not found

Explanation: The Internet Key Exchange (IKE) daemon could not match the received response from the network security services (NSS) server with a corresponding request.

In the message text:

response_type

The type of response received from the NSS server.

corr_id

The 16-byte message correlator contained in the response message.

System action: The response message is discarded; the IKE daemon continues.

Operator response: No action needed.

System programmer response: One reason that this message might be issued is that the associated Security Association might have been deleted prior to receiving the response. If this was unexpected, See the information about diagnosing IP security problems in z/OS Communications Server: IP Diagnosis Guide for information about resolving connectivity problems.

User response: Contact the system programmer.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: anchor_ureq.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1130I A verify signature response message with correlator
ID 0x0123456789ABCDEF from the Network Security Server was discarded
because a matching request was not found

EZD1131I The IKE daemon will not connect to the NSS server for *stackname* because the stack is not configured with IPSECURITY support

Explanation: The iked.conf file has an `NssStackConfig` statement specified for this stack, but the stack is not configured with IPSECURITY support. The Internet Key Exchange (IKE) daemon connects to only the Network Security Services (NSS) server for stacks that are configured with IPSECURITY support.

In the message text:

stackname

The TCP/IP stack that is specified on the `NssStack Config` parameter in the `iked.conf` file.

System action: The IKE daemon does not connect to the NSS server for this stack. The IKE daemon continues.

Operator response: Notify the system programmer.

System programmer response: If this stack should connect to the NSS server, check the stack profile to ensure that IPSECURITY is configured correctly. If this stack should not connect to the NSS server, comment out the `NssStackConfig` parameter and its associated values from the `iked.conf` file to avoid seeing this message. See the information about `IPCONFIG` in *z/OS Communications Server: IP Configuration Reference* for more information about specifying IPSECURITY for a stack.

User response: Not applicable.

Problem determination: Not applicable.

Source: *z/OS Communications Server TCP/IP: IPSec*

Module: `stackobj.cpp`

Routing code: 12

Descriptor code: 10

Example:

EZD1131I The IKE daemon will not connect to the NSS server for TCPCS because the stack is not configured with IPSECURITY support

EZD1132I A *request_type* request for the NSScertificate services could not be sent for stack *stack_name* - return code = *ret_code*

Explanation: The Internet Key Exchange (IKE) daemon could not send a network certificate services request to the network security services (NSS) server.

In the message text:

request_type

The type of request.

stack_name

The name of the stack.

ret_code

Possible values are:

- 1 The IKE daemon is not connected to the NSS server.
- 2 The stack is not configured to use network security certificate services.
- 3 The stack is not authorized to use network security certificate services.

System action: The request fails; the IKE daemon continues.

Operator response: No action needed.

System programmer response: If the return code indicates that the IKE daemon is not connected to the NSS server, See the information about the diagnosing network connectivity problems in *z/OS Communications Server: IP Diagnosis Guide* for information about resolving connectivity problems. If the return code indicates that the stack is not authorized to use network security certificate services, notify the system programmer of the NSS server to provide authorization to the stack for network security certificate services. See the information about IP security in *z/OS Communications Server: IP Configuration Guide* for information about network security certificate services.

EZD1133I • EZD1135I

User response: If the return code indicates that the stack is not configured to use network security certificate services, see the information about IP security in z/OS Communications Server: IP Configuration Guide for information about configuring network security services. Contact the system programmer for all other return codes.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: oakley_kep.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1132I A verify signature request for network security certificate services could not be sent for stack TCPCS - return code -1

EZD1133I IKE STATUS FOR STACK *stackname* IS ACTIVE WITHOUT IPSECURITY SUPPORT

Explanation: The Internet Key Exchange (IKE) daemon detected that the specified stack is active but is not configured with IP security support. The IKE daemon can establish Security Associations for the specified stack only after that stack has specified the IPCONFIG IPSECURITY option in its configuration profile. See the information about the IPCONFIG statement in z/OS Communications Server: IP Configuration Reference for more information about the IPSECURITY parameter.

In the message text:

stackname

The name of the stack that is active without IP security support.

System action: The IKE daemon continues.

Operator response: None.

System programmer response: If you want IP security support, specify the IPCONFIG IPSECURITY option in the configuration profile of the stack. See the information about the IPCONFIG statement in z/OS Communications Server: IP Configuration Reference for more information about the IPSECURITY parameter.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1133I IKE STATUS FOR STACK TCPCS IS ACTIVE WITHOUT IPSECURITY SUPPORT

EZD1135I *NssStackConfig* statements were specified, but no NSS server configuration was found in the *IkeConfig* statement

Explanation: One or more *NssStackConfig* statements were found, but the *IkeConfig* statement did not contain a *NetworkSecurityServer* parameter or *NetworkSecurityServerBackup* parameter.

System action: If the error occurs during IKE daemon startup, IKE daemon configuration file processing ends, and the IKE daemon ends. If the error occurs as a result of a MODIFY REFRESH command, IKE daemon configuration file processing ends, but the IKE daemon remains active using the configuration values that existed prior to the MODIFY REFRESH command.

Operator response: Contact the system programmer.

System programmer response: Either remove the *NssStackConfig* statements or add a *NetworkSecurityServer* parameter or *NetworkSecurityServerBackup* parameter to the *IkeConfig* statement. See the information about the IKE

daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file and these IkeConfig parameters.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1136I The IKE daemon is connected to the NSS server at *location port port for stack stackname*

Explanation: The Internet Key Exchange (IKE) daemon is connected to the network security services (NSS) server.

In the message text:

location

The configured hostname or IP address of the NSS server.

port

The port of the NSS server.

stackname

The name of the stack for which the IKE daemon has established a connection to the NSS server.

System action: The IKE daemon can use network security services for the specified stack; the IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

The IKE daemon is connected to the network security server at 1.2.3.4 port 4519 for stack TCPCS

EZD1137I The IKE daemon is disconnected from the NSS server at *location port port for stack stackname*

Explanation: A connection from the Internet Key Exchange (IKE) daemon to the network security services (NSS) server has been disconnected.

In the message text:

location

The configured hostname or IP address of the NSS server.

port

The port of the NSS server.

stackname

The name of the stack for which the IKE daemon does not have an established connection to the NSS server.

System action: Network security services are not available for the specified stack; the IKE daemon continues.

EZD1138I • EZD1139I

Operator response: This message is issued only after message EZD1136I has been issued. The following are examples of when this message is issued:

- During IKE daemon shutdown.
- The NSS server is stopped while the IKE daemon is active.
- The IKE daemon configuration file is refreshed following deletion of the NetworkSecurityServer[Backup] statement or deletion of the NssStackConfig statement for the specified stack.

If this message is issued under any other circumstances, notify the system programmer.

System programmer response: See the information about the diagnosing IP security problems in z/OS Communications Server: IP Diagnosis Guide for information about resolving connectivity problems.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

The IKE daemon is disconnected from the network security server at 1.2.3.4 port 4519 for stack TCPCS

EZD1138I The IKE daemon is connecting to the NSS server at *ipaddr* port *port* for stack *stackname*

Explanation: The Internet Key Exchange (IKE) daemon is connecting to the network security services (NSS) server.

In the message text:

stackname

The stack for which the IKE deamon is establishing a connection to the NSS server.

ipaddr

The IP address of the NSS server.

port

The port of the NSS server.

System action: The IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

EZD1138I The IKE daemon is connecting to the network security server at 1.2.3.4 port 4503 for stack TCPCS

EZD1139I Request type *requestcode* with correlator ID *corrid* for stack *stackname* failed - return code *returncode* reason code *reasoncode*

Explanation: The Internet Key Exchange (IKE) daemon sent a network security services request to the network security services (NSS) server and the server sent a response indicating that the request failed.

In the message text:

requestcode

The NMsMType field of the response.

corrid

A unique identifier for the request.

stackname

The stack for which the request was made.

returncode

The NMsMRc field of the response

reasoncode

The NMsMRsn field of the response.

System action: The request fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: See the information about the error code descriptions in z/OS Communications Server: IP Diagnosis Guide to determine the appropriate response.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

```
EZD1139I Request type NSS_CreateSignatureReqToSrv for stack TCPCS with correlator ID 0x0123456789ABCDEF
failed - return code EINVAL reason code NSSRsnNoMatchingCert
```

EZD1140I The NSS server identity is not valid

Explanation: The subject name or one of the subject alternate names in the certificate used by the network security services (NSS) server must match the Identity parameter on either the NetworkSecurityServer keyword or the NetworkSecurityServerBackup keyword of the IkeConfig statement.

The Internet Key Exchange (IKE) daemon will not use network security services and will not be available for remote management until the condition is resolved.

System action: The IKE daemon will periodically try to connect to the server specified by the NetworkSecurityServer keyword and the server specified by the NetworkSecurityServerBackup keyword as configured using the NssWaitLimit and NssWaitRetries keywords of the IkeConfig statement. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about these keywords.

Operator response: Contact the system programmer.

System programmer response: Check the NetworkSecurityServer keyword or the NetworkSecurityBackup keyword of the IkeConfig statement. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about these keywords. If these keywords are configured correctly, check the certificate used by the NSS server. The certificate subject name or one of the certificate subject alternate names must match the configured identity. See the information about the IPSec Certificate management in z/OS Communications Server: IP Configuration Guide for more information about managing NSS server certificates.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

EZD1141I • EZD1142I

Descriptor code: 12

Example: Not applicable.

EZD1141I The keyword **identity** *ident* does not match the subject name or any of the subject alternate names in the certificate used by the NSS server

Explanation: An identity mismatch was detected for the network security services (NSS) server.

In the message text:

keyword

Possible values are NetworkSecurityServer or NetworkSecurityServerBackup.

ident

The Identity parameter as configured on either the NetworkSecurityServer keyword or the NetworkSecurityBackup keyword of the IkeConfig statement.

System action: The IKE daemon continues.

Operator response: Check the log for message EZD1140I. If message EZD1140I is in the log, see that message for further information. If message EZD1140I is not in the log, no further action is necessary.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

EZD1141I The NetworkSecurityServer identity 9.1.1.5 does not match the subject name or any of the subject alternate names in the certificate used by the network security server

EZD1141I The NetworkSecurityServerBackup identity 9.1.2.6 does not match the subject name or any of the subject alternate names in the certificate used by the network security server

EZD1140I The network security server identity is not valid

EZD1142I Name resolution failed for keyword **hostname** *hostname*

Explanation: Name resolution failed for the specified host name on either the NetworkSecurityServer keyword or the NetworkSecurityServerBackup keyword.

In the message text:

keyword

Possible values are NetworkSecurityServer or NetworkSecurityBackup.

hostname

The name that was configured on the host parameter on either the NetworkSecurityServer keyword or the NetworkSecurityServerBackup keyword.

System action: Name resolution fails; the IKE daemon continues. The IKE daemon will not connect to the network security services (NSS) server that corresponds to the specified keyword.

Operator response: Contact the system programmer.

System programmer response: Verify that the host parameter on the NetworkSecurityServer keyword or the NetworkSecurityServerBackup keyword is the correct name. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about these keywords. See the information about diagnosing resolver problems information in z/OS Communications Server: IP Diagnosis Guide for information about resolving name resolution problems. Restart the IKE daemon or issue the MODIFY IKEDREFRESH command to attempt the name resolution again. See z/OS Communications Server: IP System Administrator's Commands for more information about the MODIFY command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1143A The IKE daemon cannot locate the NSS server

Explanation: The Internet Key Exchange (IKE) daemon could not resolve the NetworkSecurityServer host parameter or the NetworkSecurityServerBackup host parameter to an IP address.

System action: The IKE daemon will not connect to the network security services (NSS) server until the problem is resolved; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: This message is accompanied by message EZD1142I. See the system programmer response for message EZD1142I to resolve this problem.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

Routing code: 1

Descriptor code: 2

Example: Not applicable.

EZD1144I The NSS certificate service is available for stack *stackname*

Explanation: The network security services (NSS) server authorized the IKE daemon to use the certificate service for the stack.

In the message text:

stackname

The name of the stack for which the network security certificate service is available.

System action: The IKE daemon will support digital signature modes of authentication for the stack; the IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1144I The network security certificate service is available for stack TCPIP

EZD1145I • EZD1146I

EZD1145I The NSS certificate service is not available for stack *stackname*

Explanation: The network security services (NSS) server did not authorize the IKE daemon to use the certificate service for the stack.

In the message text:

stackname

The name of the stack for which the certificate service is not available.

System action: The IKE daemon will not support digital signature modes of authentication for the stack; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: See information about the network security services (NSS) server authorization considerations in z/OS Communications Server: IP Configuration Guide for information about authorizing NSS clients.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1145I The network security certificate service is not available for stack TCPIP

EZD1146I The NSS remote management service is available for stack *stackname*

Explanation: The network security services (NSS) server authorized the IKE daemon to use the remote management service for the stack.

In the message text:

stackname

The name of the stack for which the network security remote management service is available.

System action: The IKE daemon will support network security remote management for the stack; the IKE daemon continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1146I The NSS remote management service is available for stack TCPIP

EZD1147I The NSS remote management service is not available stack *stackname*

Explanation: The network security services (NSS) server did not authorize the IKE daemon to use the remote management service for the stack.

In the message text:

stackname

The name of the stack for which the network security remote management service is not available.

System action: The IKE daemon will not support network security remote management for the stack; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security server authorization considerations in z/OS Communications Server: IP Configuration Reference for information about authorizing NSS clients.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1147I The network security remote management service is not available for stack TCPIP

EZD1148A THE IKE DAEMON CANNOT CONNECT TO THE NSS SERVER FOR *stackname* BECAUSE THE STACK DOES NOT SUPPORT IPV6

Explanation: The network security server is reachable using only an IPv6 address but the stack does not support IPv6.

In the message text:

stackname

The name of the stack for which the IKE daemon cannot connect to the network security server.

System action: The IKE daemon will not connect to the network security services (NSS) server for the specified stack until the problem is resolved; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: Either reconfigure the stack to support IPv6 or reconfigure the NSS server location using an IPv4 address. For information about reconfiguring the stack to support IPv6, see the information about the Enabling IPv6 support in z/OS Communications Server: IPv6 Network and Application Design Guide.

For information about configuring the network security server location, use the host parameter of the NetworkSecurityServer and NetworkSecurityServerBackup keywords. See the information about the IKE daemon information in z/OS Communications Server: IP Configuration Reference for more information about these keywords. If the host parameter on either the NetworkSecurityServer or the NetworkSecurityServerBackup keywords indicates a hostname, reconfigure the domain name server so that at least one IPv4 address is resolved for the hostname. See the information about the diagnosing resolver problems in z/OS Communications Server: IP Diagnosis Guide for information about resolving name resolution problems. Restart the IKE daemon or issue the MODIFY IKED,REFRESH command to attempt the name resolution again. See the information about the MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: Not applicable.

EZD1149I • EZD1150I

Routing code: 1

Descriptor code: 2

Example: None.

EZD1149I The IKE daemon connection to the NSS server at *ipaddr port port* for stack *stackname* is not secure

Explanation: The Internet Key Exchange (IKE) daemon connection to the network security server is not secure. The connection to the network security server must be secured using Application Transparent Transport Layer Security (AT-TLS).

In the message text:

ipaddr

The IP address of the network security server.

port

The port of the network security server

stackname

The name of the stack for which the IKE daemon connection to the network security server is not secure.

System action: Network security services are not available for the specified stack; the IKE daemon continues. The IKE daemon will attempt to connect to the NetworkSecurityServer and the NetworkSecurityServerBackup in a round-robin fashion until a secure connection is established. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about these keywords.

Operator response: Notify the system programmer.

System programmer response: See the information about configuring the IKE daemon information in z/OS Communications Server: IP Configuration Guide for information about defining AT-TLS policy to protect communication with a network security server.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

EZD1149I The IKE daemon connection to the network security server at 1.9.0.1 port 4159
for stack TCPCS is not secure

EZD1150I THE IKE DAEMON FAILED TO CONNECT *retries* TIMES TO THE *server_type* NSS SERVER AT host *PORT* *port* FOR STACK *stackname*

Explanation: The Internet Key Exchange (IKE) daemon was unable to establish a connection to the Network Security Services (NSS) server for the stack, host, and port specified for the number of retries specified on the NssWaitRetries parameter of the iked.conf file.

In the message text:

retries

The number of retries attempted.

server_type

The type of NSS server for which a connection was not established. Possible values are:

PRIMARY

Primary NSS server

BACKUP

Backup NSS server

host

The configured hostname or IP address for which the connection to the NSS server was not established.

port

The port for which the connection to the NSS server was not established.

stackname

The name of the TCP/IP stack for which the connection to the NSS server was not established.

System action: IKED continues trying to connect to the NSS server by doing one of the following:

- Switching servers, if both a primary and a backup NSS server have been specified in the iked.conf file.
- Trying to connect to the same server, if only a primary or a backup NSS server has been specified in the iked.conf file.

The IKE daemon continues.

Operator response: If connectivity cannot be established, notify the system programmer.

System programmer response: Ensure that the NetworkSecurityServer and NetworkSecurityServerBackup parameters in the iked.conf file have been configured correctly. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about these keywords. If these keywords are configured correctly, ensure the TCP/IP configuration is specified correctly.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: IkeInetConnectManager.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1150I THE IKE DAEMON FAILED TO CONNECT 4 TIMES TO THE PRIMARY NSS SERVER
AT 2.5.2.6 PORT 4159 FOR STACK TCPCS4
```

EZD1151I **KeyExchangeAction *actionname* prevents the creation of a dynamic tunnel with source data endpoint specification *source_ip* and destination data endpoint specification *dest_ip***

Explanation: Dynamic tunnel activation is denied as a result of a configured source or destination data IP address constraint. See the information about the KeyExchangeAction statement in z/OS Communications Server: IP Configuration Reference for an explanation of data address constraints.

In the message text:

actionname

The name of the KeyExchangeAction statement configured with a source or destination IP address constraint.

source_ip

The source IP address of the dynamic tunnel.

dest_ip

The destination IP address of the dynamic tunnel.

System action: The dynamic tunnel activation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: If the tunnel activation should be permitted, then do one of the following to correct the configuration.

- When IPSec policy is configured with the IBM Configuration Assistant for z/OS Communications Server, add a connectivity rule with a local data endpoint that matches the *source_ip* value and a remote data endpoint that matches the *dest_ip* value at the top of the rule list.
- When IPSec policy is configured without the IBM Configuration Assistant for z/OS Communications Server, update the KeyExchangeAction ConstrainSource or ConstrainDest configuration to include the *source_ip* value and

EZD1152I

the *dest_ip* value. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

If the tunnel activation should not be permitted, then determine whether the tunnel was activated locally or remotely. If the *source_ip* value matches the IP address value in the Local IPSec Client ID information from the Security Association (SA) Context Information that was output with the message, then the tunnel was activated locally. Otherwise, the tunnel was activated remotely. If the tunnel was activated locally but should not be permitted, then correct the local IpFilterPolicy statement to block the activation. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring the IpFilterPolicy statement. If the tunnel was activated remotely but should not be permitted, then contact the owner of the remote system to request that the activation be blocked on that system.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: policymgr.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: This message goes to the syslog.

Example:

```
Jun 19 22:34:08 MVS073 IKE: Message instance 3: *** SA Context Information ***
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Phase 2 SAID : 0           Assoc P1 ID : 2
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Stackname : TCPCS1
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Local IPSec Client ID info : Ipv4 1.1.0.1 Port: Any
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Remote IPSec Client ID info : IPV4 Subnet 0.0.0.0/0 Port: Any
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Local IPSec IP info : 1.1.0.1
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Remote IPSec IP info : 1.2.0.1
Jun 19 22:34:08 MVS073 IKE: Message instance 3: Protocol : UDP(17)
Jun 19 22:34:08 MVS073 IKE: Message instance 3: LocalDynVpnRuleName : udppvpn1
Jun 19 22:34:08 MVS073 IKE: Message instance 3: AH SPIs in/out : 0 / 0
Jun 19 22:34:08 MVS073 IKE: Message instance 3: ESP SPIs in/out : 0 / 0
Jun 19 22:34:08 MVS073 IKE: Message instance 3: EZD1151I KeyExchangeAction ConstrainedAction1 prevents the
creation of a dynamic tunnel with source data endpoint specification 1.1.0.1 and destination data endpoint
specification 0.0.0.0/0
```

EZD1152I The IKE daemon is resolving *server hostname name*

Explanation: The Internet Key Exchange (IKE) daemon is resolving a server hostname. The IKE daemon must resolve the hostname before it can connect to the Network Security Services (NSS) server. No information is exchanged with the NSS server while name resolution is in progress. Message EZD1153I is issued when the name resolution completes.

In the message text:

server

The *server* value can be either NetworkSecurityServer or NetworkSecurityServerBackup.

name

The host name being resolved.

System action: The IKE daemon continues.

Operator response: If the EZD1152I message is not followed by an EZD1153I message it might indicate a problem with the resolver. Contact the system programmer.

System programmer response: If the EZD1152I message is not followed by an EZD1153I message then ensure that the resolver is operating correctly. See the information about diagnosing resolver problems information in z/OS Communications Server: IP Diagnosis Guide for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

EZD1152I The IKE daemon is resolving the NetworkSecurityServer hostname mvs073

EZD1153I The IKE daemon resolved the NetworkSecurityServer hostname mvs073 to 3 addresses

EZD1153I The IKE daemon resolved the *server* hostname *name* to *count* addresses

Explanation: The Internet Key Exchange (IKE) daemon resolved the Network Security Services (NSS) server hostname to zero or more addresses. The IKE daemon will not connect to the NSS server unless the hostname resolves to one or more addresses.

In the message text:

server

The *server* value can be either NetworkSecurityServer or NetworkSecurityServerBackup.

name

The host name that was resolved.

count

The number of addresses to which the hostname resolved.

System action: The IKE daemon continues.

Operator response: If the number of addresses is zero, contact the system programmer.

System programmer response: If the number of addresses is zero, correct the configuration so that the server hostname resolves to one or more addresses. See the information about resolvers in z/OS Communications Server: IP Configuration Guide for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Example:

EZD1152I The IKE daemon is resolving the NetworkSecurityServer hostname mvs073

EZD1153I The IKE daemon resolved the NetworkSecurityServer hostname mvs073 to 3 addresses

EZD1154I The remote data endpoint *rip* with identity *rid* does not match the remote security endpoint *rsip* using KeyExchangeAction *actionname*

Explanation: When the FilterByIdentity Yes parameter is configured on a KeyExchangeAction statement or a mobile user connectivity rule is configured using the IBM Configuration Assistant for z/OS Communications Server, the peer is restricted to negotiating data protection only for its security endpoint address. Remote identity support is intended for mobile users, who are not permitted to function as a security gateway. However, the peer's data endpoint and security endpoint do not match, which violates the local restriction for mobile user negotiations. It is likely that the peer is not a mobile user; initiation is denied.

In the message text:

rip

The data endpoint IP address of the peer.

rid

The identity of the peer.

EZD1155I

rsip

The security endpoint IP address of the peer.

actionname

The name of the KeyExchangeAction statement configured with FilterByIdentity Yes.

System action: The dynamic tunnel activation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: If the peer at the security endpoint IP address should be permitted to function as a security gateway, then correct the local configuration. It is also possible that the peer is a mobile user but is configured in violation of the local restriction for mobile user negotiations. Contact the owner of the peer to determine whether the peer is a mobile user. If so, inform the owner that the peer data endpoint IP address must be configured to match the peer security endpoint IP address when initiating a dynamic tunnel to the z/OS IKE daemon.

When IPSec policy is configured without the IBM Configuration Assistant for z/OS Communications Server, either update the KeyExchange action identified in the message to specify the FilterByIdentity N parameter or configure a new dynamic tunnel that is specific to the initiating peer. See the information about configuring the branch office model in z/OS Communications Server: IP Configuration Guide.

When IPSec policy is configured with the IBM Configuration Assistant for z/OS Communications Server, either edit the mobile user rule and change it to a typical rule, or create a new typical connectivity rule that is specific to the initiating peer and move the new rule above the mobile user rule. See the online helps in the GUI for additional information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: doi.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: This message goes to the syslog.

Example:

```
Jun 19 22:46:55 MVS073 IKE: Message instance 3: *** SA Context Information ***
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Phase 2 SAID : 0          Assoc P1 ID : 1
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Stackname : TCPCS2
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Local IPSec Client ID info : IPV4 Subnet 0.0.0.0/0 Port: Any
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Remote IPSec Client ID info : IPV4 Subnet 172.16.0.0/12 Port: Any
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Local IPSec IP info : 1.2.0.1
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Remote IPSec IP info : 1.1.0.1
Jun 19 22:46:55 MVS073 IKE: Message instance 3: Protocol : UDP(17)
Jun 19 22:46:55 MVS073 IKE: Message instance 3: AH SPIs in/out : 0 / 0
Jun 19 22:46:55 MVS073 IKE: Message instance 3: ESP SPIs in/out : 0 / 0
Jun 19 22:46:55 MVS073 IKE: Message instance 3: EZD1154I The remote data endpoint 172.16.0.0/12 with identity
1.1.0.1 does not match the remote security endpoint 1.1.0.1 using KeyExchangeAction strong-KE
```

EZD1155I *t_name transform t_num in proposal p_num does not include an integrity algorithm*

Explanation: The Internet Key Exchange (IKE) daemon received a proposal that contains a transform with no encryption algorithm and no integrity algorithm during a dynamic tunnel negotiation. Such a proposal is not permitted and is an auditable event. If no acceptable proposal is received then EZD1022I will also be issued.

In the message text:

t_name

The transform name.

t_num

The transform number. There might be multiple transforms in a proposal.

p_num

The proposal number. There might be multiple proposals in a Security Association (SA) establishment message.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Use the remote IPSec IP information in the SA context information to identify the source of the invalid proposal. Contact the owner of the invalid proposal and request that the configuration be corrected.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ipsec_match.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: This message goes to the syslog.

Example:

```
Jun 22 21:24:13 MVS073 IKE: Message instance 3: *** SA Context Information ***
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Phase 2 SAID : 4           Assoc P1 ID : 1
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Stackname : TCPCS2
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Local IPSec Client ID info : IPV4 Subnet 0.0.0.0/0 Port: Any
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Remote IPSec Client ID info : Ipv4 1.1.0.1 Port: Any
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Local IPSec IP info : 1.2.0.1
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Remote IPSec IP info : 1.1.0.1
Jun 22 21:24:13 MVS073 IKE: Message instance 3: Protocol : UDP(17)
Jun 22 21:24:13 MVS073 IKE: Message instance 3: IpFilterRuleName : 0^6
Jun 22 21:24:13 MVS073 IKE: Message instance 3: AH SPIs in/out : 0 / 0
Jun 22 21:24:13 MVS073 IKE: Message instance 3: ESP SPIs in/out : 0 / 0
Jun 22 21:24:13 MVS073 IKE: Message instance 3: EZD1155I ESP_NULL transform 1 in proposal 1 does not
include an integrity algorithm
Jun 22 21:24:13 MVS073 IKE: Message instance 3: EZD1155I ESP_NULL transform 1 in proposal 2 does not
include an integrity algorithm
Jun 22 21:24:13 MVS073 IKE: Message instance 3: EZD1022I No proposal chosen with IpFilterRule ( 0^6 ) and
IpDynVpnAction ( IPSec_Gold )
```

EZD1156I Extraneous text ignored on line *linenum* after keyword *value*

Explanation: The Internet Key Exchange (IKE) daemon encountered extraneous text in a configuration file. The extraneous text appeared after a keyword and value specification.

In the message text:

linenum

The line of the configuration file where the extraneous text was found

keyword

The configuration keyword after which the extraneous text was found

value

The configuration value after which the extraneous text was found

System action: The configuration keyword is processed, and the extraneous text is ignored. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Remove the extraneous text from the indicated line in the IKE configuration file. See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for more information about the IKE daemon configuration file syntax.

User response: Not applicable.

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Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: ike_config.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: This message goes to the syslog.

Example:

```
EZD1156I Extraneous text ignored on line 12 after IkeSyslogLevel 1
```

EZD1157I IKE message received from *remote_ip* port *remote_port* to *local_ip* port *local_port* with length *message_length* is too short to contain the IKE header

Explanation: The Internet Key Exchange (IKE) daemon received a message that is too short to contain the message header, which is 28 bytes long.

In the message text:

remote_ip
The remote security endpoint IP specification.

remote_port
The remote port of the IKE daemon peer.

local_ip
The local security endpoint IP specification.

local_port
The local port of the IKE daemon.

message_length
The length of the IKE message, in bytes.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that a protocol error has occurred.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: simple_net.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1157I IKE message received from 1.2.3.4 port 500 to 5.6.7.8 port 500 with length 27 is too short  
to contain the IKE header
```

EZD1158I DISPLAY IKE *type*:

Explanation: The Internet Key Exchange (IKE) daemon received the MODIFY DISPLAY subcommand.

In the message text:

type
The type of IKE data that is displayed.

System action: The IKE daemon continues processing the MODIFY DISPLAY command.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: mdfysrvr.cpp

Routing code: 2

Descriptor code: 5, 8, 9

Automation: This message is written to both the operator console and syslog.

Example:

EZD1158I DISPLAY IKE CONFIGURATION:

EZD1159I Remote security endpoint *id_type* identity length *id_length* is longer than the maximum of *id_max*

Explanation: An IKE Security Association (SA) negotiation failed because the remote security endpoint identity received that was from the IKE peer was longer than the maximum allowed.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

id_type

The name of the remote security endpoint identity type

id_length

The length of the remote security endpoint identity received from the IKE peer.

id_max

The maximum acceptable length for a remote security endpoint identity.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint and ask the administrator to configure the remote security endpoint with a smaller identity or a different identity type.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: fw_convert.cpp

Routing code: *

Descriptor code: *

Automation: This message is output to syslog.

Example:

```
Message instance 2: *** SA Context Information ***
Message instance 2: Phase 1 tunnel ID : K0 Generation : 0
Message instance 2: Stackname : TCPCS
Message instance 2: Local IKE ID info : ID_FQDN mvsa.tcp.raleigh.ibm.com
Message instance 2: Local IKE IP : 9.42.105.138 port 500
Message instance 2: Remote IKE IP : 9.42.141.122 port 500
Message instance 2: KeyExchangeRuleName : RSA
```

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```
Message instance 2: Icookie/Rcookie : x82F0255E3A5993B2 / x58DFAFF2C1AD3F19
Message instance 2: IKE Version : 2
Message instance 2: EZD1159I Remote security endpoint ID_DER_ASN1_DN identity length 2285 is longer
than the maximum of 1024
```

EZD1160I Policy mismatch: IpDynVpnAction *statement_name* requires parameter *parameter_name* with value *policy_value* but the value selected by the IKE peer is *peer_value*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a value selected by the IKE peer because the value is not allowed by the local policy. The Security Association negotiation will fail. Message EZD1022I will be issued to syslog and will indicate the failure.

In the message text:

statement_name

- In the policy agent configuration file, the *statement_name* value is the name specified on the applicable IpDynVpnAction statement.
- If the policy agent is configured with the IBM Configuration Assistant for z/OS Communications Server, the *statement_name* value corresponds to the name of the security level in the GUI. The value also contains a numeric suffix appended to the security level name to guarantee uniqueness.

parameter_name

The IpDynVpnAction parameter that encountered a mismatch. See the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about the parameter specified.

policy_value

The IpDynVpnAction parameter value that does not match the value selected by the IKE peer.

peer_value

The value selected by the IKE peer that does not match the *policy_value* value.

System action: The negotiation fails; the IKE daemon continues.

Operator response: Notify the system programmer.

System programmer response: Ensure that the IpDynVpnAction statement is configured correctly. Alter either the local policy to accept the value specified by *peer_value* in this statement or notify the administrator of the remote security endpoint about the mismatch and ask the administrator to alter the remote configuration to propose the *policy_value* value required by the local policy. See the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2TSRequest.cpp

Routing code: 2

Descriptor code: 5

Automation: Not applicable.

Example:

```
EZD1160I Policy mismatch: IpDynVpnAction p2_action requires parameter HowToEncapIKEv2
with value Transport but the value selected by the IKE peer is Tunnel
```

EZD1161I DCAS CONFIGURATION SERVERTYPE IS UNDEFINED

Explanation: The combination of SERVERTYPE keyword definitions in the DCAS configuration file caused the SERVERTYPE keyword to be undefined to DCAS.

System action: DCAS ends.

Operator response: Contact the system programmer.

System programmer response: See z/OS Communications Server: IP Configuration Reference for a list of the

SERVERTYPE keyword values in the DCAS configuration file.

Module: dcasconf.c

Procedure name: process_config_keyword()

EZD1162I DCAS CONFIGURATION SERVERTYPE *value* IS NOT SUPPORTED

Explanation: This message is issued when DCAS is processing the DCAS configuration file.

value is the SERVERTYPE keyword that is not supported.

System action: DCAS ends.

Operator response: Contact the system programmer.

System programmer response: See z/OS Communications Server: IP Configuration Reference for a list of the SERVERTYPE keyword values in the DCAS configuration file.

Module: dcasconf.c

Procedure name: process_config_keyword()

EZD1163I *ip_version* DYNAMIC XCF INTERFACE *xcfinterface_name* WAS CREATED BUT THE SPECIFIED SOURCEVIPINTERFACE *interface_name* WILL NOT BE USED

Explanation: The interface name specified by the SOURCEVIPINTERFACE parameter on the IPCONFIG DYNAMICXCF statement or the IPCONFIG6 DYNAMICXCF statement was not valid. The interface name must be an active static VIPA link or interface name of the appropriate IP version.

In the message text:

ip_version

Either IPV4 or IPV6

xcfinterface_name

The Dynamic XCF interface name that was created

interface_name

The name that was specified on the SOURCEVIPINTERFACE parameter for IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF

System action: The dynamic XCF interface is created. TCP/IP continues.

Operator response: Contact the system programmer.

System programmer response: Create a static VIPA with an interface name that matches the one specified on the IPCONFIG DYNAMICXCF or IPCONFIG6 DYNAMICXCF SOURCEVIPINTERFACE statement and restart TCP/IP.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBXFDYN

Routing code: 2, 8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1163I IPV4 DYNAMIC XCF INTERFACE EZAXCFAA WAS CREATED BUT THE SPECIFIED SOURCEVIPINTERFACE VIPA1 WILL NOT BE USED

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EZD1164I IPV6 TCPSTACKSOURCEVIPA INTERFACE *interface_name* WAS NOT USED BY *tcp_jobname*

Explanation: An outbound connection request was processed but the interface configured with TCPSTACKSOURCEVIPA could not be used to determine the source IPv6 address because the interface was not an active static VIPA interface or an active dynamic VIPA interface.

interface_name is the name specified on the TCPSTACKSOURCEVIPA parameter of the IPCONFIG6 statement.

tcp_jobname is the name of the job associated with the procedure that was used to start TCP/IP.

System action: TCP/IP continues. To avoid flooding the system console, this informational message will not be issued again for at least five minutes.

Operator response: Contact the system programmer.

System programmer response: Change the TCPSTACKSOURCEVIPA interface name to be an active static or dynamic VIPA interface.

Module: EZBX6UTL

Procedure name: EZBX6SSV

EZD1165I DVIPA INTERFACE *interface_name* IS ALREADY DEFINED WITH *ip_addr*

Explanation: The TCPIP detected that the interface *interface_name* was already defined as a DVIPA interface with a conflicting definition.

For a VIPADEFINE/VIPABACKUP configuration statement, the interface was already defined either by a previous VIPADEFINE/VIPABACKUP with a different IP address, or by a SIOCSVIPA IOCTL or BIND to an IP address in a configured VIPARANGE.

interface_name is the interface name specified on the VIPADEFINE/VIPABACKUP statement.

ip_addr is the IP address specified on the previous VIPADEFINE/VIPABACKUP statement.

System action: Processing continues. The VIPABACKUP or VIPADEFINE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Correct the VIPABACKUP or VIPADEFINE statement with a different IP address or with a different interface name.

Module: EZBX6DVI

Procedure name: PreValidateVBKUP6, PreValidateVDEF6

EZD1166E *tcpstackname* DELAYING SYSPLEX PROFILE PROCESSING - *application* IS NOT ACTIVE

Explanation: The TCP/IP stack delayed joining a sysplex group and delayed processing sysplex definitions in the profile (VIPADYNAMIC and IPCONFIG/IPCONFIG6 DYNAMICXCF statements).

tcpstackname is the name of the TCP/IP stack.

application is the name of the application that is not active and is either OMPROUTE or VTAM.

See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

System action: TCP/IP continues.

Operator response: If *application* is VTAM, start VTAM.

If the *application* value is OMPROUTE and it is not active, start OMPROUTE; If OMPROUTE is active, contact the system programmer. This message is issued for OMPROUTE only if GLOBALCONFIG SYSPLEXMONITOR DELAYJOIN was specified in a profile.

If you want the TCP/IP stack to immediately join a sysplex group rather than waiting for OMPROUTE to activate, issue the VARY TCPIP,,OBEYFILE command with GLOBALCONFIG SYSPLEXMONITOR NODELAYJOIN specified. See z/OS Communications Server: IP Configuration Reference for information about the DELAYJOIN keyword.

When OMPROUTE activation is complete or a VARY TCPIP,,OBEYFILE command with GLOBALCONFIG

SYSPLEXMONITOR NODELAYJOIN has been specified, TCP/IP will join a sysplex group and finish processing the sysplex definitions.

System programmer response: If VTAM or OMPROUTE cannot be started, contact IBM software support services with the system log.

Module: EZBXFPDM

Procedure name: EZBXFPDM

EZD1167I DVIPA INTERFACE *interface_name* IS CONFIGURED FROM A VIPARANGE

Explanation: The interface name specified on a VIPADELETE was defined on a VIPARANGE statement. The interface cannot be deleted by using a VIPADELETE statement.

interface_name is the interface name specified on the VIPADELETE statement.

System action: Processing continues. The VIPADELETE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Change the VIPADELETE to specify a valid interface name, or use a VIPARANGE DELETE (instead of a VIPADELETE) to delete the configured VIPARANGE statement.

Module: EZBX6DVI

Procedure name: ValidateVDEL6

EZD1168I VIPADISTRIBUTE WITH THE PORT KEYWORD REJECTED FOR INTERFACE *interface_name*

Explanation: The PORT keyword was specified on a VIPADISTRIBUTE statement for a Dynamic VIPA (DVIPA) that already had a VIPADISTRIBUTE statement specified without a PORT keyword, indicating dynamic ports.

interface_name is the interface name specified on the rejected VIPADISTRIBUTE statement with the PORT keyword.

System action: Processing continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: To disable dynamic ports, delete all previous VIPADISTRIBUTE statements for this DVIPA. Then reissue the VIPADISTRIBUTE with the PORT keyword.

Module: EZBX6DVI

Procedure name: ValidateVDIST6

EZD1169I VIPADISTRIBUTE WITHOUT THE PORT KEYWORD REJECTED FOR INTERFACE *interface_name*

Explanation: The PORT keyword was not specified on a VIPADISTRIBUTE statement indicating dynamic ports for a Dynamic VIPA (DVIPA) that already had a VIPADISTRIBUTE statement specified with a PORT keyword.

interface_name is the interface name specified on the rejected VIPADISTRIBUTE statement without the PORT keyword.

System action: Processing continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: To enable dynamic ports, delete all previous VIPADISTRIBUTE statements for this DVIPA. Then reissue the VIPADISTRIBUTE without the PORT keyword.

Module: EZBX6DVI

Procedure name: ValidateVDIST6

EZD1170E *tcpstackname* WAS NOT ABLE TO GET TCP/IP *storagetype* STORAGE

Explanation: TCP/IP was not able to satisfy a request for storage.

tcpstackname is the name of the TCP/IP stack.

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storagetype is the type of storage that was unavailable. The value for *storagetype* is either private or ECSA (Extended Common Storage Area)

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of the TCP/IP sysplex group, the following RECOVERY actions will occur:
 - This stack will leave the TCP/IP sysplex group.
 - This stack will no longer participate in sysplex distribution (as a distributor or target) or act as an owner or a backup for DVIPAs. All DVIPAs defined on this stack will be deactivated; however, the DVIPA definitions will be saved.
 - When the stack leaves the TCP/IP sysplex group, this operator message will be deleted.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action will be taken.

See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definitions of the SYSPLEXMONITOR parameters.

Operator response: Save the TCP/IP profile and system log. If a dump was not created, then take a dump of the TCP/IP address space and dataspaces.

If NORECOVERY is active, no further actions are needed.

If RECOVERY is active, then even if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack will *not* automatically rejoin the TCP/IP sysplex group, due to the severity of the problem encountered.

Message EZZ9676E will be displayed if the TCP/IP stack successfully deactivates all DVIPAs and leaves the TCP/IP sysplex group. After this message is displayed, issuing the VARY TCPIP,,SYSPLEX,JOINGROUP command will cause the DVIPA definitions to be processed, and the stack to rejoin the TCP/IP sysplex group.

System programmer response: Use the display TCP/IP storage command D TCPIP,,STOR to determine the current status of TCP/IP private and ECSA storage. See z/OS Communications Server: IP System Administrator's Commands for more information about the D TCPIP,,STOR command.

For ECSA storage exhaustion, determine which jobs or address spaces are using an excessive amount of storage. To determine the users of ECSA storage, enable common storage tracking. See the z/OS MVS Initialization and Tuning Guide for information about requesting common storage tracking. Use the VERBEXIT VSMDATA OWNCOMM SUMMARY command to determine how much storage is used by each job. See the z/OS MVS Diagnosis: Tools and Service Aids for information about the IPCS VERBEXIT VSMDATA command.

If the storage problem cannot be corrected, contact IBM software support services with all supporting documentation.

If the storage problem can be corrected:

- If RECOVERY is active, then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the DVIPA definitions to be processed, and the stack to rejoin the TCP/IP sysplex group.

Module: EZBXFPDC

Procedure name: EZBXFPDC

EZD1171I THERE IS NO ROUTE AVAILABLE FOR VIPAROUTE *dxcf_address target_ipaddress*

Explanation: The target stack identified by *dxcf_address* is active, and *target_ipaddress* is defined at that target stack, however no route is available to *target_ipaddress*. As a result, the local stack cannot forward any DVIPA packets to the target stack.

dxcf_address is the dynamic XCF address of a target stack as specified on the VIPAROUTE statement.

target_ipaddress is the IP address in the HOME list of the target stack as specified on the VIPAROUTE statement.

System action: TCP/IP continues, but the local stack cannot forward any DVIPA packets to the target stack.

Operator response: This might be a temporary condition that can resolve itself when the route becomes available. Use the Netstat ROUTe/-r command on the distributing stack to see possible routing failure problems to that target stack. If the problem cannot be resolved, contact the system programmer.

System programmer response: See the information about diagnosing OMPROUTE problems in z/OS Communications Server: IP Diagnosis Guide for information about routing failures.

Module: EZBXFDVI, EZBX6DVI, EZBXFMS4, EZBX6MS2

Procedure name: EZBXFDVI, EZBX6DVI, EZBXFMS4, EZBX6MS2

**EZD1172E *tcpstackname* DETERMINED THAT ALL PARTNERS WERE UNREACHABLE FOR AT LEAST
 timevalue SECONDS**

Explanation: Sysplex problem detection determined that there are no routes available to any partners.

tcpstackname is the name of the TCP/IP stack.

timevalue is the number of seconds that connectivity was not available.

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of its TCP/IP sysplex group, the following RECOVERY actions will occur:
 - This stack will leave the TCP/IP sysplex group.
 - This stack will no longer participate in sysplex distribution (as a distributor or target) or act as an owner or a backup for DVIPAs. All DVIPAs defined on this stack will be deactivated; however, the DVIPA definitions will be saved.
 - If the problem is corrected, this operator message will be deleted; if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack will process the DVIPA definitions and rejoin the TCP/IP sysplex group.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action will be taken. If the problem is corrected, this operator message will be deleted.

See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definition of the SYSPLEXMONITOR parameters.

Operator response: Contact the system programmer.

System programmer response: Issue Netstat ROUTe/-r to determine which interfaces are used by the VIPAROUTE statements. Issue the Netstat DEvlinks/-d command to show which interfaces are active; check the system log for any messages related to the status of interfaces. If you cannot determine why the routes were lost, see the information about diagnosing OMPROUTE problems in z/OS Communications Server: IP Diagnosis Guide for additional information.

If this problem can be corrected, this operator message will be deleted.

If RECOVERY and NOAUTOREJOIN are active, then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the DVIPA definitions to be processed, and the stack to rejoin the TCP/IP sysplex group.

If RECOVERY and AUTOREJOIN are active, no further actions are needed. The stack will process the DVIPA definitions and rejoin the TCP/IP sysplex group.

If NORECOVERY is active, no further actions are needed.

After connectivity is reestablished, if RECOVERY is active, wait until message EZD1172E is issued when the process of leaving the sysplex group completes successfully. Then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the stack to rejoin the sysplex group. If NORECOVERY is active, no further actions are needed.

Module: EZBXFPDM

Procedure name: EZBXFPDM

EZD1173I VIPAROUTE IS NOT ENABLED FOR *dxcf_address target_ipaddress* - TARGET IP ADDRESS IS NOT VALID

Explanation: The target stack identified by *dxcf_address* is active, but *target_ipaddress* is not defined at that target stack or it is defined, but the address is not valid (for example, a dynamic VIPA address or loopback is used). The local stack will forward DVIPA packets to the target stack using dynamic XCF interfaces.

dxcf_address is the dynamic XCF address of a target stack as specified on the VIPAROUTE statement.

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target_ipaddress is the IP address as specified on the VIPAROUTE statement.

System action: TCP/IP continues.

Operator response: Contact the system programmer.

System programmer response: Take the following actions to correct the problem:

- Ensure that the VIPAROUTE statement specifies the correct DXCF address and target IP address for the desired target stack.
- Ensure that *target_ipaddress* is correctly defined in the HOME list of the target stack and that it is an address that is valid for use as a target IP address.

See z/OS Communications Server: IP Configuration Reference for information about the VIPAROUTE statement.

Module: EZBXFDVI, EZBX6DVI, EZBXFMS4, EZBX6MS2

Procedure name: EZBXFDVI, EZBX6DVI, EZBXFMS4, EZBX6MS2

EZD1174I THE ROUTE FOR VIPAROUTE *dxcf_address* *target_ipaddress* IS NOW ACTIVE

Explanation: The route to *target_ipaddress* on the target stack identified by *dxcf_address* is now active. As a result, the local stack can forward DVIPA packets to the target stack.

dxcf_address is the dynamic XCF address of a target stack as specified on the VIPAROUTE statement.

target_ipaddress is the IP address in the HOME list of the target stack as specified on the VIPAROUTE statement.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFHSH, EZBX6HSH

Procedure name: Check_Route, Check_Route6

EZD1175I VARY TCPIP,,SYSPLEX,JOINGROUP COMMAND IGNORED BECAUSE *tcpstackname* IS ALREADY A MEMBER OF A TCP/IP SYSPLEX GROUP

Explanation: The command was ignored because the TCP/IP stack is already a member of a TCP/IP sysplex group. *tcpstackname* is the name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1176I *tcpstackname* HAS SUCCESSFULLY JOINED THE TCP/IP SYSPLEX GROUP *groupname*

Explanation: The TCP/IP stack successfully joined the TCP/IP sysplex group *groupname*. This stack can participate in sysplex distribution (as a distributor or target) or act as an owner or a backup for DVIPAs.

tcpstackname is the name of the TCP/IP stack.

groupname is the name of the TCP/IP sysplex group that was joined.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFINI

Procedure name: Join_Sysplex_Group

EZD1177I *tcpstackname* SYSPLEX PROFILE DEFINITIONS ARE IGNORED BECAUSE THE STACK IS NO LONGER A MEMBER OF A TCP/IP SYSPLEX GROUP

Explanation: The sysplex profile definitions in the data set referenced by the VARY TCPIP,,OBEYFILE command were ignored because the stack is no longer a member of a TCP/IP sysplex group. Sysplex profile definitions cannot be applied if the stack is not a member of a TCP/IP sysplex group.

The stack left the TCP/IP sysplex group because one of the following occurred:

- A VARY TCPIP,,SYSPLEX,LEAVEGROUP command was issued, causing the stack to leave the TCP/IP sysplex group.
- A problem was detected that caused the stack to leave the TCP/IP sysplex group.

tcpstackname is the name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: If a VARY TCPIP,,SYSPLEX,LEAVEGROUP command was issued, then issue a VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the stack to rejoin the TCP/IP sysplex group. If a problem was detected, prior eventual action messages explain why the stack is not a member. The problem that caused the stack to leave the TCP/IP sysplex group should be identified and corrected so that the stack can rejoin the TCP/IP sysplex group. See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information. If the problem cannot be corrected, contact the system programmer. When the stack has rejoined the TCP/IP sysplex group, the sysplex profile definitions can be reapplied.

System programmer response: If the problem causing the stack to leave the TCP/IP sysplex group cannot be corrected, contact IBM software support services.

Module: EZBXFDYN

Procedure name: EZBXFDYN

EZD1178I THE VARY TCPIP,,SYSPLEX,JOINGROUP COMMAND WAS ACCEPTED

Explanation: A VARY TCPIP,,SYSPLEX,JOINGROUP command was accepted. Later messages will indicate whether the stack successfully joined a TCP/IP sysplex group.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1179I VIPAROUTE DEFINE REJECTED - *dxcf_address* IS ALREADY DEFINED

Explanation: The VIPAROUTE DEFINE statement was rejected. The same dynamic XCF address was already defined with a different target IP address on a prior VIPAROUTE DEFINE statement.

dxcf_address is the dynamic XCF address that was specified on the VIPAROUTE DEFINE statement that was rejected.

System action: TCP/IP continues but the VIPAROUTE DEFINE statement is ignored.

Operator response: Contact the system programmer.

System programmer response: Correct the VIPAROUTE statement and issue a VARY TCPIP,,OBEYFILE command with the new VIPADYNAMIC block.

Module: EZBXFDVI, EZBX6DVI

Procedure name: EZBXFDVI, EZBX6DVI

EZD1180I VIPAROUTE DELETE REJECTED - *dxcf_address target_ipaddress IS NOT DEFINED*

Explanation: The VIPAROUTE DELETE statement was rejected. The *dxcf_address* with *target_ipaddress* was not found on a previously defined VIPAROUTE DEFINE statement.

dxcf_address is the dynamic XCF address that was specified on the VIPAROUTE DELETE statement that was rejected.

target_ipaddress is the IP address in the HOME list of the target stack as specified on the VIPAROUTE statement.

System action: TCP/IP continues but the VIPAROUTE DELETE statement is ignored.

Operator response: Contact the system programmer.

System programmer response: Correct the VIPAROUTE DELETE statement and issue a VARY TCPIP,,OBEYFILE command with a new VIPADYNAMIC block.

Module: EZBXFDVI, EZBX6DVI

Procedure name: EZBXFDVI, EZBX6DVI

EZD1181I VIPAROUTE DEFINE *dxcf_address REJECTED - ENTRIES EXCEEDED*

Explanation: The VIPAROUTE DEFINE statement was rejected. The maximum number of 256 VIPAROUTE entries was exceeded.

dxcf_address is the dynamic XCF address that was coded on the VIPAROUTE statement that was rejected.

System action: TCP/IP continues but the VIPAROUTE statement is ignored.

Operator response: Contact the system programmer.

System programmer response: Issue a VARY TCPIP,,OBEYFILE command with a new VIPADYNAMIC block to remove unneeded VIPAROUTE entries before adding new ones.

Module: EZBXFDVI, EZBX6DVI

Procedure name: EZBXFDVI, EZBX6DVI

EZD1182I TARGET SERVER FOR *dvipa_or_intfname PORT portnum AT tcp_name ON host_name IS NOT RESPONSIVE - TCSR tcsr_value CER cer_value SEF sef_value*

Explanation: The server that is servicing the specified distributed dynamic virtual IP address (DVIPA) and port number became unresponsive while it was processing connection setup requests. The server is no longer successfully processing incoming connection requests.

In the message text:

dvipa_or_intfname

- For IPv4, specifies the distributed DVIPA that is being serviced by the target server.
- For IPv6, specifies the interface name associated with the distributed DVIPA that is being serviced by the target server.

portnum

The port that is being serviced by the target server.

tcp_name

The name of the TCP/IP stack that the target server is using.

host_name

The name of the MVS system that the TCP/IP stack is running on.

tcsr_value

The percent of connection setup requests that are routed from the distributor and that are successfully received by the target for this server.

cer_value

The percentage of connection setup requests that are received by the target for this server and that achieve the connection established state.

sef_value

The server efficiency factor for the server application. This value is an indication of how effectively the application is accepting new connection requests and managing its backlog queue.

System action: Processing continues. New connection setup requests are not routed to this target server until the target server recovers. Message EZD1183I will be issued at that time.

Operator response: See the information about diagnosing sysplex problems in z/OS Communications Server: IP Diagnosis Guide for more information.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFWLM

Routing code: 10

Descriptor code: 12

Automation: This message is sent to the system console. Although this target server is no longer an eligible target server, you might want to review why your target server is not performing correctly.

Example:

```
EZD1182I TARGET SERVER FOR 192.3.10.13 PORT 23 AT TCPCS ON MVS128 IS NOT RESPONSIVE - TCSR 100
CER 0 SEF 80
```

**EZD1183I TARGET SERVER FOR *dvipa_or_intfname* PORT *portnum* AT *tcp_name* ON *host_name* IS NOW
RESPONSIVE**

Explanation: The server servicing the specified distributed DVIPA and port number resumed responsiveness in processing connection setup requests. The server is now successfully processing incoming connection requests.

dvipa_or_intfname:

- For IPv4, this is the distributed dynamic virtual IP address that is being serviced by the target server.
- For IPv6, this is the interface name associated with the dynamic virtual IP address that is being serviced by the target server.

portnum is the port that is being serviced by the target server.

tcp_name is the name of the TCP/IP stack that the target server is using.

host_name is the name of the MVS system that the TCP/IP stack is running on.

System action: Processing continues. New connection setup requests will now be routed to this target server.

Operator response: None.

System programmer response: None.

Module: EZBXFWLM

Procedure name: EZBXFPWS

**EZD1185I THE VARY TCPIP,,SYSPLEX,DEACTIVATE, DVIPA COMMAND WAS IGNORED BECAUSE THE
DVIPA IS ALREADY DEACTIVATED**

Explanation: A VARY TCPIP,,SYSPLEX,DEACTIVATE, DVIPA command was issued for a DVIPA. The command was ignored because the DVIPA is currently deactivated. The Netstat VIPADCFG/-F command can be used to see all of the currently active DVIPAs and deactivated DVIPAs.

System action: TCP/IP continues.

Operator response: None.

EZD1186I • EZD1187E

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1186I THE VARY TCPIP,,SYSPLEX,DEACTIVATE,DVIPA COMMAND WAS REJECTED BECAUSE THE DVIPA IS NOT DEFINED BY VIPADEFINE OR VIPABACKUP ON THIS STACK

Explanation: A VARY TCPIP,,SYSPLEX,DEACTIVATE,DVIPA command was issued for a DVIPA. The command was rejected because the DVIPA is not defined by a VIPADEFINE or VIPABACKUP statement on this stack. The VARY TCPIP,,SYSPLEX,DEACTIVATE,DVIPA command can be issued only on the stack that has a VIPADEFINE or VIPABACKUP definition for this DVIPA. Use the Netstat VIPADCFG/-F command to see all the currently active DVIPAs and deactivated DVIPAs.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1187E *tcpstackname* WAS NOT ABLE TO GET TCP/IP *storagetype* STORAGE

Explanation: As a result of storage limits set by GLOBALCONFIG, *tcpstackname* was not able to get TCP/IP *storagetype* storage.

tcpstackname is the name of the TCP/IP stack.

storagetype is the type of storage that was unavailable. *storagetype* will be either **PRIVATE** or **ECSA** (extended common storage area).

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of its TCP/IP sysplex group, the following RECOVERY actions will occur:
 - This stack will leave the TCP/IP sysplex group.
 - This stack will no longer participate in sysplex distribution (as a distributor or target) or act as an owner or a backup for DVIPAs. All DVIPAs defined on this stack will be deleted; however, the DVIPA definitions will be saved.
 - If the problem is corrected, this operator message will be deleted; if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack will process the saved DVIPA definitions and rejoin the TCP/IP sysplex group.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action will be taken. If the problem is corrected, this operator message will be deleted.

See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definitions of the SYSPLEXMONITOR parameters.

Operator response: If the storage problem cannot be corrected, save the TCP/IP profile and system log. If a dump was not created, then take a dump of the TCP/IP address space and dataspaces. Contact the system programmer.

System programmer response: Use the display TCP/IP storage command D TCPIP,,STOR to determine the current status of TCP/IP PRIVATE and ECSA storage. See the information about the DISPLAY TCPIP,,STOR command in z/OS Communications Server: IP System Administrator's Commands for more information about using this command.

Storage limits were set using the GLOBALCONFIG ECSALIMIT or GLOBALCONFIG POOLLIMIT statement. It might be necessary to raise these limits to correct this problem; look for earlier TCP/IP warning messages that are issued each time a storage limit boundary is crossed (OK, CONSTRAINED, CRITICAL, and EXHAUSTED).

See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definitions of the ECSALIMIT and POOLLIMIT. For ECSA storage exhaustion, it is necessary to

determine which jobs or address spaces are using an excessive amount of storage. To determine the users of ECSA storage, common storage tracking should be enabled. See the z/OS MVS Initialization and Tuning Guide for information about requesting common storage tracking. Use the VERBEXIT VSMDATA OWNCOMM SUMMARY command to determine how much storage is used by each job. See the z/OS MVS Diagnosis: Tools and Service Aids for information about the IPCS VERBEXIT VSMDATA command.

If the storage problem cannot be corrected, contact IBM software support services with all supporting documentation.

If this problem can be corrected, this operator message will be deleted.

If RECOVERY and NOAUTOREJOIN are active, then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the saved DVIPA definitions to be processed, and the stack to rejoin the TCP/IP sysplex group.

If RECOVERY and AUTOREJOIN are active, no further actions are needed. The stack will process the DVIPA definitions and rejoin the TCP/IP sysplex group.

If NORECOVERY is active, no further actions are needed.

Module: EZBXFPDM

Procedure name: EZBXFPDM

EZD1188I THE VARY TCPIP,,SYSPLEX,REACTIVATE,DVIPA COMMAND FAILED

Explanation: A VARY TCPIP,,SYSPLEX,REACTIVATE,DVIPA command was issued for a DVIPA. The command failed. A prior error message will indicate why the command failed.

System action: TCP/IP continues. The specified DVIPA definition remains deactivated.

Operator response: Use the prior error message to determine why the command failed.

System programmer response: None.

Module: EZBXFDVI, EZBX6DVI

Procedure name: ValidateVDEF,ValidateVBKKUP

EZD1189I THE VARY TCPIP,,SYSPLEX,REACTIVATE,DVIPA COMMAND COMPLETED SUCCESSFULLY

Explanation: A VARY TCPIP,,SYSPLEX,REACTIVATE,DVIPA command completed successfully for a DVIPA.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFDVI,EZBX6DVI

Procedure name: Add_DVIPAentry,Add_DVIPAentry6

EZD1190I THE VARY TCPIP,,SYSPLEX,LEAVEGROUP COMMAND WAS IGNORED BECAUSE THE STACK IS NOT A MEMBER OF A TCP/IP SYSPLEX GROUP

Explanation: The VARY TCPIP,,SYSPLEX,LEAVEGROUP command was ignored because the stack is not a member of a TCP/IP sysplex group.

System action: TCP/IP continues.

Operator response: See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1191I • EZD1193I

EZD1191I THE VARY TCPIP,,SYSPLEX,JOINGROUP COMMAND WAS IGNORED BECAUSE SYSPLEX PROBLEM DETECTION CLEANUP HAS NOT FINISHED

Explanation: A problem detected by Sysplex Autonomics caused the stack to leave the TCP/IP sysplex group and cleanup all DVIPA resources. The DVIPA resource cleanup has not completed.

System action: TCP/IP continues. One of the following two messages will be issued when the problem detection cleanup process completes:

- EZZ9675E to indicate that the resource cleanup process failed.
- EZZ9676E to indicate that the resource cleanup process has successfully completed.

Operator response: Wait until either EZZ9675E or EZZ9676E is issued. If message EZZ9675E is issued, restart the stack to rejoin the TCP/IP sysplex group. If message EZZ9676E is issued and the stack does not automatically rejoin the sysplex group, see message EZZ9676E in z/OS Communications Server: IP Messages Volume 4 (EZB, SNM) for more information about how to cause the stack to rejoin the sysplex group. See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1192I THE VIPADYNAMIC CONFIGURATION WAS SUCCESSFULLY RESTORED FOR *tcpstackname*

Explanation: The stack rejoined the TCP/IP sysplex group and all its VIPADYNAMIC configuration definitions were successfully restored.

tcpstackname is the name of the TCP/IP stack.

System action: TCP/IP continues

Operator response: None.

System programmer response: None.

Module: EZBXFDYN

Procedure name: EZBXFDYN

EZD1193I ALL OF THE VIPADYNAMIC CONFIGURATION DEFINITIONS FOR *tcpstackname* COULD NOT BE RESTORED

Explanation: The stack rejoined the TCP/IP sysplex group, but one or more of the stack VIPADYNAMIC definitions could not be restored because of a conflict with existing definitions on this or another stack in the TCP/IP sysplex group.

tcpstackname is the name of the TCP/IP stack.

System action: TCP/IP continues. VIPADYNAMIC configuration definitions that could not be restored were deleted. Configuration definitions that did not have a conflict were activated.

Operator response: See prior error messages to determine which configuration definitions were not restored. If you want to configure these definitions on this stack, remove the conflicting configuration (on this or another stack) and invoke the VARY TCPIP,,OBEYFILE command, referencing a data set that contains the rejected VIPADYNAMIC definitions.

System programmer response: None.

Module: EZBXFDYN

Procedure name: EZBXFDYN

EZD1194E *tcpstackname* SYSPLEX PROCESSING ENCOUNTERED A NONRECOVERABLE ERROR WHILE TRYING TO RESTORE THE SAVED SYSPLEX CONFIGURATION

Explanation: A nonrecoverable error was encountered while attempting to restore the saved configuration and join a TCP/IP sysplex group.

tcpstackname is the name of the TCP/IP stack.

System action: TCP/IP continues. The stack must be restarted to join a TCP/IP sysplex group. If AUTOREJOIN was configured, it is now disabled.

Operator response: Save the TCP/IP profile and system log. If a dump was not created, then take a dump of the TCP/IP address space and dataspaces. Contact the system programmer.

System programmer response: Contact IBM software support services with the TCP/IP profile, system log and dump.

Module: EZBXFUT4

Procedure name: EZBXFRSC

EZD1195I THE VARY TCPIP,,SYSPLEX,JOINGROUP COMMAND WAS REJECTED. THE STACK MUST BE RESTARTED TO JOIN A TCP/IP SYSPLEX GROUP

Explanation: The VARY SYSPLEX,JOINGROUP command was rejected because either sysplex problem detection cleanup failed as the stack left the TCP/IP sysplex group, or a previous attempt to process the saved sysplex configuration and join a TCP/IP sysplex group failed. See the explanation of message EZD1194E (issued if failure occurs while processing the saved sysplex configuration) or EZZ9675E (issued for sysplex cleanup failure) in z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM) for more information.

System action: TCP/IP continues. The stack must be restarted to join a TCP/IP sysplex group.

Operator response: See the explanations of messages EZD1194E or EZZ9675E for more information.

System programmer response: See the explanations of messages EZD1194E or EZZ9775E for more information.

Module: EZBXFSVS

Procedure name: EZBXFIO2

EZD1196I THE VARY TCPIP,,SYSPLEX,REACTIVATE,DVIPA COMMAND WAS IGNORED BECAUSE THE DVIPA IS NOT DEACTIVATED

Explanation: A VARY TCPIP,,SYSPLEX,REACTIVATE, DVIPA command was issued for a DVIPA. The command was ignored because the DVIPA is not deactivated or it does not exist on this stack. Use the Netstat VIPADCFG/-F command to see all of the currently active DVIPAs and deactivated DVIPAs.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFIO2

Procedure name: EZBXFSVS

EZD1197I THE VARY TCPIP,,SYSPLEX,DEACTIVATE,DVIPA COMMAND COMPLETED SUCCESSFULLY

Explanation: A VARY TCPIP,,SYSPLEX,DEACTIVATE,DVIPA command successfully completed for a DVIPA.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFUT4

Procedure name: EZBXFVVS

EZD1198I • EZD1201I

EZD1198I THE VARY TCPIP,,SYSPLEX,*cmdtype* COMMAND COMPLETED SUCCESSFULLY

Explanation: A VARY SYSPLEX QUIESCE or RESUME command completed successfully.

cmdtype is either **QUIESCE** or **RESUME**.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

Module: EZBXFUT4

Procedure name: Process QUIESCE cmd, Process RESUME cmd

EZD1199I THE VARY TCPIP,,SYSPLEX,*cmdtype* COMMAND WAS IGNORED BECAUSE NO APPLICATION WAS FOUND LISTENING WITH THE SPECIFIED COMMAND PARAMETERS

Explanation: A VARY SYSPLEX QUIESCE or RESUME command was issued for a specific port. The command was ignored because no application was found listening with the parameters specified on the command.

cmdtype is either **QUIESCE** or **RESUME**.

System action: TCP/IP continues.

Operator response: Reissue the command after correcting the command parameters. See the information about the VARY QUIESCE command and the VARY RESUME command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: EZBXFUT4

Procedure name: Process QUIESCE cmd, Process RESUME cmd

EZD1200I THE VARY TCPIP,,SYSPLEX,*cmdtype* COMMAND WAS REJECTED BECAUSE MORE THAN ONE LISTENING APPLICATION WAS FOUND MATCHING THE COMMAND PARAMETERS

Explanation: A VARY SYSPLEX QUIESCE or RESUME command was issued for a specific port. The command was rejected because there is more than one listening application matching the parameters specified on the command.

cmdtype is either **QUIESCE** or **RESUME**.

System action: TCP/IP continues.

Operator response: You must specify the JOBNAME and possibly the ASID parameters to identify a unique listening application. See the information about the VARY QUIESCE command and the VARY RESUME command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: EZBXFUT4

Procedure name: Process QUIESCE cmd, Process RESUME cmd

EZD1201I THE VARY TCPIP,,SYSPLEX,RESUME,PORT COMMAND WAS REJECTED BECAUSE IT FOLLOWS A VARY TCPIP,,SYSPLEX,QUIESCE,TARGET COMMAND

Explanation: A VARY TCPIP,,SYSPLEX,RESUME,PORT command cannot follow a VARY TCPIP,,SYSPLEX,QUIESCE,TARGET command. The only valid RESUME command that can follow a VARY TCPIP,,SYSPLEX,QUIESCE,TARGET is VARY TCPIP,,SYSPLEX,RESUME,TARGET.

System action: TCP/IP continues.

Operator response: You must specify VARY TCPIP,,SYSPLEX,RESUME,TARGET to resume the listening applications for DVIPA sysplex distributor workload distribution following a VARY TCPIP,,SYSPLEX,QUIESCE,TARGET command.

System programmer response: None.

Module: EZBXFUT4

Procedure name: Process_RESUME_cmd

EZD1202I THE VARY TCPIP,,SYSPLEX,RESUME,TARGET COMMAND WAS REJECTED BECAUSE IT WAS NOT PRECEDED BY A CORRESPONDING VARY TCPIP,,SYSPLEX,QUIESCE,TARGET COMMAND

Explanation: A VARY TCPIP,,SYSPLEX,RESUME,TARGET command can only follow a VARY TCPIP,,SYSPLEX,QUIESCE,TARGET command.

System action: TCP/IP continues.

Operator response: You must specify VARY TCPIP,,SYSPLEX,RESUME,PORT to resume a listening application for DVIPA sysplex distributor workload distribution that has been previously quiesced using VARY TCPIP,,SYSPLEX,QUIESCE,PORT command.

System programmer response: None.

Module: EZBXFUT4

Procedure name: Process_RESUME_cmd

EZD1203I VIPADISTRIBUTE NOT ALLOWED BECAUSE *dvipa_or_intfname* IS CURRENTLY DEACTIVATED

Explanation: A VIPADISTRIBUTE DEFINE or DELETE statement appeared in the file referenced by a VARY TCPIP,,OBEYFILE command, but the specified dynamic virtual P address (DVIPA) has been deactivated and distribution cannot be added or changed while the DVIPA is deactivated.

dvipa_or_intfname:

- For IPv4, this is the DVIPA that is specified on the VIPADISTRIBUTE statement.
- For IPv6, this is the interface name that is specified on the VIPADISTRIBUTE statement.

System action: TCP/IP continues. The specified DVIPA remains deactivated with its distribution definitions unchanged.

Operator response: Contact the system programmer.

System programmer response: If you want to change the distribution for this DVIPA before reactivating it, you must issue a VARY TCPIP,,OBEYFILE command referencing a file containing a VIPADELETE statement for the DVIPA. Because the DVIPA is deactivated, this will delete both the DVIPA and its distribution definitions. To redefine the DVIPA on this stack, issue a VIPADEFINE or VIPABCKUP statement, followed by any VIPADISTRIBUTE statements, for the DVIPA. This can be done with the same, or a subsequent, VARY TCPIP,,OBEYFILE command.

Module: EZBXFDVI, EZBX6DVI

Procedure name: ValidateVDIST, ValidateVDIST6

EZD1204I DYNAMIC VIPA *dvipa* WAS CREATED USING IOCTL BY *jobname* ON *tcpstackname*

Explanation: The application instance DVIPA specified by the *dvipa* value was created dynamically by executing the MODDVIPA utility or by an application invoking the SIOCSVIPA or SIOCSVIPA6 IOCTL.

In the message text:

dvipa

The dynamic VIPA that was created.

jobname

The job name of either the application or the MODDVIPA utility that issued the SIOCSVIPA or SIOCSVIPA6 IOCTL.

tcpstackname

The name of the TCP/IP stack.

See the information about configuring the unique application-instance scenario in z/OS Communications Server: IP Configuration Guide for more information.

EZD1205I • EZD1206I

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFUDV

Example: None.

EZD1205I DYNAMIC VIPA *dvipa* WAS CREATED USING BIND BY *jobname* ON *tcpstackname*

Explanation: The application instance DVIPA specified by the *dvipa* value was created dynamically using a BIND.

In the message text:

dvipa

The dynamic VIPA that was created.

jobname

The job name of the application that issued the BIND.

tcpstackname

The name of the TCP/IP stack.

See the information about configuring the unique application-instance scenario in z/OS Communications Server: IP Configuration Guide for more information.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFUDV

Example: None.

EZD1206I DYNAMIC VIPA *dvipa* WAS DELETED USING IOCTL BY *jobname* ON *tcpstackname*

Explanation: The specified DVIPA was deleted dynamically by executing the MODDVIPA utility or by an application invoking the SIOCSVIPA or SIOCSVIPA6 IOCTL.

In the message text:

dvipa

The dynamic VIPA that was deleted.

jobname

The job name of either the application or the MODDVIPA utility that issued the SIOCSVIPA or SIOCSVIPA6 IOCTL.

tcpstackname

The name of the TCP/IP stack.

See the information about configuring the unique application-instance scenario in z/OS Communications Server: IP Configuration Guide for more information.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFUDV

Example: None.

EZD1207I DYNAMIC VIPA *dvipa* WAS DELETED USING CLOSE API BY *jobname* ON *tcpstackname*

Explanation: The specified application instance DVIPA was deleted dynamically by a CLOSE API.

In the message text:

dvipa

The dynamic VIPA that was deleted.

jobname

The job name of the application that issued the CLOSE API.

tcpstackname

The name of the TCP/IP stack.

See the information about configuring the unique application-instance scenario in z/OS Communications Server: IP Configuration Guide for more information.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFUDV

Example: None.

EZD1208I VIPADISTRIBUTE WITH BOTH TIMEDAFFINITY AND OPTLOCAL REJECTED

Explanation: Both the OPTLOCAL keyword and the TIMEDAFFINITY keyword were specified on the same VIPADISTRIBUTE statement. The OPTLOCAL and TIMEDAFFINITY keywords are mutually exclusive on the VIPADISTRIBUTE statement.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: To change the VIPADISTRIBUTE statement to have only one keyword, do one of the following:

- Correct and resubmit the original profile statement with the new VIPADYNAMIC block.
- Issue the VARY TCPIP,,OBEYFILE command with the new VIPADYNAMIC block.

See the information about the VIPADYNAMIC command in z/OS Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFDVI, EZBX6DVI

Example: None.

EZD1209E • EZD1210E

EZD1209E *tcpstackname* DETERMINED THAT ALL MONITORED INTERFACES WERE NOT ACTIVE FOR AT LEAST *timevalue* SECONDS

Explanation: Sysplex problem detection has determined that all monitored interfaces are inactive.

In the message text:

tcpstackname

The name of the TCP/IP stack.

timevalue

The number of seconds during which all monitored interfaces were not active.

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of its TCP/IP sysplex group, the following RECOVERY actions occur:
 - This stack leaves the TCP/IP sysplex group.
 - This stack no longer participates in sysplex distribution (as a distributor or target) nor acts as an owner or a backup for DVIPAs. All DVIPAs defined on this stack are deactivated; however, the DVIPA definitions are saved.
 - If the problem is corrected, this operator message is deleted; if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack processes the DVIPA definitions and rejoins the TCP/IP sysplex group.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action is taken. If the problem is corrected, this operator message is deleted.

See the information about network interfaces monitoring and sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definitions of the SYSPLEXMONITOR parameters.

Operator response: Contact the system programmer.

System programmer response: Issue the Netstat DEvlinks/-d command to determine which interfaces are being monitored; check the system log for any messages related to the status of monitored interfaces. If the monitored interfaces are inactive as a result of stopping devices or interfaces, disable the monitoring of these interfaces by specifying the NOMONSYSPLEX keyword on the LINK and INTERFACE statement through the VARY TCPIP,OBEYFILE command before stopping the devices or interfaces. See the information about the DEVICE and LINK statements and the the INTERFACE statements in z/OS Communications Server: IP Configuration Reference for more information. If you cannot determine why the monitored interfaces are inactive, contact IBM software support services after obtaining the system log and the TCPIP profile.

If this problem can be corrected, this operator message is deleted.

- If RECOVERY and NOAUTOREJOIN are active, then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the DVIPA definitions to be processed, and cause the stack to rejoin the TCP/IP sysplex group.
- If RECOVERY and AUTOREJOIN are active, no further actions are needed. The stack processes the DVIPA definitions and rejoins the TCP/IP sysplex group.
- If NORECOVERY is active, no further actions are needed.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFPDM

Example: None.

EZD1210E *tcpstackname* DETERMINED THAT NO DYNAMIC ROUTES OVER MONITORED INTERFACES WERE FOUND FOR AT LEAST *timevalue* SECONDS

Explanation: Sysplex problem detection has determined that no dynamic routes over monitored interfaces were found.

In the message text:

tcpstackname

The name of the TCP/IP stack.

timevalue

The number of seconds during which no dynamic routes over monitored interfaces were found.

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of its TCP/IP sysplex group, the following RECOVERY actions occur:
 - This stack leaves the TCP/IP sysplex group.
 - This stack no longer participates in sysplex distribution (as a distributor or target) nor acts as an owner or a backup for DVIPAs. All DVIPAs defined on this stack are deactivated; however, the DVIPA definitions are saved.
 - If the problem is corrected, this operator message is deleted; if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack processes the DVIPA definitions and rejoins the TCP/IP sysplex group.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action is taken. If the problem is corrected, this operator message is deleted.

See the information about network interfaces monitoring and sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for the definitions of the SYSPLEXMONITOR parameters.

Operator response: Contact the system programmer.

System programmer response: Issue the Netstat DEvlinks/-d command to determine which interfaces are being monitored; this recovery action might be triggered because the first hop routers were brought down for maintenance. You can temporarily disable the monitoring of dynamic routes by specifying MONINTERFACE NODYNROUTE on the GLOBALCONFIG SYSPLEXMONITOR statement through the VARY TCPIP,,OBEYFILE command. If you still cannot determine why the routes were lost, see the information about diagnosing OMPROUTE problems in z/OS Communications Server: IP Diagnosis Guide for more information.

If this problem can be corrected, this operator message is deleted.

- If RECOVERY and NOAUTOREJOIN are active, then issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the DVIPA definitions to be processed, and cause the stack to rejoin the TCP/IP sysplex group.
- If RECOVERY and AUTOREJOIN are active, no further actions are needed. The stack processes the DVIPA definitions and rejoins the TCP/IP sysplex group.
- If NORECOVERY is active, no further actions are needed.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFPDM

Example: None.

EZD1211E *tcpstackname* DELAYING SYSPLEX PROFILE PROCESSING - ALL MONITORED INTERFACES WERE NOT ACTIVE

Explanation: The TCP/IP stack delayed joining a sysplex group and delayed processing sysplex definitions in the profile (VIPADYNAMIC and IPCONFIG/IPCONFIG6 DYNAMICXCF statements).

In the message text:

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: If you want the TCP/IP stack to immediately join a sysplex group rather than wait for monitored interfaces to be active, issue the VARY TCPIP,,OBEYFILE command with GLOBALCONFIG SYSPLEXMONITOR NOMONINTERFACE specified. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about the MONINTERFACE keyword.

EZD1212E • EZD1213I

When at least one monitored interface becomes active, TCP/IP joins a sysplex group and finishes processing the sysplex definitions.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFDYN

Example: None.

EZD1212E *tcpstackname* DELAYING SYSPLEX PROFILE PROCESSING - NO DYNAMIC ROUTES OVER MONITORED INTERFACES WERE FOUND

Explanation: The TCP/IP stack delayed joining a sysplex group and delayed processing sysplex definitions in the profile (VIPADYNAMIC and IPCONFIG/IPCONFIG6 DYNAMICXCF statements).

In the message text:

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: If you want the TCP/IP stack to immediately join a sysplex group rather than wait for dynamic routes over monitored interfaces to be found, issue the VARY TCPIP,,OBEYFILE command with the GLOBALCONFIG SYSPLEXMONITOR NOMONINTERFACE option or the NODYNROUTE option specified. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about the MONINTERFACE and DYNROUTE keywords.

When at least one dynamic route over monitored interfaces is found, TCP/IP joins a sysplex group and finishes processing the sysplex definitions.

If OMPROUTE is active, and the expected dynamic routes over the monitored interfaces are not being generated, contact the system programmer.

System programmer response: Issue the Netstat DEvlinks/-d command to determine which interfaces are being monitored. If the first hop routers were stopped for maintenance, this might be the reason why dynamic routes are not being generated. If you cannot determine why the routes are not being created, see the information about diagnosing OMPROUTE problems in z/OS Communications Server: IP Diagnosis Guide.

User response: Not applicable.

Problem determination: Not applicable.

Module: EZBXFDYN

Example: None.

EZD1213I A DISTMETHOD OF *distribution_method* AND AN OPTLOCAL VALUE OTHER THAN ZERO ARE NOT COMPATIBLE ON A VIPADISTRIBUTE STATEMENT - THE OPTLOCAL VALUE IS SET TO ZERO

Explanation: The OPTLOCAL values in the range 1–16 are meaningful only when the specified distribution method (DISTMETHOD) value is either BASEWLM or SERVERWLM. For any other DISTMETHOD value, the only OPTLOCAL value allowed is 0.

In the message text:

distribution_method

The configured distribution method that is causing the OPTLOCAL value to be changed from its configured setting to a value of 0.

System action: The OPTLOCAL value is changed to 0. Processing of the VIPADISTRIBUTE statement continues.

Operator response: None.

System programmer response: To avoid receiving this informational message in the future, update the

VIPADISTRIBUTE statement to specify an OPTLOCAL value of 0 or a distribution method of BASEWLM or SERVERWLM.

User response: None.

Problem determination: Not applicable.

Module: EZBXFDV2, EZBX6DV2

Example: None.

EZD1214I INITIAL DYNAMIC VIPA PROCESSING HAS COMPLETED FOR *tcpipstackname*

Explanation: This message is issued when the first of the following occurs:

- At least one statement in a VIPADYNAMIC block in a profile/obeyfile has processed.
- This stack has been made a target by another stack in the sysplex.

This message is also issued when the stack has rejoined the sysplex and configuration processing has completed.

In the message text:

tcpipstackname

The name of the TCPIP stack.

System action: Processing continues.

System programmer response: None.

User response: None.

Module: EZBXFDYN

Routing code: 2, 8

Descriptor code: 12

Automation: This message is written to the console. Automation can use this message to start applications which require Dynamic VIPA addresses to be available or which will create Dynamic VIPA addresses.

Procedure name: mainline

EZD1215I MLSCHK STARTED STACK *tcpjobname* USER *stkuser* SECLABEL *stksl*

Explanation: This message is written the first time the multilevel security consistency check is performed on a stack. It is also written each time the stack determines that the system has returned to MLACTIVE after being changed to NOMLACTIVE. When running on an MLACTIVE system, TCPIP performs a multilevel security consistency check in any of the following situations:

- After initial profile processing.
- After every VARY TCPIP,OBEYFILE command.
- After SYSPLEX dynamic VIPA changes.
- When it receives an ENF signal from RACF that indicates that a RACLIST REFRESH was done for the SERVAUTH or SECLABEL class.

tcpjobname is the name of the TCPIP job.

stkuser is the user ID of this TCPIP job.

stksl is the security label of this TCPIP job, or <NONE> if the job was started without a security label.

System action: Processing continues.

Operator response: None.

System programmer response: None. See z/OS Communications Server: IP Diagnosis Guide for information about how to set the user and seclabel values.

Module: EZBTIMDF

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Procedure name: MLSCheck

EZD1216I MLSCHK SUCCEEDED STACK *tcpjobname* IS MULTILEVEL SECURE

Explanation: When running on an MLACTIVE system, TCPIP performs a multilevel security consistency check in any of the following situations:

- After initial profile processing.
- After every VARY TCPIP,,OBEYFILE command.
- After SYSPLEX dynamic VIPA changes.
- When it receives an ENF signal from RACF that indicates that a RACLIST REFRESH was done for the SERVAUTH or SECLABEL class.

No configuration inconsistencies were found. This message is issued the first time multilevel security checking completes successfully after the stack is started or the first time it completes successfully after a failure.

tcpjobname is the job TCPIP JOBNAME.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1217I MLSCHK FAILED STACK *tcpjobname* - *count* MESSAGES WRITTEN TO JOBLOG

Explanation: When running on an MLACTIVE system, TCPIP performs a multilevel security consistency check in any of the following situations:

- After initial profile processing.
- After every VARY TCPIP,,OBEYFILE command.
- After SYSPLEX dynamic VIPA changes.
- When it receives an ENF signal from RACF that indicates that a RACLIST REFRESH was done for the SERVAUTH or SECLABEL class.

At least one configuration inconsistency was found and reported in a message.

tcpjobname is the TCPIP JOBNAME.

count is the number of problem messages written to the job log.

System action: The GLOBALCONFIG [NO]MLSCHKTERMINATE setting in TCPIP PROFILE determines the action, as follows:

- MLSCHKTERMINATE indicates that this stack will end because of the reported errors.
- NOMLSCHKTERMINATE indicates that this stack will not end even though it cannot correctly enforce multilevel security policies.

Operator response: Save the job log and contact the system programmer.

System programmer response: Review the MLSCHK messages in the job log. Correct the indicated problems in TCPIP PROFILE or security server profiles. See z/OS Communications Server: IP Diagnosis Guide for more information about diagnosing TCPIP access control problems.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1218I MLSCHK ENDED STACK *tcpjobname*

Explanation: This message is written when a stack that was performing multilevel security consistency checks determines that the system is now NOMLACTIVE. This stack discontinued checking TCP/IP and security server configurations for multilevel security consistency.

tcpjobname is the name of the TCPIP job.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1219I MLSCHK NETACCESS NOT CONFIGURED WHEN MLACTIVE

Explanation: The TCPIP PROFILE for this stack does not contain a valid NETACCESS statement when running in a multilevel secure environment. The stack does not enforce multilevel security policies when NETACCESS is not configured. The NETACCESS statement must specify both INBound and OUTBound and must contain at least one valid security zone definition.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Add a NETACCESS INBound OUTBound statement with at least one network security zone to the PROFILE for this stack.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1220I MLSCHK REQUIRED SERVAUTH PROFILE NOT FOUND RESNM *resourcename*

Explanation: In a multilevel secure environment, a required security product profile could not be found.

resourcename is the name of the resource that must be covered by a profile in the SERVAUTH class.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Define a security product profile that covers the resource name in the SERVAUTH class. Verify that the SERVAUTH class is active. If changes have been made, issue RACF command SETROPTS RACLST(SERVAUTH) REFRESH or equivalent security product command. See z/OS Communications Server: IP Configuration Guide for information about the syntax of *resourcename*.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1221I MLSCHK STACKACCESS PROFILE HAS WRONG SECLABEL *profsl* RESNM *resourcename* PRFNM *filename*

Explanation: While TCPIP is running in a multilevel secure environment, the STACKACCESS profile must have the same security label as the TCPIP job. The TCPIP job security label is displayed in message EZD1215I. The security label must remain defined and active for the duration of the TCPIP job. If any changes are made to either the seclabel class or the servauth class, that class must be refreshed.

profsl is the security label defined in the SECLABEL field in this SERVAUTH profile. If the SECLABEL field is blank, *profsl* will be <NONE>.

resourcename is the name of the STACKACCESS resource.

filename is the SERVAUTH profile found for this resource.

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System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Verify that the security label is defined, and active on this system. If necessary, alter the SECLABEL on the profile in the SERVAUTH class to the same security label as the TCPIP job. You might need to define a less generic profile that covers this resource name in the SERVAUTH class. If any changes are made to either the seclabel class or the servauth class, that class must be refreshed. Issue RACF command SETROPTS RACLST(class name) REFRESH. See z/OS Communications Server: IP Diagnosis Guide for more information about diagnosing TCPIP access control problems.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1222I MLSCHK LOCAL INTERFACE IS NOT IN A NETWORK SECURITY ZONE IPADR *ipaddress* IF *ifcname*

Explanation: In a multilevel secure environment, all interface addresses must be configured into a NETACCESS security zone.

ipaddress is the IP address on the local interface.

ifcname is the name of the INTERFACE or IPv4 LINK statement that defined this IP address.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Verify that this IP address is intended to be defined to this TCPIP stack. If so, modify the NETACCESS statement so that it maps the IP address into the correct security zone. See z/OS Communications Server: IP Configuration Guide for information about configuring Network Access Control.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1223I MLSCHK LOCAL ZONE HAS INCORRECT SECLABEL *zonesl* IPADR *ipaddress* IF *ifcname* ZONE *zonename* *zoneentry* RESNM *resourcename* PRFNM *filename*

Explanation: In a multilevel secure environment, an interface is configured into a NETACCESS security zone with an incorrect security label for the TCPIP job that owns the interface. See message EZD1215I for the security label of the TCPIP job. Local interface addresses must be in zones with the same security label as the TCPIP job. VIPAs on an unrestricted stack may be in a security zone with any security label that is currently active on that system. VIPAs on a restricted stack must be in zones with a security label that is not SYSMULTI and is equivalent to the TCPIP job.

zonesl is the security label defined in the SECLABEL field in this SERVAUTH profile. If the SECLABEL field is blank, *zonesl* will be <NONE>.

ipaddress is the IPv4 or IPv6 address on the local interface.

ifcname is the name of the INTERFACE or IPv4 LINK statement that defined this IP address.

zonename is the security zone name defined in the NETACCESS zone entry for this IP address.

zoneentry is the NETACCESS zone entry for this IP address. *zoneentry* will one of the following:

- DEFAULT
- DEFALTHOME
- *ipaddress/masklength*

resourcename is the name of the SERVAUTH resource.

filename is the name of the SERVAUTH profile that covers this resource name.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Verify that:

- The IP address is intended to be owned by this TCPIP JOB.
- The NETACCESS statement maps the IP address into the correct security zone.
- The resource name is covered by the intended profile in the SERVAUTH class.
- The profile has the correct security label defined.
- The security label is defined and active on this system.

See z/OS Communications Server: IP Diagnosis Guide for more information about diagnosing TCPIP access control problems.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1224I MLSCHK STACK SECLABEL *stksl* IS NOT VALID

Explanation: When running on an MLACTIVE system, the TCPIP job must run under a user ID with a security label. The security label must remain defined and active while TCPIP is running.

stksl is the security label of this TCPIP job, or <NONE> if the job was started without a security label.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Verify that:

- The stack is running under the correct user ID.
- The USER profile has the correct default seclabel.
- The security label is defined and active on this system.
- The user ID has READ authority to the security label.

If the user ID or user security label are incorrect, stop TCPIP, correct the problem and start it again.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1225I MLSCHK *iptype ipaddr* IS NOT IN A NETWORK SECURITY ZONE

Explanation: In a multilevel secure environment, *ipaddr* must be configured into a NETACCESS security zone with a security label the same as the TCPIP job.

iptype is either INADDR_ANY, IN6ADDR_ANY or TCPSTACKSOURCEVIPA.

ipaddr is the associated IP address.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: If the *iptype* is TCPSTACKSOURCEVIPA, verify that this IP address is intended to be used by this TCPIP JOB. Modify the NETACCESS statement so that it maps the IP address into the correct security zone.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1226I MLSCHK *iptype ipaddr* HAS INCORRECT SECLABEL *zonesl* ZONE *zonename zoneentry RESNM resourcename PRFNM filename*

Explanation: In a multilevel secure environment, *ipaddr* must be configured into a NETACCESS security zone with a security label the same as the TCPIP job. See message EZD1215I for the security label of the TCPIP job.

iptype is one of INADDR_ANY, IN6ADDR_ANY or TCPSTACKSOURCEVIPA.

ipaddr is the associated IP address.

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zonesl is the security label defined in the SECLABEL field in this SERVAUTH profile. If the SECLABEL field is blank, *zonesl* will be <NONE>.

zonename is the security zone name defined in the NETACCESS zone entry for this IP address.

zoneentry is the NETACCESS zone entry for this IP address. *zoneentry* is either:

- DEFAULT
- DEFAULTHOME
- ipaddress/masklength.

resourcename is the name of the SERVAUTH resource.

profilename is the name of the SERVAUTH profile that covers this resource name.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: If the *iptype* is TCPSTACKSOURCEVIPA, verify that this IP address is intended to be used by this TCPIP job. Verify that:

- The NETACCESS statement maps the IP address into the correct security zone.
- The resource name is covered by the intended profile in the SERVAUTH class.
- The profile has the correct security label defined.
- The security label is defined and active on this system.

See z/OS Communications Server: IP Diagnosis Guide for more information about diagnosing TCPIP access control problems.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1227I MLSCHK NETACCESS *value* NOT CONFIGURED WHEN MLACTIVE

Explanation: The TCPIP PROFILE for this stack does not contain a valid NETACCESS statement when running in a multilevel secure environment. The stack does not fully enforce multilevel security policies when NETACCESS is not completely configured. The NETACCESS statement must specify both INBound and OUTBound and must contain at least one valid security zone definition.

value is one of the following:

- INBOUND to indicate that the NETACCESS statement INBound parameter is missing.
- OUTBOUND to indicate that the NETACCESS statement OUTBound parameter is missing.
- SECURITY ZONE to indicate that the NETACCESS statement does not contain any zone entries.

System action: TCPIP continues.

Operator response: Contact the system programmer.

System programmer response: Add a NETACCESS INBound OUTBound statement with at least one network security zone to the PROFILE for this stack.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1228I MLSCHK INTERFACE *ifcname* AUTOCONFIGURED WHEN MLACTIVE

Explanation: In a multilevel secure environment, an IPv6 interface is found to be incorrectly configured to allow IP addresses to be dynamically autoconfigured. In a multilevel secure network all IP addresses must be manually configured so they can be correctly configured into NETACCESS security zones. All IPv6 INTERFACE statements must specify INTFID to complete the Link Local address. For all IPv6 interface types that support autoconfiguration, the INTERFACE statement must specify at least one IPADDR to disable autoconfiguration. If IPCONFIG6 DYNAMICXCF is configured, it must also specify INTFID to complete the Link Local address.

ifcname is the name of the INTERFACE statement that incorrectly allows autoconfigured addresses.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Verify the following:

- The named INTERFACE statement specifies a manual interface ID with the INTFID parameter.
- If IPCONFIG6 DYNAMICXCF is configured, the statement also specifies a manual interface ID with the INTFID parameter.
- If the named INTERFACE statement is of a type that supports dynamic address autoconfiguration, the statement also specifies at least one manually configured prefix or IP address with the IPADDR parameter.

See z/OS Communications Server: IP Configuration Guide for more information about IPv6 dynamic address autoconfiguration.

Module: EZBTIMDF

Procedure name: MLSCheck

EZD1231I *applname* STARTING

Explanation: The application is starting.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lamain.c, lmmain.c, ldmain.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1232I *applname* INITIALIZATION COMPLETE

Explanation: The application completed initialization.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: Processing continues.

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Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lamain.c, lmmain.c, ldmain.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1233I *applname* SHUTDOWN IN PROGRESS

Explanation: The application is shutting down in response to a STOP command.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lamain.c, lmmain.c, ldmain.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1234I *applname* SHUTDOWN COMPLETE

Explanation: The application ended in response to a STOP command.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: The application ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lamain.c, lmmain.c, ldmain.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1235I *applname* CONFIGURATION ERRORS DETECTED

Explanation: The application configuration file cannot be opened, or contains one or more errors.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: The application ends.

Operator response: Contact the system programmer.

System programmer response: Examine the syslogd file for the application configuration error messages. The syslogd identifier is lbadv for the Advisor, lbagent for the Agent, and adnr for the automated domain name registration application. Correct the configuration file errors and restart the application. See the information about the Load Balancing Advisor and Agent or the automated domain name registration in z/OS Communications Server: IP Configuration Reference for more information about configuration statements and parameters.

User response: Contact the system programmer.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: laconfig.c, lmconfig.c, ldconfig.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1236I *applname* MODIFY COMMAND ACCEPTED

Explanation: The application accepted a MODIFY command for initial processing.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

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Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lacmd.c, lmcmd.c, ldcmd.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1237I *applname* MODIFY COMMAND SYNTAX ERROR AT '*location*'

Explanation: The application detected a syntax error in a MODIFY command.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

location

The part of the entered command that is not syntactically valid.

System action: The MODIFY command is rejected.

Operator response: Re-enter the MODIFY command using valid syntax. See the information about the Load Balancing Advisor MODIFY command or the Load Balancing Agent MODIFY command or automated domain name registration Application in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

User response: Re-enter the MODIFY command using valid syntax. See the information about the Load Balancing Advisor MODIFY command or the Load Balancing Agent MODIFY command or automated domain name registration Application in z/OS Communications Server: IP System Administrator's Commands for more information.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lacmd.c, lccmd.c, lmcmd.c, ldcmd.c

Routing code: 10

Descriptor code: 12

Example: f adnr,disp,dns,max=1,summ

EZD1237I ADNR MODIFY COMMAND SYNTAX ERROR AT 'SUMMARY'

EZD1238I *applname* MODIFY COMMAND PARAMETER *parm* INCORRECT VALUE *value*

Explanation: The z/OS Load Balancing Advisor (Advisor) or z/OS Load Balancing Agent (Agent) detected an incorrect value for a parameter on a MODIFY command.

In the message text:

applname

The name of the application. Possible values are:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

param

The name of the MODIFY command parameter that is in error.

value

The incorrect value entered on the MODIFY command.

System action: The MODIFY command is rejected.

Operator response: Re-enter the MODIFY command with a valid value for the indicated parameter. See the information about the Load Balancing Advisor MODIFY command or the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lccmd.c

Procedure name: parse_modify_command

EZD1239I *applname type CALL FAILED errnoerrnojr FOR PORT port*

Explanation: The z/OS Load Balancing Advisor (Advisor) or z/OS Load Balancing Agent (Agent) was unable to initialize a listening socket.

In the message text:

applname

The name of the application. Possible values are:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

type

The type of call that failed. For example, the type might be a SOCKET, SETSOCKOPT, or BIND call.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

port

The port number on which the call failed.

System action: The application ends.

Operator response: Check to see whether TCP/IP is available. Restart TCP/IP if necessary. Restart the application. If TCP/IP is available when the application issues this message, save the syslogd file and contact the system programmer.

System programmer response: If TCP/IP is available when the application issues this message, examine the syslogd file and correct the error.

Module: lmlisten.c

Procedure name: lmlisten_sock_init

EZD1240I *applname UNABLE TO ESTABLISH endpoint LISTENING SOCKET*

Explanation: The z/OS Load Balancing Advisor (Advisor) or z/OS Load Balancing Agent (Agent) was unable to initialize because it could not get a listening socket.

In the message text:

applname

The name of the application. Possible values are:

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- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

endpoint

The *endpoint* value can be LOAD BALANCER or AGENT. AGENT is a z/OS Load Balancing Agent.

System action: The application ends.

Operator response: Check to see whether TCP/IP is available. Restart TCP/IP if necessary. Restart the application. If TCP/IP is available when the application issues this message, save the syslogd file and contact the system programmer.

System programmer response: If TCP/IP is available when the application issues this message, examine the syslogd file and correct the error.

Module: lmlisten.c

Procedure name: socket_listener

EZD1241I *applname* DEBUG LEVEL *level*

Explanation: This message is issued in response to a z/OS Load Balancing Advisor (Advisor), z/OS Load Balancing Agent (Agent), or z/OS automated domain name registration (ADNR) MODIFY *procname*,DISPLAY,DEBUG command and the ADNR MODIFY *procname*,DEBUG,LEVEL command.

If the *applname* value is the automated domain name registration application, then the enumerated debug levels are also displayed. These enumerated debug settings are displayed on a line separate from the message text.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

level

The current debug level in effect. Possible values are:

- 1 Errors are logged.
- 2 Warnings are logged.
- 4 Significant events are logged.
- 8 Informational messages are logged.
- 16 Debug data messages are logged. This level is intended for IBM service use only.
 - If the *applname* value is LBADV, then messages related to TCP/IP messages sent between the Advisor and load balancers, between the Advisor and ADNR, and between the Advisor and Agent are logged.
 - If the *applname* value is ADNR, then messages related to the detailed contents of message packets that are sent between the Global Workload Manager (GWM) and the automated domain name registration application are logged.
- 32 Debug data messages are logged. This level is intended for IBM service use only.
 - If the *applname* value is LBAGENT, then messages related to data collection and manipulation that support weight calculations are logged.
 - If the *applname* value is ADNR, then messages related to the details of ADNR managing the data in the domain name server zones are logged.
- 64 Internal debug data are logged. This level is intended for IBM service use only.
- 128 Function entry and exit tracing is logged. This level is intended for IBM service use only.

Individual values can be added together. For example, if the debug level displayed is 7, all error, warning, and event messages are logged. These messages are logged to the syslogd file.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: lacmd.c, lmcmd.c, ldcmd.c

Routing code: 10

Descriptor code: 12

Example:

```
f 1badv,display,debug
EZD1241I LBADV DEBUG LEVEL 7
f adnr,display,debug
EZD1241I ADNR DEBUG LEVEL 15
LOGGING LEVELS : ERROR,WARNING,EVENT,INFO
```

EZD1242I LOAD BALANCER SUMMARY

Explanation: The z/OS Load Balancing Advisor (Advisor) issues this message in response to a MODIFY *procname*,DISPLAY,LB command. This message is followed by summary information for connected load balancers. See the information about the Load Balancing Advisor in z/OS Communications Server: IP System Administrator's Commands for an explanation of the display output.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lmcmd.c

Procedure name: display_lb_engine

EZD1243I LOAD BALANCER DETAILS

Explanation: This message is issued in response to a MODIFY *procname*,DISPLAY,LB,INDEX=*index* command for the z/OS Load Balancing Advisor (Advisor). The *index* is a decimal number that identifies the load balancer in console messages. Every load balancer and its index are displayed in response to the Advisor's MODIFY *procname*,DISPLAY,LB command. This message is followed by detailed information for connected load balancers. See the information about the Load Balancing Advisor in z/OS Communications Server: IP System Administrator's Commands for an explanation of the display output.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lmcmd.c

Procedure name: display_lb_engine

EZD1244I MEMBER SUMMARY

Explanation: This message is issued in response to a MODIFY *procname*,DISPLAY,MEMBERS command for the z/OS Load Balancing Agent. This message is followed by summary information for members (applications being load balanced) that one or more load balancers registered with the z/OS Load Balancing Advisor.

See the information about the Load Balancing Agent in z/OS Communications Server: IP System Administrator's Commands for an explanation of the display output.

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System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lacmd.c

Procedure name: display_mem_engine

EZD1245I MEMBER DETAILS

Explanation: This message is issued in response to a MODIFY *procname*,DISPLAY,MEMBERS,DETAIL command for the z/OS Load Balancing Agent. This message is followed by detailed information for members (applications being load balanced) that one or more load balancers registered with the z/OS Load Balancing Advisor.

See the information about the Load Balancing Agent in z/OS Communications Server: IP System Administrator's Commands for an explanation of the display output.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lacmd.c

Procedure name: display_mem_engine

EZD1246I *applname* INITIALIZATION ERROR - REASON CODE *reason*

Explanation: The application could not initialize because it detected an error.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

reason

The reason code for the error. Possible values are:

- 1 Another copy of the application is already active.
 - If subplexing is being used:
 - Only one copy of the Advisor can be active in the subplex.
 - On each MVS system, only one copy of the Agent can be active for each subplex on that system.
 - If subplexing is not being used:
 - Only one copy of the Advisor can be active in the sysplex.
 - Only one copy of the Agent can be active on each MVS system in the sysplex.
- This reason code does not apply to ADNR.
- 2 The Agent, Advisor, or ADNR application cannot open the configuration file, or found an error in the configuration file. Message EZD1235I should precede this message. See the information about Load Balancing Advisor in z/OS Communications Server: IP Configuration Reference for information about configuring the Advisor, and for information about the Agent. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Reference for information about configuring the ADNR application.
- 3 Indicates an internal error in the application.
- 4 The Agent, Advisor, or ADNR application found an error in a start option parameter in the start procedure.

- 5 The user ID associated with the started task is not authorized, or the application was not started as a started procedure. See z/OS Communications Server: IP Configuration Guide for information about setting up the authorization profiles for the security product.
- 6 A required resource is not available. For example, the TCP/IP stack is not started, or a configured IP address is not defined or available on the TCP/IP stack, or the Advisor or Agent was configured for subplexing and a TCP/IP stack or VTAM node corresponding to the specified TCP/IP sysplex group name could not be found.

System action: The application ends.

Operator response:

- If the *reason* value is 1, then verify that the copy of the application that is active is the one that is wanted. If a previous copy of the application was stopped but never ended, issue a CANCEL command to cancel the previous copy before starting the new copy.
- If the *reason* value is 6, then start the TCP/IP stack, if it is not already started.
- If the stack is already started, and for all other *reason* values, save the syslogd file and contact the system programmer.

System programmer response: Take action appropriate for the reason as follows:

- 1 If subplexing is being used, ensure that the correct TCP/IP sysplex group name is coded in the configuration file for the Agent and Advisor in each subplex.
- 2 Examine the application syslogd file for errors. Correct the configuration file as needed.
- 3 Contact IBM software support center. The application syslogd file is the minimum diagnostic data that should be provided. See z/OS Communications Server: IP Diagnosis Guide for information about collecting diagnostic data.
- 4 Examine the application syslogd file for errors. Correct the start procedure as needed.
- 5 Examine the security product profiles that have been established for the Advisor, Agent, and ADNR. Ensure that the application was started from a started procedure and that the user ID in the start procedure is permitted to the appropriate profiles if they are defined.
- 6 Examine the application syslogd file for errors. Verify that the correct IP addresses are configured in the configuration file. Correct the configuration file as needed. See the information about the Load Balancing Advisor in z/OS Communications Server: IP Configuration Reference for more information about configuring the Advisor, and for information about the Agent. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Reference for information about configuring the ADNR application.

User response:

- If the *reason* value is 1, then verify that the copy of the application that is active is the copy that is wanted. If a previous copy of the application was stopped but never ended, issue a CANCEL command to cancel the previous copy before starting the new copy.
- If the *reason* value is 6, then start the TCP/IP stack, if it is not already started.
- If the stack is already started, and for all other reason values, save the syslogd file and contact the system programmer.

Problem determination: To ensure that there is sufficient information to debug this problem, configure the application to use a debug level of 127 and restart the application. See z/OS Communications Server: IP Configuration Reference for information about how to configure the debug level for the specified application.

Contact IBM software support center. The application syslogd file is the minimum diagnostic data that should be provided. See z/OS Communications Server: IP Diagnosis Guide for information about collecting diagnostic data.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: lamain.c, lmmain.c, ldmain.c

Routing code: 10

Descriptor code: 12

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Example: None.

EZD1247I *applname* CONFIGURATION WARNINGS DETECTED

Explanation: The application configuration file contains one or more warnings. These warnings do not cause the application to end, but might indicate conditions that affect the normal operation of the application.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing

System action: Processing continues.

Operator response: Save the syslogd file and contact the system programmer.

System programmer response: Examine the syslogd file for the application configuration warning messages. The syslogd identifier is lbadv for the Advisor, lbagent for the Agent, or adnr for the automated domain name registration application. Correct the configuration file warnings. For the Advisor or Agent, restart the application at the earliest opportunity. For the automated domain name registration application, issue the MODIFY REFRESH command. See the information about Load Balancing Advisor and Agent or automated domain name registration in z/OS Communications Server: IP Configuration Reference for more information about configuring the application.

User response: Save the syslogd file and contact the system programmer.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: laconfig.c, lmconfig.c, ldconfig.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1248I *applname* ALL APPLICATIONS ARE ALREADY QUIESCED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,QUIESCE or MODIFY *procname*,ENABLE command. A previous MODIFY *procname*,QUIESCE,SYSTEM command was issued to quiesce all applications for this Agent.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

System action: The MODIFY command is rejected because all applications are already quiesced.

Operator response: Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. To remove the flag, enter a MODIFY,*proname*,Enable command, and then optionally a MODIFY,*proname*,QUIESCE command to change the scope of the members quiesced. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1249I applname ALL APPLICATIONS ARE ALREADY ENABLED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname,ENABLE,SYSTEM* command. A previous MODIFY *procname,ENABLE,SYSTEM* command was issued to enable all applications for this Agent, or a MODIFY *procname,QUIESCE,SYSTEM* command was never issued.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

System action: The MODIFY command is rejected because all members in this MVS system are already enabled from an operator perspective. This means that all members are enabled from an MVS operator perspective unless they were individually quiesced by an MVS operator. Members that are individually quiesced by an MVS operator must be individually enabled by the MVS operator.

Operator response: Issue the Agent MODIFY *procname,DISPLAY,MEMBERS* command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname,QUIESCE* or a MODIFY *procname,ENABLE* command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1250I applname ALL APPLICATIONS FOR stackname ARE ALREADY QUIESCED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname,QUIESCE,TCP=stackname* command. A previous MODIFY *procname,QUIESCE,TCP=stackname* command was issued to quiesce all applications for the TCP/IP stack.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

stackname

The name of the TCP/IP stack.

System action: The MODIFY command is rejected because an MVS operator previously quiesced all applications on the stack.

Operator response: Issue the Agent MODIFY *procname,DISPLAY,MEMBERS* command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname,QUIESCE* or a MODIFY *procname,ENABLE* command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1251I *applname* ALL APPLICATIONS FOR *stackname* ARE ALREADY ENABLED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,ENABLE,TCP=*stackname* command. A previous MODIFY *procname*,ENABLE,TCP=*stackname* or MODIFY *procname*,ENABLE,SYSTEM command was issued to enable all applications for the TCP/IP stack or system, or a MODIFY *procname*,QUIESCE,TCP=*stackname* command was never issued.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

stackname

The name of the TCP/IP stack.

System action: The MODIFY command is rejected because all members for the stack are already enabled from an MVS operator perspective.

Operator response: Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1252I *applname* NO MEMBERS MATCH SELECTION CRITERIA

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command. The MODIFY command is rejected because no active registered target applications match the criteria specified in the MODIFY command.

This message is also issued in response to a MODIFY *procname*,QUIESCE,TCP=*stackname* or MODIFY *procname*,ENABLE,TCP=*stackname* command when the stackname does not match a TCP/IP stack active on the Agent system.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

System action: The MODIFY command is ignored. Processing continues.

Operator response: Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1253I applname command COMMAND REJECTED

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command. The MODIFY command is rejected. A more specific error message precedes this message that explains the reason for the command rejection.

In the message text:

applname

The name of the application. Possible values are:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

command

The command that was rejected. Possible values are:

- QUIESCE SYSTEM
- ENABLE SYSTEM
- QUIESCE TCPNAME
- ENABLE TCPNAME
- QUIESCE APPLICATION
- ENABLE APPLICATION

System action: The MODIFY command is ignored. Processing continues.

Operator response: Look for a previous message that provides more specific information about why the MODIFY command was rejected. Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1254I message

Explanation: This message is issued in response to an automated domain name registration (ADNR) MODIFY *procname* DISPLAY command. This message is followed by information for resources defined to the application.

In the message text:

message

Depending on the command issued, possible values are:

- DNS SUMMARY
- DNS DETAIL
- DNS ZONE SUMMARY
- DNS ZONE DETAIL
- GWM SUMMARY
- GWM DETAIL
- GWM GROUP SUMMARY
- GWM GROUP DETAIL

See the information about automated domain name registration application in z/OS Communications Server: IP System Administrator's Commands for an explanation of the display output.

System action: Processing continues.

Operator response: None.

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System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: ldcmd.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1255I applname PORT port IS ALREADY QUIESCED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,QUIESCE,PORT=*port* command. The MODIFY command is rejected because all active registered target applications that match the criteria specified in the MODIFY command are already quiesced.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

port

The local port number that was specified on the MODIFY command.

System action: The MODIFY command is ignored. Processing continues.

Operator response: Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY *procname*,QUIESCE or a MODIFY *procname*,ENABLE command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1256I applname PORT port IS ALREADY ENABLED BY OPERATOR

Explanation: This message is issued in response to a z/OS Load Balancing Agent (Agent) MODIFY *procname*,ENABLE,PORT=*port* command. The MODIFY command is rejected because all active registered target applications that match the criteria specified in the MODIFY command are already enabled from an MVS operator perspective.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

port

The local port number that was specified on the MODIFY command.

System action: The MODIFY command is ignored. Processing continues.

Operator response: Issue the Agent MODIFY *procname*,DISPLAY,MEMBERS command to list the registered members on the local MVS system and the status flags for each member. The operator quiesce flag (SYSQ, TCPQ, or APPQ) indicates that an MVS operator quiesced the member. The absence of this flag indicates that the member is enabled

from an MVS operator perspective. If the flag value is not wanted, enter a MODIFY procname,QUIESCE or a MODIFY procname,ENABLE command to change the flag value. See the information about the Load Balancing Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

Module: lacmd.c

Procedure name: eq_engine

EZD1257I *applname ZONE zoneLabel IS NOT RESPONSIVE*

Explanation: The application is not receiving responses from the domain name server zone.

In the message text:

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

zoneLabel

The label of the zone in the application configuration file that is not responding. The zone identified by the *zoneLabel* value occurs in the ADNR configuration, but for reasons involving name server availability, network connectivity, or configuration mismatch, the zone cannot be updated or managed by ADNR.

System action: ADNR periodically probes this zone to determine whether it is responding. This zone is not updated in the name server until the underlying cause of its unresponsiveness is corrected. ADNR continues processing.

Operator response: Contact the system programmer.

System programmer response: See the information about diagnosing unresponsive zones in z/OS Communications Server: IP Diagnosis Guide for information about resolving this problem.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldzone.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1258I *applname AGENT CONNECTION FROM ipaddress CLOSED DUE TO INACTIVITY*

Explanation: This immediate action message is issued when the z/OS Load Balancing Advisor (Advisor) closes its connection to the z/OS Load Balancing Agent (Agent) because the Advisor did not receive a message from the Agent in the expected time. The Advisor will delete this message when the Agent connects to the Advisor.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the Agent.

System action: The Agent will attempt to reconnect to the Advisor until the Agent connects with the Advisor or the Agent is stopped. If the situation is temporary, the Agent will successfully reconnect to the Advisor.

Operator response: If the Agent is not active, start it. If the error persists, contact the system programmer.

System programmer response: Network connectivity problems, routing problems, slow system performance on the Agent system, and low MVS dispatching priority for the Agent might cause this problem. If the error persists,

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increase the update interval in the Advisor configuration file and restart the Advisor.

Module: lmagt.c

Procedure name: lm_perform_dead_agent

EZD1259I *applname* CONNECTED TO ADVISOR *ipaddress*

Explanation: This message is issued when the z/OS Load Balancing Agent (Agent) is successfully connected to the z/OS Load Balancing Advisor (Advisor).

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

ipaddress

The IP address of the Advisor.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: laadv.c

Procedure name: la_process_weightTableData

EZD1260I *applname* CONNECTION TO ADVISOR *ipaddress* IS NO LONGER ACTIVE

Explanation: This message is issued when the z/OS Load Balancing Agent (Agent) loses its connection to the z/OS Load Balancing Advisor (Advisor).

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

ipaddress

The IP address of the Advisor.

System action: The Agent will attempt to reconnect to the Advisor until the Agent connects with the Advisor or the Agent is stopped. If the situation is temporary, the Agent will successfully reconnect to the Advisor.

Operator response: If the Advisor is not active, start it. If the Advisor is active, save the syslogd file and contact the system programmer.

System programmer response: Examine the syslogd file for Advisor or Agent error or warning messages. The syslogd identifier is lbadv for the Advisor and lbagent for the Agent. Correct any errors and restart the application.

Module: lamain.c

Procedure name: reset_connection

EZD1261I *applname* AGENT CONNECTED FROM *ipaddress*

Explanation: This message is issued when the z/OS Load Balancing Advisor (Advisor) detects that it successfully connected with a z/OS Load Balancing Agent (Agent).

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)

- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the Agent.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lmagt.c

Procedure name: lm_process_agentRegistrationRequest

EZD1262I *applname* AGENT CONNECTION FROM *ipaddress* IS NO LONGER ACTIVE

Explanation: This message is issued when the z/OS Load Balancing Advisor (Advisor) detects that it lost its connection with a z/OS Load Balancing Agent (Agent). This usually indicates that the agent has been stopped.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the Agent.

System action: Processing continues. If the Agent was not stopped, the Agent will attempt to reconnect to the Advisor. If the situation is temporary, the Agent will successfully reconnect to the Advisor.

Operator response: Check to see why the Agent has ended. Restart the Agent, if necessary. If the Agent cannot reconnect to the Advisor, save the syslogd file and contact the system programmer.

System programmer response: No action is needed if the Agent was stopped. Otherwise, examine the syslogd file for Advisor or Agent error or warning messages. The syslogd identifier is lbadv for the Advisor and lbaagent for the Agent. Correct any errors and restart the application.

Module: lmagt.c

Procedure name: lm_service_agent_connection

EZD1263I *applname* LOAD BALANCER CONNECTED FROM *ipaddress*

Explanation: This message is issued when the z/OS Load Balancing Advisor (Advisor) detects that it successfully connected with a load balancer.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the connected load balancer.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: lmhb.c

Procedure name: lm_process_registrationRequest, lm_process_setLbStateRequest

EZD1264I • EZD1265I

EZD1264I *applname* LOAD BALANCER CONNECTION FROM *ipaddress* IS NO LONGER ACTIVE

Explanation: This message is issued when the z/OS Load Balancing Advisor (Advisor) detects that it lost its connection with a load balancer.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the previously connected load balancer.

System action: If the load balancer is still active, the load balancer might attempt to reconnect to the Advisor.

Operator response: Check to see whether the load balancer is active. Restart the load balancer, if necessary. If the load balancer is active, contact the system programmer.

System programmer response: Check the load balancer and correct any configuration or connectivity problems. See z/OS Communications Server: IP Diagnosis Guide for information about diagnosing network connectivity problems.

Module: lmlb.c

Procedure name: lm_service_lb_connection

EZD1265I *applname* CONNECTION TO ADVISOR *ipaddress* CLOSED DUE TO PROTOCOL ERROR

Explanation: This immediate action message is issued when the z/OS Load Balancing Agent (Agent) closes its connection to the z/OS Load Balancing Advisor (Advisor) due to an internal protocol error. The Agent will delete this message when the Agent connects to the Advisor.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Agent, if it is configured for subplexing

ipaddress

The IP address of the Advisor.

System action: The Agent will take a CEDUMP, write messages to the syslogd file, and attempt to reconnect to the Advisor. The Agent will attempt to reconnect to the Advisor until the Agent connects with the Advisor or the Agent is stopped.

Operator response: Save the dump, syslogd file, and packet trace (if active). The dump data set is specified in the CEDUMP DD statement in the Agent's start procedure. Contact the system programmer. If the problem persists, stop the Agent.

System programmer response: Examine the syslogd files for the Advisor and Agent.

If the debug level includes Message level messages, the syslogd file will show the data that each application sent or received. If the data that was sent by one application was the same data received by the corresponding application, contact IBM software support services.

If the data that was sent was not the same data that was received, this might indicate that network integrity has been compromised.

If the packet trace was active, examine the trace for the data that was sent and received.

If the packet trace is not active, try to recreate the problem with packet trace active. See z/OS Communications Server: IP Diagnosis Guide for information about the packet trace.

Module: lczap.c

Procedure name: zap_protocol_error

EZD1266I *applname* AGENT CONNECTION FROM *ipaddress* CLOSED DUE TO PROTOCOL ERROR

Explanation: This immediate action message is issued when the z/OS Load Balancing Advisor (Advisor) closes its connection with a z/OS Load Balancing Agent (Agent) as a result of an internal protocol error. The Advisor will delete this message when the Agent connects to the Advisor.

In the message text:

applname

The name of the application. The application name can be one of the following:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

ipaddress

The IP address of the Agent.

System action: The Advisor will take a CEDUMP and write messages to the syslogd file. If the Agent is still active, it will attempt to reconnect to the Advisor until the Agent connects with the Advisor or the Agent is stopped. If the situation is temporary, the Agent will successfully reconnect to the Advisor.

Operator response: Save the dump, syslogd file, and packet trace (if active). The dump data set is specified in the CEDUMP DD statement in the Advisor's start procedure. Contact the system programmer. If the Agent is not active, start it.

System programmer response: Examine the syslogd files for the Advisor and Agent. If the debug level includes Message level messages, the syslogd file will show the data that each application sent or received.

If an Agent is configured to use AT-TLS and the Advisor is not, the configuration is not valid. The Advisor will issue message EZD1266I. To correct this configuration, configure the Advisor to use AT-TLS.

If the data that was sent by one application was the same data received by the corresponding application, contact IBM software support services.

If the data that was sent was not the same data that was received, this might indicate that network integrity has been compromised.

If the packet trace was active, examine the trace for the data that was sent and received.

If the packet trace is not active, try to recreate the problem with packet trace active. See z/OS Communications Server: IP Diagnosis Guide for information about the packet trace.

Module: lczap.c

Procedure name: zap_protocol_error

EZD1267I *applname* ENDED ABNORMALLY

Explanation: The application ended in response to an unexpected error.

In the message text:

applname

The name of the application. The application name can be one of the following:

- ADNR for the automated domain name registration (ADNR) application
- LBADV for the z/OS Load Balancing Advisor (Advisor)
- LBAGENT for the z/OS Load Balancing Agent (Agent)
- The job name of the Advisor or Agent, if it is configured for subplexing.

System action: Processing continues.

Operator response: Save the CEDUMP, snap output, and syslogd file. Contact the system programmer.

System programmer response: Contact IBM software support services.

Module: lcassert.c, lcerror.c

Procedure name: default_callback, lba_error_fatal

EZD1268I • EZD1269I

EZD1268I *applname ZONE zoneLabel IS NOW RESPONDING*

Explanation: The domain name server zone that was previously not responding (as reported by message EZD1257I) is now responding to requests from the application.

In the message text:

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

zoneLabel

The label of the zone in the application configuration file.

System action: The application continues processing.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communication Server TCP/IP other application

Module: ldzone.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1269I *applname COMMAND REJECTED - REFRESH IN PROGRESS*

Explanation: The specified application is currently processing a previous MODIFY REFRESH command.

In the message text:

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

System action: The application continues processing.

Operator response: If the application is ADNR, then reissue the command after the active refresh command completes. Message EZD1275I is issued when the refresh is complete. Message EZD1277I is issued if the refresh completes with a failure. If the pending ADNR refresh does not complete, contact the system programmer.

System programmer response: Contact IBM software support services.

User response: Not applicable.

Problem determination: If the application is ADNR and the pending refresh does not complete, then see the information about diagnosing unresponsive zones in z/OS Communications Server: IP Diagnosis Guide for information about why the ADNR refresh failed to complete.

Source: z/OS Communication Server TCP/IP other application

Module: ldcmd.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1270I ADNR CONNECTED TO GWM *gwmipaddress*

Explanation: The automated domain name registration (ADNR) application established a connection to the Global Workload Manager (GWM).

In the message text:

gwmipaddress

The IP address of the GWM. The IP address is specified on the gwm_id parameter of the gwm statement in the ADNR configuration file.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldgwm.c

Routing code: 10

Descriptor code: 12

Example:

EZD1270I ADNR CONNECTED TO GWM 10.42.11.182

EZD1271E ADNR CONNECTION TO GWM *gwmipaddress* IS NO LONGER ACTIVE

Explanation: The automated domain name registration (ADNR) application no longer has a connection to the Global Workload Manager (GWM).

In the message text:

gwmipaddress

The IP address of the GWM. The IP address is specified on the gwm_id parameter of the gwm statement in the ADNR configuration file.

System action: Processing continues. The ADNR application can no longer communicate with the GWM. ADNR will periodically try the connection again. If it succeeds, the eventual action message will be deleted. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Guide for more information.

Operator response: If the GWM application has been stopped, no further actions are needed. When the GWM application is restarted, the ADNR application automatically reconnects to the GWM. If the GWM was not stopped and the reason for the connection attempt failure between the ADNR and GWM application cannot be determined, save the following information:

- The ADNR log file
- Any ADNR dump produced when the problem occurred
- The TCP/IP profile and system log of the TCP/IP stack used by the ADNR application
- The GWM log file
- The TCP/IP profile and system log of the TCP/IP stack used by the GWM application

Contact the system programmer.

System programmer response: Verify that routing exists between the IP address used by the ADNR application and the IP address of the GWM that is specified in the message. A route should exist from the ADNR IP address to the GWM IP address, and a route should also exist from the GWM IP address to the ADNR IP address. The IP address used by the ADNR application is found in one of the following places:

- The IP address is specified on the host_connection_addr parameter of the gwm statement that contains the corresponding gwm_id parameter in the ADNR configuration file.

EZD1272E

- The IP address is displayed in message EZD1263I. This message is issued by the Load Balancing Advisor. Look for this message in the system log for the system on which the Advisor is running, at a time that corresponds approximately to the time at which this ADNR was started.

If routing exists, then check the ADNR and GWM log files for messages corresponding to the time when the connection failed. See the information about diagnosing problems with the automated domain name registration application in z/OS Communications Server: IP Diagnosis Guide. If the reason for the connection loss cannot be determined, contact the IBM support center after obtaining the supporting TCP/IP, ADNR, and GWM documentation.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldgwm.c

Routing code: 1

Descriptor code: 2

Example:

EZD1271E ADNR CONNECTION TO GWM 10.42.11.182 IS NO LONGER ACTIVE

EZD1272E ADNR CONNECTION ATTEMPT TO GWM *gwmipaddress* FAILED

Explanation: The automated domain name registration (ADNR) application failed to establish a connection to the Global Workload Manager (GWM).

In the message text:

gwmipaddress

The IP address of the GWM. The IP address is specified on the *gwm_id* parameter of the *gwm* statement in the ADNR configuration file.

System action: Processing continues. The ADNR application cannot communicate with the GWM. ADNR will periodically try the connection again. If it succeeds (as indicated by message EZD1270I), the eventual action message will be deleted. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Guide or diagnosing problems with the automated domain name registration application in z/OS Communications Server: IP Diagnosis Guide for more information.

Operator response: If the GWM application has been stopped, no further actions are needed. When the GWM application is restarted, the ADNR application automatically reconnects to the GWM. If the GWM was not stopped and the reason for the connection attempt failure between the ADNR and GWM application cannot be determined, save the following information:

- The ADNR log file
- Any ADNR dump produced when the problem occurred
- The TCP/IP profile and system log of the TCP/IP stack used by the ADNR application
- The GWM log file
- The TCP/IP profile and system log of the TCP/IP stack used by the GWM application.

Contact the system programmer.

System programmer response: Verify that routing exists between the IP address used by the ADNR application and the IP address of the GWM. A route should exist from the ADNR IP address to the GWM IP address, and a route should also exist from the GWM IP address to the ADNR IP address. The IP address of the GWM is specified in the message. The IP address used by the ADNR application is one of the following:

- Specified on the *host_connection_addr* parameter of the *gwm* statement containing the corresponding *gwm_id* parameter in the ADNR configuration file.
- Selected by the ADNR's TCP/IP stack. If *host_connection_addr* is not specified, the ADNR attempts to connect to the IP address specified in the *gwm_id* parameter. The ADNR's TCP/IP stack selects a source IP address. See the information about source IP address selection in z/OS Communications Server: IP Configuration Guide for information about how TCP/IP selects a source IP address.

If routing exists, then check the ADNR and GWM log files for messages corresponding to the time when the connection failed. See the information about diagnosing problems with the automated domain name registration application in z/OS Communications Server: IP Diagnosis Guide. If the reason for the connection attempt failure cannot be determined, contact IBM software support services after obtaining the supporting TCP/IP, ADNR and GWM documentation.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldgwm.c

Routing code: 1

Descriptor code: 2

Example:

EZD1272E ADNR CONNECTION ATTEMPT TO GWM 10.42.11.182 FAILED

EZD1273I ADNR FAILED TO DELETE ZONE *zoneLabel*

Explanation: The automated domain name registration (ADNR) application failed to delete a domain name server zone that is not in the new configuration while processing a MODIFY *procname*,REFRESH command.

In the message text:

zoneLabel

The label of the zone in the ADNR configuration file.

System action: Any domain name server resource records from the old configuration remain in the domain name server zone identified by the *zoneLabel* value. Processing continues. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Guide or diagnosing problems with the automated domain name registration application in z/OS Communications Server: IP Diagnosis Guide for more information.

Operator response: Contact the system programmer.

System programmer response: Perform one of the following actions:

- Use the Dig or Nslookup utility to perform a zone transfer of the zone to examine its contents. Based on the results from using the Dig or Nslookup utility, use the Nsupdate utility to manually remove the resource records. See the information about querying and administrating a Domain Name System in z/OS Communications Server: IP System Administrator's Commands for information about using the Nslookup, Dig, and Nsupdate commands.
- If you can wait for communications to be restored between the ADNR application and the zone's name server, see the information about flushing a zone in z/OS Communications Server: IP Configuration Guide. Before this communication is restored, the name server might contain stale data for this zone.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldzone.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1274I *applname* NEW CONFIGURATION INFORMATION TEMPORARILY UNAVAILABLE

Explanation: This message is issued in response to the specified application MODIFY DISPLAY command. A dynamic reconfiguration operation (REFRESH) is still in progress. The old configuration is being displayed, and the new (refreshed) configuration is not yet available for display.

In the message text:

EZD1275I • EZD1276I

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

System action: The application continues.

Operator response: If the application is ADNR, then reissue the ADNR MODIFY DISPLAY command after the ADNR MODIFY REFRESH command has completed (as indicated when message EZD1275I ADNR REFRESH COMMAND COMPLETED is issued).

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldcmd.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1275I *applname* REFRESH COMMAND COMPLETED

Explanation: The application's MODIFY REFRESH command has completed. Subsequent MODIFY REFRESH commands will now be accepted.

In the message text:

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

System action: The new configuration is now active.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldmain.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1276I ADNR CONNECTION TO GWM *gwmipaddress* CLOSED DUE TO PROTOCOL ERROR

Explanation: The automated domain name registration (ADNR) application closed the connection to the Global Workload Manager (GWM) as a result of a Server/Application State Protocol (SASP) protocol violation or a configuration mismatch. One common configuration mismatch is failing to include the IP address used by ADNR in the Advisor lb_id_list. If the lb_id_list statement is not specified in the Advisor's configuration file, AT-TLS must be configured for the connection to be fully established. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Reference for more information about how to correctly coordinate the configuration of ADNR and the GWM.

The automated domain name registration (ADNR) application closed the connection to the Global Workload Manager (GWM) as a result of a Server/Application State Protocol (SASP) protocol violation.

In the message text:

gwmipaddress

The IP address of the GWM. The IP address is specified on the gwm_id parameter of the gwm statement in the ADNR configuration file.

System action: Processing continues. ADNR dumps its address space. The ADNR application is no longer able to communicate with the GWM. ADNR will periodically reestablish the connection to the GWM and attempt to communicate with the GWM. See the information about automated domain name registration in z/OS Communications Server: IP Configuration Guide and diagnosing problems with the automated domain name registration application (EZBADNR) in the z/OS Communications Server: IP Diagnosis Guide for more information.

Operator response: Save the ADNR log file, and the ADNR dump. Save the GWM log file. Contact the system programmer.

System programmer response: Review the ADNR log file and the GWM log file to determine the cause for the connection being closed. Correct any configuration mismatch errors. If the error is a SASP protocol violation, contact IBM software support services after obtaining the supporting ADNR and GWM documentation.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldgwm.c

Routing code: 10

Descriptor code: 12

Example:

```
EZD1276E ADNR CONNECTION TO GWM 10.42.11.182 CLOSED DUE TO PROTOCOL ERROR
```

EZD1277I applname REFRESH COMMAND FAILED

Explanation: The application MODIFY REFRESH command failed because of errors in the configuration file. The new configuration is not used. Subsequent MODIFY REFRESH commands can now be accepted.

In the message text:

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

System action: Processing continues. The previous configuration continues to be used.

Operator response: Contact the system programmer.

System programmer response: Check the application log files for error messages to determine why the configuration failed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: ldconfig.c

Routing code: 10

Descriptor code: 12

Example: None.

EZD1278E applname A ZONE SUBORDINATE TO DNS dnsLabel IS NOT RESPONSIVE

Explanation: One or more domain name server zones are not responding to the specified application.

In the message text:

EZD1279I

applname

The name of the application. The application name is ADNR for the automated domain name registration (ADNR) application.

dnsLabel

Label of the domain name server server in the application configuration file containing one or more unresponsive zones.

System action: The application continues.

Operator response: If the application is ADNR, then review the ADNR system log for the reason why the zone is not responsive to the ADNR application. An EZD1257I message is issued to identify each zone that is not responsive.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP other application

Module: lddns.c

Routing code: 1

Descriptor code: 2

Example: None.

EZD1279I *applname SECURE CONNECTION REQUEST RECEIVED FROM USER *user_id* AT IP ADDRESS *ip_addr**

Explanation: The Advisor received a Transport Layer Security (TLS) secure connection request at the specified IP address from the user specified by the *user_id* value. SAF authorization for access to the Advisor will be checked for the specified user ID.

In the message text:

applname

The name of the application that received the connection request. Possible values are:

- LBADV for the z/OS Load Balancing Advisor (Advisor)
- The job name of the Advisor, if it is configured for subplexing

user_id

The user identifier of the load balancer or Load Balancing Agent requesting access to the Advisor.

ip_addr

The IP address of the load balancer or Load Balancing Agent.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Load Balancing Advisor

Module: lmmain

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

LBADV SECURE CONNECTION REQUEST RECEIVED FROM USER AGENT1 AT IP ADDRESS 192.10.1.1

**EZD1280I *applname client CONNECTION ATTEMPT FROM USER userid AT IP ADDRESS ip_addr FAILED
REASON CODE reason***

Explanation: The Advisor received a connection request at the specified IP address at the specified IP address from an Agent or load balancer with the specified user ID. Authorization for connection to the Advisor failed for the specified user ID.

In the message text:

applname

The name of the application that received the connection request. Possible values are:

- LBADV for the z/OS Load Balancing Advisor (Advisor).
- The job name of the Advisor, if it is configured for subplexing.

client

The type of client that attempted to connect to the Advisor. Possible values are:

- AGENT for the z/OS Load Balancing Agent
- LB for a load balancer or ADNR connection

userid

The user ID of the load balancer or Load Balancing Agent that is requesting access to the Advisor. If the user ID is not obtained from AT-TLS, the value is UNKNOWN.

ip_addr

The IP address of the load balancer or Load Balancing Agent.

reason

A code that explains the failure. Possible values are:

- 1 The Advisor TCP/IP stack is not configured for Application Transparent Transport Layer Security (AT-TLS), and the Advisor configuration file did not allow connections from this client. The TTLS option in the TCP/IP profile TCPCONFIG statement enables the stack for AT-TLS.
- 2 There is not a usable AT-TLS policy for this connection, and the Advisor configuration file did not allow connections from this client. For example, the policy agent is not active, or the AT-TLS policy for this connection specifies the wrong port.
- 3 The AT-TLS policy defined for this connection does not enable AT-TLS, and the Advisor configuration file did not allow connections from this client. In the policy, the TTLSGroupAction statement is not configured with TTLSEnabled set to ON.
- 4 The AT-TLS policy that is defined for this connection does not define the Advisor as a controlling application, and the Advisor configuration file did not allow connections from this client. In the policy, the TTLSEnvironmentAdvancedParms parameter is not configured with ApplicationControlled set to On for the Advisor.
- 5 The AT-TLS handshake failed for this connection, and the Advisor configuration file did not allow connections from this client.
- 6 System authorization facility (SAF) authorization failed for this connection. The SERVAUTH class profile EZB.LBA.LBACCESS.*sysname.tcp.sysplexgroupname* (for a load balancer connection) or EZB.LBA.AGENTACCESS.*sysname.tcp.sysplexgroupname* (for an Agent connection) exists but the user is not authorized to use this profile. The system does not use the Advisor configuration file because the user is not authorized to use the SERVAUTH class profile.
- 7 The Advisor was unable to obtain storage for processing an AT-TLS connection request, and the Advisor configuration file did not allow connections from this client.
- 8 The Advisor call to the SIOCTTLSCTL IOCTL failed unexpectedly, and the Advisor configuration file did not allow connections from this client.
- 9 System authorization facility (SAF) authorization failed for this connection, and the Advisor configuration file did not allow connections from this client. The SERVAUTH class profile EZB.LBA.LBACCESS.*sysname.tcp.sysplexgroupname* (for a load balancer connection) or EZB.LBA.AGENTACCESS.*sysname.tcp.sysplexgroupname* (for an Agent connection) is not protected by SAF.

System action: The system continues processing. The client that attempted to connect to the Advisor might continue to attempt to connect.

Operator response: If you are not using AT-TLS for this connection, save the Advisor syslogd file and contact the system programmer.

If you are using AT-TLS for this connection, take the action appropriate for the reason as follows:

reason action

- 2 Start the Policy Agent if it is not already started. If the AT-TLS policy for the Advisor connections has changed, refresh the Policy Agent. If the problem is not corrected, save the Advisor syslogd file, the AT-TLS syslogd file, and the policy agent syslogd file, then contact the system programmer.
- 7 If the storage problem cannot be corrected, save the Advisor syslogd file. If a dump was not created, take a dump of the Advisor address space, then contact the system programmer.

All other reasons

Save the system console, the Advisor syslogd file, the AT-TLS syslogd file, and the policy agent syslogd file, then contact the system programmer.

See z/OS Communications Server: IP Diagnosis Guide for information about collecting diagnostic data.

System programmer response: If you are not using AT-TLS, examine the Advisor syslogd file for errors. Correct the configuration file as needed. See z/OS Communications Server: IP Configuration Reference for information about configuring the Advisor and Agent and ADNR application.

If you are using AT-TLS for this connection, take action appropriate for the reason as follows:

- 1 Activate AT-TLS with the TCPCONFIG TTLS configuration statement. Either correct and resubmit the original TCP/IP profile or submit a VARY TCPIP,,OBEYFILE command. See the information about the TCPCONFIG statement in z/OS Communications Server: IP Configuration Reference for more information about the TTLS parameter.
- 2 If the Policy Agent is active and has been refreshed since the last change to the AT-TLS policy, examine the system console, the Advisor syslogd file, the AT-TLS syslogd file, and the policy agent syslogd file for errors. Correct the AT-TLS policy for this connection. See the information about diagnosing AT-TLS problems in z/OS Communications Server: IP Diagnosis Guide and Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Refresh the Policy Agent after changing the policy.
- 3 Change the AT-TLS policy for this connection in the TTLSGroupAction statement to TTLSEnabled On. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Refresh the Policy Agent after changing the policy.
- 4 Change the AT-TLS policy for this connection in the TTLSEnvironmentAdvancedParms statement to ApplicationControlled On for the server (Advisor). See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Refresh the Policy Agent after changing the policy.
- 5 Correct the TLS handshake parameters in the AT-TLS policy for this connection.
 - See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference. Refresh the Policy Agent after changing the policy. For example,
 - Ensure that the HandshakeTimeout value for the Advisor policy is sufficient (for example, 30 seconds)
 - Ensure that the HandshakeRole value for the Advisor is ServerWithClientAuth or Server.
 - Ensure that the HandshakeRole value for the Agent and load balancers is Client.
- 6 Ensure that the user ID has at least read access to the correct SERVAUTH class profile (EZB.LBA.LBACCESS.sysname.tcpsysplexgroupname for a load balancer connection, EZB.LBA.AGENTACCESS.sysname.tcpsysplexgroupname for an Agent connection). For more information, see z/OS Security Server RACF Command Language Reference .
- 7 If the storage problem cannot be corrected, contact IBM software support services with all supporting documentation. The application syslogd file is the minimum diagnostic data that should be provided. See z/OS Communications Server: IP Diagnosis Guide for information about collecting diagnostic data.
- 8 Examine the system console, the Advisor syslogd file, the AT-TLS syslogd file, and the policy agent syslogd file for errors. Ensure that the certificate is correct. For more information, see z/OS Security Server RACF

Command Language Reference. If the problem is not corrected, contact IBM software support services with all supporting documentation. See z/OS Communications Server: IP Diagnosis Guide for information about collecting diagnostic data.

- 9 Define and permit the LBACCESS and AGENTACCESS profiles on each system where the Advisor can run. Ensure that the user ID has at least read access to the correct SERVAUTH class profile (EZB.LBA.LBACCESS.sysname.tcpsysplexgroupname for a load balancer connection, EZB.LBA.AGENTACCESS.sysname.tcpsysplexgroupname for an Agent connection). See the z/OS Security Server RACF Command Language Reference for information about the RDEFINE (Define General Resource Profile).

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Load Balancing Advisor

Module: lmmain

Routing code: 10

Descriptor code: 12

Example:

```
EZD1280I LBADV AGENT CONNECTION ATTEMPT FROM USER AGENT1 AT IP ADDRESS 192.10.1.1 FAILED REASON CODE 6
```

EZD1281I TTLS Map CONNID: *cid* LOCAL: *loc_ip..loc_port* REMOTE: *rem_ip..rem_port* JOBNAME: *jobname* USERID: *userid* TYPE: *type* STATUS: *stat* RULE: *rule* ACTIONS: *grp_act env_act conn_act*

Explanation: The TCP connection with the specified connection ID (CONNID) matched the specified Application Transparent Transport Layer Security (AT-TLS) rule. This CONNID will be used in all future AT-TLS messages for this connection. The message creation time and owning TCP/IP jobname of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of INFO and is written to the syslog when AT-TLS trace option INFO (4) or EVENT (8) is specified.

cid is a hexadecimal value that uniquely identifies this TCP connection for the life of the connection.

loc_ip is the local IPv4 or IPv6 address.

loc_port is the local port number.

rem_ip is the remote IPv4 or IPv6 address.

rem_port is the remote port number.

jobname is the job name of the application associated with this connection.

userid is the user ID of the application associated with this connection.

type is the direction of connection initiation for connections using the primary policy mapping method: Inbound if Accepting, Outbound if Connecting. *type* is Secondary if the SecondaryMap method was used in either direction.

stat is the AT-TLS status for the connection. The values for *stat* are:

- Not Enabled if TTLSEnabled in the matching AT-TLS policy is set to OFF.
- Enabled if TTLSEnabled in the matching AT-TLS policy is set to ON.
- Appl Control if ApplicationControlled in the matching AT-TLS policy is set to ON.

rule is the name of the TTLSRule that mapped this connection.

grp_act is the name of the TTLSGroupAction.

env_act is the name of the TTLSEnvironmentAction. If a TTLSEnvironmentAction is not specified on the TTLSRule statement, this value will be *N/A*.

conn_act is the name of the TTLSConnectionAction. If a TTLSConnectionAction is not specified on the TTLSRule statement, this value will be *N/A*.

System action: None.

EZD1282I

Operator response: None.

System programmer response: None.

Module: EZBTLMMSG

Procedure name: EZBTLMMSG

EZD1282I TTLS Start GRPID: *gid* ENVID: *eid* CONNID: *cid* event ACTIONS: *grp_act env_act conn_act add_data*

Explanation: An Application Transparent Transport Layer Security (AT-TLS) event has been started for the specified connection ID (CONNID). The message creation time and owning TCP/IP job name of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of DEBUG and is written to the syslog when AT-TLS trace option EVENT (8) or FLOW (16) is specified. Flow messages (EZD1284I) and Event messages (EZD1283I) might follow this message, depending on the trace options chosen.

gid is a hexadecimal value that uniquely identifies the AT-TLS group supporting the connection or SSL environment.

eid is a hexadecimal value that uniquely identifies the AT-TLS environment supporting the connection. Multiple AT-TLS environments might be represented by a single master System SSL secure environment. If *eid* is 00000000, the event does not apply to a specific environment.

cid is a hexadecimal value that uniquely identifies this TCP connection for the life of the connection. A previously issued message EZD1281I provides additional information about the connection. If *cid* is 00000000, the event does not apply to a specific connection.

event is an AT-TLS event. The start of the following events are reported by this message:

Connection Abend Close

An abend occurred while executing AT-TLS work for the specified connection. The specified connection will be reset and closed.

Connection Close

The specified secure connection is being closed.

Connection Stop

The specified secure connection is being stopped.

Environment Create

The specified AT-TLS environment is being created in the AT-TLS group to support the specified connection.

Environment Delete

The specified AT-TLS environment is no longer needed and is being deleted from the AT-TLS group. If this AT-TLS environment is not linked to a master AT-TLS environment, the corresponding System SSL environment will be closed.

Initial Handshake

The initial SSL handshake process is beginning for the specified connection.

Reset Cipher Request

A request to renegotiate the cipher is being processed.

Reset Session Request

A request to reset the session is being processed.

SSL Control Data Read

Control data, such as handshake or alert data, is being read.

grp_act is the name of the TTLSGroupAction.

env_act is the name of the TTLSEnvironmentAction. If a TTLSEnvironmentAction is not specified on the TTLSRule statement or if the event is not environment or connection related, this value will be *N/A*.

conn_act is the name of the TTLSConnectionAction. If a TTLSConnectionAction is not specified on the TTLSRule statement or if the event is not connection related, this value will be *N/A*.

add_data is additional information traced with the following events:

Connection Abend Close

The abend code.

Initial Handshake

The handshake role and, if handshake role is ServerWithClientAuth, the client authentication type.

System action: None.

Operator response: None.

System programmer response: If *event* is **Connection Abend Close**, then contact IBM software support services. If *event* is anything else, then there is no action to be taken.

Module: EZBTLSMSG

Procedure name: EZBTLSMSG

EZD1283I TTLS Event GRPID: *gid* ENVID: *eid* CONNID: *cid* RC: *rcode* event *add_data*

Explanation: Application Transparent Transport Layer Security (AT-TLS) has finished the specified event. The message creation time and owning TCP/IP jobname of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of DEBUG and is written to the syslog when AT-TLS trace option EVENT (8) is specified.

gid is a hexadecimal value that uniquely identifies the AT-TLS group supporting the connection or SSL environment.

eid is a hexadecimal value that uniquely identifies the AT-TLS environment supporting the connection. Multiple AT-TLS secure environments may be represented by a single master System SSL secure environment. If the *eid* is 00000000, the event does not apply to a specific environment.

cid is a hexadecimal value that uniquely identifies this TCP connection for the life of the connection. A previously issued message EZD1281I provides additional information about the connection. If the *cid* is 00000000, the event does not apply to a specific connection.

rcode is a System SSL or AT-TLS return code. A value other than zero indicates why the event failed. *rcode* values under 5000 are generated by System SSL and are defined in z/OS Cryptographic Services System SSL Programming. Rcode values over 5000 are generated by AT-TLS and are defined in Diagnosing AT-TLS problems in z/OS Communications Server: IP Diagnosis Guide.

event is an AT-TLS event. Possible values are:

Connection Abend Close

An abend occurred while executing AT-TLS work for the specified connection. The specified connection will be reset and closed.

Connection Close

The specified secure connection was closed.

Connection Init

A secure connection was initiated for the specified connection.

Connection Stop

The specified secure connection was stopped.

Data Decryption

Application data was decrypted by System SSL.

Environment Close

The specified AT-TLS environment was deleted. The corresponding System SSL environment was closed.

Environment Init

A System SSL environment was initialized for the specified AT-TLS environment.

Environment Link

The specified newly created AT-TLS environment could use an existing System SSL environment. The new AT-TLS environment was linked to a master AT-TLS environment that represents a single System SSL environment.

Environment Link Delete

The specified linked AT-TLS environment was no longer needed. It was linked to a master AT-TLS

environment. The AT-TLS environment and its link were deleted. If this was the last AT-TLS environment linked to the master AT-TLS environment, the master was also deleted and the corresponding System SSL environment will be closed.

Environment Master Close

The specified master AT-TLS environment no longer had any linked AT-TLS environments. The corresponding System SSL environment was closed.

Environment Master Create

The specified newly created AT-TLS environment could be linked to a master AT-TLS environment. The master AT-TLS environment did not exist yet and was created. The master AT-TLS environment corresponds to a single System SSL environment.

Environment Master Delete

The specified master AT-TLS environment was no longer needed and was deleted from the AT-TLS group. The corresponding System SSL environment will be closed.

Environment Master Init

A System SSL environment was initialized for the specified master AT-TLS environment.

Initial Handshake

The initial SSL handshake process was completed for the specified connection.

Messages Dropped

Syslog messages were dropped as a result of an excessive backlog of messages to be logged.

Policy Mapping

Policy map was attempted for the specified connection.

Received FIN

A TCP header with the FIN flag turned on was received on the secure connection.

Received Reset

A TCP header with the Reset flag turned on was received on the secure connection. The connection is closed.

Reset Cipher Request

A request to renegotiate the cipher was processed.

Reset Ignored

A TCP header with the Reset flag turned on was received in a response to an SSL close alert. The reset has been ignored.

Reset Session Request

A request to reset the SSL session ID was processed.

SSL Control Data Read

Control data, such as handshake or alert data, was read.

add_data is additional information traced with the following events:

Connection Abend Close

- The handle of the System SSL connection block.
- The handle of the System SSL environment, if used by the connection.
- The abend code.

Connection Close

- The handle of the System SSL connection block.
- The handle of the System SSL environment, if used by the connection.

Data Decryption

The handle of the System SSL connection block.

Environment Close

The handle of the System SSL environment representing the AT-TLS environment.

Environment Init

The handle of the System SSL environment representing the AT-TLS environment.

Environment Link

- The handle of the System SSL environment that represents the master AT-TLS environment.
- The master AT-TLS environment ID.

Environment Link Delete

- The handle of the System SSL environment that represents the master AT-TLS environment.
- The master AT-TLS environment ID.

Environment Master Close

The handle of the System SSL environment representing the master AT-TLS environment.

Environment Master Create

The AT-TLS environment ID just created that necessitates creation of this master AT-TLS environment.

Environment Master Delete

The handle of the System SSL environment representing the master AT-TLS environment.

Environment Master Init

The handle of the System SSL environment representing the master AT-TLS environment.

Initial Handshake

- The handle of the System SSL connection block.
- The handle of the System SSL environment used by the connection.
- The security protocol used by the secure connection.
- The cipher used by the secure connection.

Messages Dropped

The number of messages that were dropped.

Received FIN

The number of bytes of encrypted data on the AT-TLS receive queue when the FIN was received.

Reset Cipher Request

- The handle of the System SSL connection block.
- The handle of the System SSL environment used by the connection.

Reset Session Request

- The handle of the System SSL connection block.
- The handle of the System SSL environment used by the connection.

SSL Control Data Read

- The handle of the System SSL connection block.
- The handle of the System SSL environment used by the connection.

System action: None.

Operator response: None.

System programmer response: System Programmer response varies by event type:

If *event* is **Connection Abend Close**, then contact IBM software support services. For all other *event* values, if *r code* has a value other than zero, use it to determine the cause of the error and correct if necessary. See z/OS Communications Server: IP Diagnosis Guide for more information.

Module: EZBTLMMSG

Procedure name: EZBTLMMSG

EZD1284I TTLS Flow GRPID: *gid* ENVID: *eid* CONNID: *cid* RC: *r code* *action func_or_parm- add_data*

Explanation: Application Transparent Transport Layer Security (AT-TLS) called System SSL to perform the specified action on the specified function or parameter. The message creation time and owning TCP/IP job name of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of DEBUG and is written to the syslog when AT-TLS trace option FLOW (16) is specified. Flow messages might follow the Start message and precede Event messages, depending on the trace options chosen.

EZD1285I

gid is a hexadecimal value that uniquely identifies the AT-TLS group supporting the connection or SSL environment.

eid is a hexadecimal value that uniquely identifies the AT-TLS environment supporting the connection. Multiple AT-TLS environments might be represented by a single master System SSL secure environment. If the *eid* is 00000000, the event does not apply to a specific environment.

cid is a hexadecimal value that uniquely identifies this TCP connection for the life of the connection. A previously issued message EZD1281I provides additional information about the connection. If the *cid* is 00000000, the event does not apply to a specific connection.

rcode is a System SSL or AT-TLS return code. A value other than zero indicates why the event failed. *rcode* values under 5000 are generated by System SSL and are defined in z/OS Cryptographic Services System SSL Programming. *rcode* values over 5000 are generated by AT-TLS and are defined in Diagnosing AT-TLS problems in z/OS Communications Server: IP Diagnosis Guide.

action is the action that was taken. Possible values are:

- Call** Call a System SSL function.
- Get** Get a System SSL parameter value.
- Set** Set a System SSL parameter value.

func_or_parm is the name and enumeration value of the System SSL function that was called or the System SSL parameter whose value was set or retrieved. See z/OS Cryptographic Services System SSL Programming for more information about System SSL functions and parameters.

add_data is additional information traced with the following actions:

- Call** The System SSL handle for the Environment or Connection processed by the called function.
- Get** The value received for the parameter on the Get.
- Set** The value specified for the parameter on the Set.

System action: None.

Operator response: None.

System programmer response: If *rcode* has a value other than zero, use it to determine the cause of the error and correct if necessary. See z/OS Communications Server: IP Diagnosis Guide for more information.

Module: EZBTLMMSG

Automation: Not applicable.

Procedure name: EZBTLMMSG

Example:

```
EZD1284I TTLS Flow GRPID: 00000001 ENVID: 00000004 CONNID: 0000018C RC:      0
Set GSK_KEYRING_FILE(201) - ibmuser_ring
```

EZD1285I TTLS Data CONNID: *cid* dir **Cipher** *data*

Explanation: Application Transparent Transport Layer Security (AT-TLS) has sent or received non-application data on the specified connection. The message creation time and owning TCP/IP jobname of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of DEBUG and is written to syslog when AT-TLS trace option DATA (32) is specified.

cid is a hexadecimal value that uniquely identifies this TCP connection for the life of the connection. A previously issued message EZD1281I provides additional information about the connection. If the *cid* is 00000000, the event does not apply to a specific connection.

dir is either of the following:

- Recv** AT-TLS has received data from the network on the connection.
- Send** AT-TLS is sending data to the network on the connection.

data is the System SSL control data being transferred.

System action: None.

Operator response: None.

System programmer response: None.

Module: EZBTLMMSG

Procedure name: EZBTLMMSG

EZD1286I TTLS Error GRPID: *gid* ENVID: *eid* CONNID: *cid* LOCAL: *loc_ip..loc_port* REMOTE: *rem_ip..rem_port* JOBNAME: *jobname* USERID: *userid* RULE: *rule* RC: *rcode event*

Explanation: Application Transparent Transport Layer Security (AT-TLS) detected an error during the specified AT-TLS event. The message creation time and owning TCP/IP job name of the process creating the message are included in the syslog trace prior to the message ID. This message has a syslog priority of ERROR and is written to the syslog when AT-TLS trace option ERROR (2) is specified.

In the message text:

gid

The hexadecimal value that uniquely identifies the AT-TLS group supporting the connection or SSL environment.

eid

The hexadecimal value which uniquely identifies the AT-TLS environment supporting the connection. Multiple AT-TLS environments may be represented by a single master System SSL secure environment. If the *eid* is 00000000, the event does not apply to a specific environment.

cid

The hexadecimal value which uniquely identifies this TCP connection for the life of the connection. A previously issued message EZD1281I provides additional information about the connection. If the *cid* is 00000000, the event does not apply to a specific connection.

loc_ip

The local IPv4 or IPv6 address.

loc_port

The local port number.

rem_ip

The remote IPv4 or IPv6 address.

rem_port

The remote port number.

jobname

The job name of the application associated with this connection.

userid

The user ID of the application associated with this connection.

rule

The name of the TTLSRule statement that mapped this connection.

rcode

The System SSL or AT-TLS return code that indicates why the event failed. *rcode* values under 5000 are generated by System SSL and are defined in z/OS Cryptographic Services System SSL Programming. *rcode* values over 5000 are generated by AT-TLS and are defined in AT-TLS return codes in z/OS Communications Server: IP Diagnosis Guide.

event

The AT-TLS event that was in process when the error occurred. Possible values are:

Connection Abend Close

An abend occurred while executing AT-TLS work for the specified connection.

Connection Close

The specified secure connection was being closed.

Connection Init

A secure connection was being initiated for the specified connection.

Connection Stop

The specified secure connection was being stopped.

Data Decryption

Application data was being decrypted by System SSL.

Data Encryption

Application data was being encrypted by System SSL.

Environment Close

The specified AT-TLS environment was being deleted and the corresponding System SSL environment was being closed.

Environment Init

A System SSL environment was being initialized for the specified AT-TLS environment.

Environment Link

The specified newly created AT-TLS environment could use an existing System SSL environment. The new AT-TLS environment was being linked to a master AT-TLS environment that represents a single System SSL environment.

Environment Link Delete

The specified linked AT-TLS environment was no longer needed. It was linked to a master AT-TLS environment. The AT-TLS environment and its link were being deleted. If this is the last AT-TLS environment linked to the master AT-TLS environment, the master was also being deleted and the corresponding System SSL environment will be closed.

Environment Master Close

The specified master AT-TLS environment no longer had any linked AT-TLS environments. The corresponding System SSL environment was being closed.

Environment Master Create

The specified newly created AT-TLS environment could be linked to a master AT-TLS environment. The master AT-TLS environment did not exist yet and was being created. A master AT-TLS environment corresponds to a single System SSL environment.

Environment Master Delete

The specified master AT-TLS environment was no longer needed and was being deleted from the AT-TLS group. The corresponding System SSL environment will be closed.

Environment Master Init

A System SSL environment was being initialized for the specified master AT-TLS environment.

HandshakeTimeout Expired

A secure connection was being initialized, but did not complete in the HandshakeTimeout interval.

Initial Handshake

The initial SSL handshake was in process for the connection.

Policy Mapping

Policy was being mapped for the specified connection.

Reset Cipher Request

A request to renegotiate the cipher was being processed.

Reset Session Request

A request to reset the session was being processed.

SSL Control Data Read

Control data, such as handshake or alert data, was being read.

System action: None.

Operator response: None.

System programmer response: Use the *rcode* value to determine the cause of the error and correct if necessary. See z/OS Communications Server: IP Diagnosis Guide for more information.

Module: EZBTLSMSG

Example:

```
EZD1286I TTLS Error GRPID: 00000001 ENVID: 00000001 CONNID: 0000001F LOCAL: 9.42.104.171..1025
REMOTE: 9.42.104.171..6003 JOBNAME: USER603 USERID: USER60 RULE: tnsaso_c1nt6 RC: 5006
Initial Handshake 00000000 00000000
```

Procedure name: EZBTLSMSG

EZD1287I TTLS ERROR RC: rcode event JOBNAME: jobname RULE: rule LOCAL: loc_ip..loc_port REMOTE: rem_ip..rem_port USERID: userid GRPID: gid ENVID: eid CONNID: cid

Explanation: Application Transparent Transport Layer Security (AT-TLS) detected an error during the specified AT-TLS event. This message is written to the joblog when AT-TLS trace option JOBLOG (1) is specified and has the same information as EZD1286I, which goes to the syslog when AT-TLS trace option ERROR (2) is specified. See EZD1286I for more information.

System action: None.

Operator response: None.

System programmer response: Use the *rcode* value to determine the cause of the error and correct if necessary. See z/OS Communications Server: IP Diagnosis Guide for more information.

Module: EZBTLSMSG

Example:

```
EZD1287I TTLS Error RC: 5006 Initial Handshake
LOCAL: 9.42.104.171..1025
REMOTE: 9.42.104.171..6003
JOBNAME: USER603 RULE: tnsaso_c1nt6
USERID: USER60 GRPID: 00000001 ENVID: 00000001 CONNID: 0000001F
```

Procedure name: EZBTLSMSG

EZD1288I Tcpname AT-TLS GROUP group_name INITIALIZATION FAILED - reason

Explanation: The initialization of the AT-TLS GROUP *group_name* did not complete successfully because of the *reason* specified.

In the message text:

Tcpname

The name of the TCPIP stack

group_name

The name of the AT-TLS group specified on a TTLSGroupAction statement

reason

Additional information about why the initialization of the group failed. *reason* is one of the following:

ICSF UNAVAILABLE FOR FIPS140 MODE GROUP – ICSF was not active when *tcpname* initialized the AT-TLS group *group_name*, which is configured with FIPS140 On. ICSF is required for FIPS140 support.

System action: TCPIP continues. The AT-TLS group *group_name* is marked as failed. Any connections attempting to use that group will be reset. AT-TLS sets a return code of 5018 for those connections.

Operator response: Contact the system programmer.

System programmer response: Use the *reason* to resolve the initialization failure.

For *reason* ICSF UNAVAILABLE FOR FIPS140 MODE GROUP:

- If the AT-TLS group needs to be FIPS140 enabled, start ICSF before installing the AT-TLS policy. To attempt starting the AT-TLS group again after ICSF is active, refresh the AT-TLS policy as described in Action refresh in z/OS Communications Server: IP Configuration Guide.
- If the AT-TLS group does not need to be FIPS140 enabled, specify FIPS140 Off on the TTLSGroupAction statement. Refresh the AT-TLS policy as described in Action refresh in z/OS Communications Server: IP Configuration Guide.

User response: None.

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Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBTLMST

Routing code: 2, 8

Descriptor code: 12

Automation: This message goes to the console. Automation can notify the system programmer.

Example:

```
EZD1288I TCPCS AT-TLS GROUP grp_act1 INITIALIZATION FAILED - ICSF UNAVAILABLE FOR FIPS140 MODE GROUP
```

EZD1289I *Tcpname ICSF SERVICES ARE CURRENTLY AVAILABLE FOR AT-TLS GROUP group_name*

Explanation: AT-TLS is starting AT-TLS group *group_name* and ICSF is active.

In the message text:

Tcpname

The name of the TCPIP stack

group_name

The name of the AT-TLS group specified on a TTLSGroupAction statement

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBTLMST

Routing code: 2, 8

Descriptor code: 12

Automation: Not applicable for automation.

Example:

```
EZD1289I TCPCS ICSF SERVICES ARE CURRENTLY AVAILABLE FOR AT-TLS GROUP grp_act1
```

EZD1290I *Tcpname ICSF SERVICES ARE CURRENTLY UNAVAILABLE FOR AT-TLS GROUP group_name*

Explanation: AT-TLS is starting AT-TLS group *group_name* and ICSF is not active. ICSF services are not available for the AT-TLS group. This includes access to the cryptographic hardware, certificate keys stored in ICSF, Elliptical Curve Cryptography, and AES-GCM ciphers.

In the message text:

Tcpname

The name of the TCPIP stack

group_name

The name of the AT-TLS group specified on a TTLSGroupAction statement

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: If ICSF is not being used, no response is required. If ICSF services are required, the AT-TLS group must be restarted when ICSF is available. After ICSF is active, refresh the AT-TLS policy as described in Action refresh in z/OS Communications Server: IP Configuration Guide.

User response: None.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBTLMST

Routing code: 2, 8

Descriptor code: 12

Automation: This message goes to the console. Automation can notify the system programmer if ICSF services are being used by AT-TLS groups.

Example:

```
EZD1290I TCPCS ICSF SERVICES ARE CURRENTLY UNAVAILABLE FOR AT-TLS GROUP grp_act1
```

EZD1291I Active EXPLICITBINDPORTRANGE changed to *begin_port - end_port* by *tcp_name* on *mvs_name*

Explanation: The explicit bind port range, used to coordinate sysplex port allocation across the sysplex for applications issuing bind INADDR_ANY and IN6ADDR_ANY with port 0, has been changed by the specified stack on the specified MVS system.

This message is displayed only on the MVS system for the stack that caused the range to change.

In the message text:

begin_port

The first port in the new range.

end_port

The last port in the new range.

tcp_name

The name of the TCP/IP stack that caused the port range to change.

mvs_name

The name of the MVS system on which the TCP/IP stack is running.

System action: TCP/IP processing continues. Explicit bind sysplex ports will be allocated from the new range.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFEBR, EZBXFSCF

Routing code: 11

Descriptor code: 6

Example:

```
EZD1291I Active EXPLICITBINDPORTRANGE changed to 06000 - 06999 by TCP1 on MVS1
```

EZD1292I No active EXPLICITBINDPORTRANGE is available from this stack

Explanation: This message is issued in response to a DISPLAY TCPIP,*tcpname*,SYSPLEX,PORTS command. The active explicit bind port range is not available to be displayed from this stack either because explicit bind port range processing is not enabled for this stack or this stack does not have access to the sysplexports coupling facility structure.

System action: TCP/IP continues

Operator response: Issue the DISPLAY TCPIP,*tcpname*,SYSPLEX,PORTS command, specifying a stack that has explicit bind port range processing enabled, or issue a DISPLAY NET,STATS,TYPE=CFS,STRNAME=*sysplexports_structure_name* command on a VTAM node that is connected to the

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sysplexports structure. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about enabling the EXPLICITBINDPORTRANGE parameter. See the information about the DISPLAY STATS command information in z/OS Communications Server: SNA Operation for information about displaying sysplexport structure data.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFIO2

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: Not applicable.

EZD1293I Configured EXPLICITBINDPORTRANGE: *begin_port - end_port*

Explanation: This message is issued in response to a DISPLAY TCPIP,*tcpname*,SYSPLEX,PORTS command. It displays the explicit bind port range configured by specifying EXPLICITBINDPORTRANGE on the GLOBALCONFIG statement. The explicit bind port range configured on this stack might not be the range that is actively in use for allocating explicit bind sysplexports. Message EZD1294I displays the currently active explicit bind port range. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about specifying the EXPLICITBINDPORTRANGE parameter.

In the message text:

begin_port

The first port in the configured explicit bind port range.

end_port

The last port in the configured explicit bind port range.

System action: TCP/IP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFIO2

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

EZD1293I Configured EXPLICITBINDPORTRANGE: 06000 - 06999

EZD1294I Active EXPLICITBINDPORTRANGE: *begin_port - end_port*

Explanation: This message is issued in response to a DISPLAY TCPIP,*tcpname*,SYSPLEX,PORTS command. It displays the explicit bind port range that is actively in use in the sysplex (or subplex) that allocates explicit bind sysplexports.

In the message text:

begin_port

The first port in the active explicit bind port range.

end_port

The last port in the active explicit bind port range.

System action: TCP/IP continues.

Operator response: If the active explicit bind port range does not match the configured range for this stack (displayed in message EZD1293I), contact the system programmer.

System programmer response: Configure the same explicit bind port range on all the TCP/IP stacks that participate in explicit bind port range processing in the sysplex (or subplex). See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about how to coordinate explicit bind port range configuration across stacks in the sysplex.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFIO2

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

```
EZD1294I Active EXPLICITBINDPORTRANGE: 06000 - 06999
```

EZD1295I No EXPLICITBINDPORTRANGE is configured on this stack

Explanation: This message is issued in response to a DISPLAY TCPIP,*tcpname*,SYSPLEX,PORTS command. The explicit bind port range is not configured on this stack, either because no GLOBALCONFIG statement was processed that specified the EXPLICITBINDPORTRANGE parameter, or a GLOBALCONFIG statement with the NOEXPLICITBINDPORTRANGE parameter was processed.

System action: TCP/IP continues.

Operator response: If you want this stack to participate in explicit bind port range processing, contact the system programmer.

System programmer response: See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about enabling the EXPLICITBINDPORTRANGE option.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFIO2

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: Not applicable.

EZD1296I EXPLICITBINDPORTRANGE exhausted

Explanation: There are no more ports available in the active range to be allocated for explicit bind port range processing. This message indicates that the explicit bind port range is too small to accommodate all the applications that issue bind requests to INADDR_ANY and IN6ADDR_ANY and port 0. This message is issued only once every 5 minutes when the TCP/IP stack attempts to allocate a new port from the explicit bind port range and finds that no ports are available. Display the active explicit bind port range by issuing a DISPLAY TCPIP,,SYSPLEX,PORTS command. See the information about DISPLAY TCPIP,,SYSPLEX in z/OS Communications Server: IP System Administrator's Commands.

System action: TCP/IP continues. Applications that issue bind requests to INADDR_ANY and IN6ADDR_ANY , port 0 on this stack will have their subsequent connections fail if a distributed DVIPA is chosen as a source IP address.

Operator response: Contact the system programmer.

System programmer response: Either extend the active explicit bind port range or configure a new explicit bind

EZD1297I

port range with enough ports to accommodate the way the range is used in your sysplex (or subplex). The increase in size for the range should be at least 64 times the number of TCP/IP stacks configured with the GLOBALCONFIG EXPLICITBINDPORTRANGE option in the sysplex (or subplex). For example, if your current range is 06000–06639 and you have five TCP/IP stacks configured with the GLOBALCONFIG EXPLICITBINDPORTRANGE statement, you probably want to increase the range by 320 ports to 06000–06959. See the information about the GLOBALCONFIG statement in z/OS Communications Server: IP Configuration Reference for information about setting the EXPLICITBINDPORTRANGE statement. See the information about diagnosing network security services (NSS) server problems in z/OS Communications Server: IP Diagnosis Guide for information about how to determine a range for explicit bind ports.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBTCNET

Routing code: 2,8

Descriptor code: 12

Automation: This is a system console message. You might automate on this message to determine when the EXPLICITBINDPORTRANGE is exhausted, so that you can extend the range, as described in the System Programmer Response.

Example: Not applicable.

EZD1297I *tcp_name* is unable to set EXPLICITBINDPORTRANGE in the sysplexports structure

Explanation: An attempt to set the explicit bind port range in the sysplexports coupling facility structure failed. This attempt was made during the processing of a GLOBALCONFIG statement with the EXPLICITBINDPORTRANGE parameter specified. The failure might be caused by a loss of access to the sysplexports structure, either as a result of a structure rebuild or a structure disconnect.

In the message text:

tcp_name

The name of the TCP/IP stack.

System action: TCP/IP processing continues. No explicit bind port range processing is performed on this stack.

Operator response: In the console log, check for any failure or rebuild messages referencing the sysplexports structure (the sysplexports structure name will be in the format EZBEPOR $vvtt$, where the vv value is the VTAM XCF group ID specified as a VTAM start option and the tt value is the TCP XCF group ID specified in the TCP profile on the GLOBALCONFIG statement.) If a structure rebuild was in process for the sysplexports structure used by this stack, wait for the rebuild to complete and issue a VARY TCPIP,,OBEYFILE command specifying a file containing the GLOBALCONFIG EXPLICITBINDPORTRANGE statement. If VTAM lost connectivity to the structure, issue the VARY NET,CFS,ACTION=CONNECT,STRNAME=*structure_name* command to re-establish connectivity to the structure. When connectivity is re-established, issue a VARY TCPIP,,OBEYFILE command specifying a file containing the GLOBALCONFIG EXPLICITBINDPORTRANGE statement. If neither of the previous conditions are true, contact the system programmer.

System programmer response: Take a dump of TCP stack address space, the VTAM address space, and the sysplexports structure and contact the IBM Software Support Center.

User response: Not applicable

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFUT6

Routing code: 2,8

Descriptor code: 12

Example:

EZD1297I TCP1 is unable to set EXPLICITBINDPORTRANGE in the sysplexports structure

EZD1298I DYNAMIC VIPA *dvipa* DELETED FROM *tcpstackname*

Explanation: A DVIPA was deleted from the TCP/IP stack. The stack is no longer servicing any connections for this DVIPA.

In the message text:

dvipa

The dynamic VIPA that was deleted.

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: DVIPA

Module: EZBXFDVI, EZBX6DVI

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1298I DYNAMIC VIPA 19.10.1.10 DELETED FROM TCPCS

EZD1299I VIPADISTRIBUTE *keyword* IS NOT VALID BECAUSE THE CURRENT DISTRIBUTION METHOD IS NOT SERVERWLM

Explanation: The DISTMETHOD keyword was not specified on the VIPADISTRIBUTE statement that is being processed. Either the distribution method was set to the default value BASEWLM, or a previous VIPADISTRIBUTE statement for the same DVIPA and port defined a distribution method other than SERVERWLM. The specified keyword is valid only when the distribution method is SERVERWLM.

This message appears only in the system log and is preceded by either message EZZ8469I or message EZZ8470I, which identifies the VIPADISTRIBUTE definition.

In the message text:

keyword

The keyword on the VIPADISTRIBUTE profile statement.

System action: TCP/IP continues. The VIPADISTRIBUTE statement with the keyword that is not valid is ignored.

Operator response: Contact the system programmer.

System programmer response: Remove the incorrect VIPADISTRIBUTE statement from the VIPADYNAMIC block, or correct the VIPADISTRIBUTE statement by deleting the parameter and keyword that is not valid, or by adding the DISTMETHOD parameter with the value SERVERWLM to change the distribution method. Then issue a VARY TCPIP,,OBEYFILE command with an obey file that contains the corrected VIPADYNAMIC block. See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information.

User response: Not applicable.

Problem determination: Not Applicable

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: ezbxfdv2, ezbx6dv2

Routing code: 11

EZD1300I • EZD1301I

Descriptor code: 6

Automation: Not applicable.

Example:

```
EZD1299I VIPADISTRIBUTE PROCXCOST IS NOT VALID BECAUSE THE CURRENT DISTRIBUTION METHOD IS NOT SERVERWLM
```

EZD1300I TIER PARAMETER DOES NOT MATCH VIPADEFINE

Explanation: This message contains additional information for message EZZ8469I or EZZ8471I. The VIPADISTRIBUTE statement and the corresponding VIPADEFINE statement for this DVIPA must have the same TIER parameter value (either TIER1, TIER2, or not specified), but the TIER parameter values do not match.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Issue the Netstat VIPADCFG/-F command to determine which DVIPAs are configured on this stack.

If the VIPADISTRIBUTE statement was incorrect, change that statement in a VARY TCPIP,,OBEYFILE data set to specify the appropriate TIER parameter value. If the VIPADEFINE statement was incorrect, specify a VIPADELETE statement for the DVIPA in a data set that is referenced by a VARY TCPIP,,OBEYFILE command, followed by a VIPADEFINE statement for that DVIPA that specifies the appropriate TIER parameter. Also, to delete any existing VIPADISTRIBUTE DEFINE statements that reference this DVIPA, include the VIPADISTRIBUTE DELETE statements before the VIPADELETE statement in the data set.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD1301I VIPA IS DEFINED WITH THE CPCSCOPE PARAMETER BUT WITHOUT THE TIER2 PARAMETER

Explanation: This message contains additional information for message EZZ8469I. A VIPADISTRIBUTE DEFINE statement appears in a TCP/IP profile or VARY TCPIP,,OBEYFILE data set. The VIPA that it references is defined with the CPCSCOPE parameter, but without the TIER2 parameter. These DVIPAs cannot be distributed.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Issue the Netstat VIPADCFG/-F command to determine which DVIPAs are configured on this stack.

If the VIPADISTRIBUTE DEFINE statement was incorrect, change that statement in a VARY TCPIP,,OBEYFILE data set to use a DVIPA that does not specify the CPCSCOPE parameter or that specifies the CPCSCOPE and TIER2 parameters. If the VIPADEFINE statement was incorrect, specify a VIPADELETE statement for the DVIPA, followed by a VIPADEFINE statement for that DVIPA that does not specify the CPCSCOPE parameter or that specifies the CPCSCOPE and TIER2 parameters.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD1302I DVIPA *ipaddr* WITH CPCSCOPE IS ALREADY DEFINED ON A DIFFERENT CPC

Explanation: A DVIPA was defined by a VIPADEFINE or a VIPABACKUP statement in a TCP/IP profile or in a VARY TCPIP,,OBEYFILE data set with the CPCSCOPE parameter specified, but that DVIPA has already been defined on a different central processor complex (CPC). Definitions of CPCSCOPE DVIPAs must remain within a CPC.

In the message text:

ipaddr

The IP address specified on the VIPADEFINE or VIPABACKUP statement.

System action: TCP/IP continues. The VIPADEFINE or VIPABACKUP statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Move the VIPADEFINE or the VIPABACKUP statement to a TCP/IP profile that will be used by a stack that is on the same CPC as the original definition of this DVIPA or issue the VARY TCPIP,,OBEYFILE command for a stack that is on the same CPC as the original definition of this DVIPA.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADEFINE and VIPABACKUP profile statements.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1302I DVIPA 10.61.11.1 WITH CPCSCOPE IS ALREADY DEFINED ON A DIFFERENT CPC

EZD1303I GRE PARAMETER CANNOT BE MODIFIED FOR DVIPA *ipaddr*

Explanation: You tried to do one of the following:

- Specify a VIPADISTRIBUTE DEFINE statement with a GRE parameter but a VIPADISTRIBUTE statement was already specified without the GRE parameter.
- Specify a VIPADISTRIBUTE DEFINE statement without a GRE parameter but a VIPADISTRIBUTE statement was already specified with the GRE parameter.

If you want to specify the GRE parameter , it must be specified on the first VIPADISTRIBUTE statement that is specified for a DVIPA. If you specify GRE parameter on the first VIPADISTRIBUTE statement, all subsequent VIPADISTRIBUTE statements for that DVIPA must specify GRE.

In the message text:

ipaddr

The IP address that is specified on the VIPADISTRIBUTE statement.

EZD1305I

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: If GRE was specified on a VIPADISTRIBUTE DEFINE statement but a GRE parameter was not specified on an earlier definition, do one of the following:

- Correct the VIPADISTRIBUTE DEFINE statement by removing the GRE parameter.
- Enable GRE processing for distribution of this DVIPA by deleting all previous VIPADISTRIBUTE statements for this DVIPA that did not specify GRE and then reissuing the VIPADISTRIBUTE statements with the GRE parameter specified.

If GRE was not specified on a VIPADISTRIBUTE DEFINE statement but a GRE parameter was specified on an earlier definition, perform one of the following:

- Correct the VIPADISTRIBUTE DEFINE statement by adding the GRE parameter.
- Disable GRE processing for distribution of this DVIPA by deleting all previous VIPADISTRIBUTE statements for this DVIPA that specified GRE and then reissuing the VIPADISTRIBUTE statements without the GRE parameter specified.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1303I GRE PARAMETER CANNOT BE MODIFIED FOR DVIPA 10.22.9.11

EZD1305I TARGCONTROLLED DISTMETHOD CANNOT BE ENABLED FOR DVIPA *ipaddr*

Explanation: DISTMETHOD TARGCONTROLLED was found on a VIPADISTRIBUTE DEFINE statement for a DVIPA that already had a VIPADISTRIBUTE statement that specified a different distribution method. DISTMETHOD TARGCONTROLLED must be specified on the first VIPADISTRIBUTE statement that is specified for a DVIPA.

In the message text:

ipaddr

The IP address specified on the VIPADISTRIBUTE statement that contains the rejected DISTMETHOD parameter.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Do one of the following:

- Correct the VIPADISTRIBUTE DEFINE statement by removing the DISTMETHOD TARGCONTROLLED parameter.
- Enable TARGCONTROLLED as a distribution method, delete all previous VIPADISTRIBUTE statements for this DVIPA that specify a DISTMETHOD value other than TARGCONTROLLED, then reissue the VIPADISTRIBUTE statements with DISTMETHOD TARGCONTROLLED specified.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1305I TARGCONTROLLED DISTMETHOD CANNOT BE ENABLED FOR DVIPA 10.22.9.11

EZD1306I TARGCONTROLLED DISTMETHOD CANNOT BE DISABLED FOR DVIPA *ipaddr*

Explanation: A DISTMETHOD value other than TARGCONTROLLED was found on a VIPADISTRIBUTE DEFINE statement for a DVIPA that already had a VIPADISTRIBUTE statement that specified DISTMETHOD TARGCONTROLLED. DISTMETHOD cannot be modified from TARGCONTROLLED to another distribution method on subsequent VIPADISTRIBUTE definitions for a DVIPA.

In the message text:

ipaddr

The IP address specified on the VIPADISTRIBUTE statement that contains the rejected DISTMETHOD parameter.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Do one of the following:

- Correct the VIPADISTRIBUTE DEFINE statement by changing the DISTMETHOD value to TARGCONTROLLED.
- Disable TARGCONTROLLED as a distribution method, delete all previous VIPADISTRIBUTE statements for this DVIPA that specify DISTMETHOD TARGCONTROLLED, then reissue the VIPADISTRIBUTE statements with a DISTMETHOD other than TARGCONTROLLED specified.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1306I TARGCONTROLLED DISTMETHOD CANNOT BE DISABLED FOR DVIPA 10.22.9.11

EZD1307I CONTROLPORT VALUE CANNOT BE MODIFIED FOR DVIPA *ipaddr*

Explanation: There are two possible causes of this error:

- The CONTROLPORT parameter was found on a VIPADISTRIBUTE DEFINE statement for a DVIPA. The value of the parameter was different from the CONTROLPORT value that was currently in effect as a result of a previous VIPADISTRIBUTE DEFINE statement.
- The default CONTROLPORT value was used for the VIPADISTRIBUTE DEFINE statement for this DVIPA. The default value was different from the CONTROLPORT value that was currently in effect as a result of a previous VIPADISTRIBUTE DEFINE statement.

The CONTROLPORT value cannot be modified on subsequent VIPADISTRIBUTE definitions.

In the message text:

EZD1308I

ipaddr

The IP address specified on the VIPADISTRIBUTE statement that contains the rejected CONTROLPORT parameter.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Do one of the following:

- Correct the VIPADISTRIBUTE DEFINE statement by modifying it to use the same CONTROLPORT value as used on previous VIPADISTRIBUTE DEFINE statements.
- Modify the CONTROLPORT value for the DVIPA, delete all previous VIPADISTRIBUTE statements that use a different CONTROLPORT value, then reissue the VIPADISTRIBUTE statements with the new CONTROLPORT value specified.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADISTRIBUTE profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1307I CONTROLPORT VALUE CANNOT BE MODIFIED FOR DVIPA 10.22.9.11

EZD1308I DVIPA *ipaddr* IS ALREADY DEFINED WITH DIFFERENT TIER1, TIER2 OR CPCSCOPE PARAMETER

Explanation: A VIPADEFINE or VIPABACKUP statement appears in a TCP/IP profile or VARY TCPIP,,OBEYFILE file with the TIER1, TIER2, or CPCSCOPE parameter specified, but that DVIPA was already defined with a different TIER1, TIER2, or CPCSCOPE parameter specified. This message might also be issued if the VIPADEFINE or VIPABACKUP statement did not specify a TIER1, TIER2, or CPCSCOPE parameter, but the DVIPA was already defined with a TIER1, TIER2, or CPCSCOPE parameter specified.

In the message text:

ipaddr

The IP address specified on the VIPADEFINE or VIPABACKUP statement.

System action: TCP/IP continues. The VIPADEFINE or VIPABACKUP statement is rejected.

Operator response: Contact the system programmer.

System programmer response: If the initial VIPADEFINE or VIPABACKUP statement was incorrect, issue a VIPADELETE statement for the DVIPA, followed by a VIPADEFINE or VIPABACKUP statement for that DVIPA that specifies the appropriate TIER or CPCSCOPE parameter. If the current VIPADEFINE or VIPABACKUP statement is incorrect, change that statement to specify the TIER or CPCSCOPE parameter that is specified on the previous definition, and restart the stack (if the TCP/IP profile was changed) or reissue the VARY TCPIP,,OBEYFILE command.

See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information about the VIPADEFINE and VIPABACKUP profile statement.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBXFDVI

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1308I DVIPA 10.60.1.1 IS ALREADY DEFINED WITH DIFFERENT TIER1, TIER2 OR CPCSCOPE PARAMETER

EZD1309I DESTIP ALL CANNOT BE SPECIFIED WHEN GRE IS SPECIFIED

Explanation: This message contains additional information for message EZZ8471I. A DESTIP ALL parameter was found on a VIPADISTRIBUTE DELETE statement for a tier 1 DVIPA whose VIPADISTRIBUTE DEFINE statement specified a GRE parameter, but the DESTIP ALL parameter is not allowed for tier 1 DVIPAs when the GRE parameter is specified on the VIPADISTRIBUTE DEFINE statement. You must explicitly list the target IP addresses.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Contact the system programmer.

System programmer response: Change the VIPADISTRIBUTE DELETE statement to explicitly list the target IP addresses to be removed from distribution.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD1310I *tcp_name* DISCARDED INBOUND SYSPLEX DISTRIBUTED PACKETS

Explanation: An unusually high rate of inbound sysplex-distributed traffic resulted in severe contention for internal TCP/IP resources, as measured by the maximum concurrent service request block (SRB) threshold. TCP/IP discarded inbound sysplex-distributed traffic that is associated with the SRBs that exceeded the threshold to protect the system from exhausting critical resources. This message is issued once per sysplex monitor interval if the concurrent SRB threshold is exceeded. The message is deleted after an entire monitor interval passes without any SRBs exceeding the threshold.

In the message text:

tcp_name

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: Contact the system programmer.

System programmer response: Investigate the cause of the surge in distributed traffic. Contact IBM software support services if the message persists.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFPDM

Routing code: 2,8

Descriptor code: 3

EZD1311I • EZD1312I

Example:

EZD1310I TCPCS DISCARDED INBOUND SYSPLEX DISTRIBUTED PACKETS

EZD1311I SYSPLEX DISTRIBUTOR CONTROL CONNECTION TO DESTINATION IP ADDRESS *ip_addr* CLOSED DUE TO A PROTOCOL ERROR WITH RETURN CODE *internal_retcodes*.

Explanation: The control connection to the non-z/OS target has been closed as the result of a protocol error. The non-z/OS target cannot be used as a target for distributed connections.

In the message text:

ip_addr
The IP address of a distributed non-z/OS target.

internal_retcodes
The internal return code that was set by the function that detected the protocol error.

System action: TCP/IP continues.

Operator response: Contact the system programmer.

System programmer response: Contact the IBM software support services with the TCP/IP profile and the system log.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFSUB

Routing code: 2,8

Descriptor code: 12

Automation: This message is written to the system console. This message is a good candidate for automation. Automation can allow you to monitor the status of sysplex distributor control connections to non-z/OS targets.

Example:

EZD1311I SYSPLEX DISTRIBUTOR CONTROL CONNECTION TO DESTINATION IP ADDRESS 9.42.105.53 CLOSED DUE TO PROTOCOL ERROR WITH RETURN CODE 00000016

EZD1312I HEALTH CHECKER SETUP FAILED FOR *resource_name* MACRO *macro_name* RC *rtn_code* RSN *rsn_code*

Explanation: The initialization of support for checks in the IBM Health Checker for z/OS failed for the specified system resource.

In the message text:

resource_name
The name of the system resource associated with the IBM Health Checker for z/OS initialization failure.

- If the failure involves a TCP/IP stack, *resource_name* is the job name of the TCP/IP stack.
- If the failure involves the system resolver, *resource_name* is RESOLVER.

macro_name
The name of the macro that failed. This value is CSVDYNEX or HZSCHECK.

rtn_code
The return code from the failing macro. It is displayed as 2 hexadecimal digits.

rsn_code
The reason code from the failing macro. It is displayed as 4 hexadecimal digits.

System action: The system resource continues initialization. IBM Health Checker for z/OS checks are not performed for the specified system resource.

Operator response: Contact the system programmer.

System programmer response: If the failing macro was CSVDYNEX, look up the *rtn_code* and *rsn_code* values in the CSVDYNEX macro description in z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN to determine the cause of the failure. If the failing macro was HZSCHECK, look up the *rtn_code* and *rsn_code* values in the HZSCHECK macro description in IBM Health Checker for z/OS: User's Guide to determine the cause of the failure. When the cause of the failure has been determined, correct the problem and stop and restart the system resource to set up the appropriate checks in IBM Health Checker for z/OS.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communication Server TCP/IP or z/OS Communications Server Resolver

Module: EZBTIINI or EZBREINI

Routing code: 2

Descriptor code: 12

Example:

```
EZD1312I HEALTH CHECKER SETUP FAILED FOR TCPCS1 MACRO CSVDYNEX RC 0C RSN 0C02
```

EZD1313I REQUIRED SAF SERVAUTH PROFILE NOT FOUND *resource_name*

Explanation: TCP/IP denied a request because SAF indicated no decision (return code 4) for the requested resource name in the SERVAUTH class.

In the message text:

resource_name

The fully qualified name of the resource being checked.

System action: TCP/IP denies the request and processing continues.

Operator response: Save the system log and contact the system programmer.

System programmer response: The most likely cause of this error is that no profile was defined for this resource name. If you think that a profile was defined for this resource, ensure that the following are true:

1. RACF (or other SAF compliant security server) was started.
2. The SETROPTS CLASSACT(SERVAUTH) command was issued.
3. The SETROPTS GENERIC(SERVAUTH) command was issued before you defined any profiles that contain the asterisk (*) or percent sign (%) wildcard characters. Profiles entered before this command are not recognized by RACF as generic, but as discrete.
4. The spelling of the intended profile name matches the spelling of the resource name in the message.
5. The SETROPTS RACLIST(SERVAUTH) command was issued or the SETROPTS RACLIST(SERVAUTH) REFRESH command was issued after any changes were made.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TCP/IP stack

Module: Not applicable.

Routing code: 2,8

Descriptor code: 12

Example:

```
EZD1313I REQUIRED SAF SERVAUTH PROFILE NOT FOUND EZB.INITSTACK.MVS001.TCPPI
```

EZD1318I A CONNECTION FROM A *client_type* CLIENT HAS BEEN REJECTED BECAUSE THE NSS SERVER CAN ONLY HANDLE *max_client* CONCURRENT *client_type2* CLIENTS

Explanation: The network security services daemon (NSSD) has reached the limit of the number of clients that can be supported for a given type of client. No additional connections will be accepted until the number of active connections for the type of client attempting to connect is less than the supported limit.

EZD1319I

In the message text:

client_type

The possible values are Network Security Server or Network Management Interface.

max_client

The maximum number of clients of the specified type that the NSSD can service at any time.

client_type2

The same value as the *client_type* value.

System action: The new connection is closed and the server continues with its existing set of clients.

Operator response: Contact the system programmer.

System programmer response: See the information about NSS server capacity considerations inz/OS Communications Server: IP Configuration Guide for more information about the number of NSS server and network management interface clients that a single NSSD instance can support.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssClient.cpp, NmiClient.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1318I A CONNECTION FROM A NETWORK SECURITY SERVER CLIENT HAS BEEN REJECTED BECAUSE THE NSS SERVER CAN ONLY HANDLE 500 CONCURRENT NETWORK SECURITY SERVER CLIENTS

EZD1319I ERROR (*errno* | *errnojr* | *description*) WHILE OPENING MESSAGE CATALOG *name* - DEFAULT MESSAGES WILL BE USED

Explanation: The network security services daemon (NSSD) was unable to open the message catalog. Default messages will be used.

In the message text:

errno

The UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description

Describes the meaning of the *errno* value.

name

The message catalog file name that the NSSD was attempting to open.

System action: The default message catalog will be used by the NSSD.

Operator response: Contact the system programmer.

System programmer response: Correct the error indicated by the *errno*, *errnojr*, and *description* values. A common cause of this error message is an incorrectly set NSSD_FILE environment variable. See the Steps for configuring the NSS server inz/OS Communications Server: IP Configuration Guide for information about the NSSD_FILE environment variable.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssLog.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1319 ERROR (129 | 053B006C | EDC5129I NO SUCH FILE OR DIRECTORY.) WHILE OPENING MESSAGE
CATALOG NSSDMMSG.CAT - DEFAULT MESSAGES WILL BE USED
```

EZD1320I NSSD CTRACE PARMLIB MEMBER *pname* WAS NOT FOUND

Explanation: The network security services (NSS) server was unable to find the specified parmlib member and is initialized with the MINIMUM tracing option.

In the message text:

pname

The name of the CTRACE parmlib member.

System action: NSSD CTRACE initializes with the minimum tracing option; the NSS server continues.

Operator response: If different CTRACE options are required, contact the system programmer.

System programmer response: If different CTRACE options are required, configure the CTRACE parmlib member. See the information about the Sockets API traces in z/OS Communications Server: IP Diagnosis Guide for more information about configuring the CTrace parmlib member.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssTrace.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1320I NSSD CTRACE PARMLIB MEMBER CTINSS00 WAS NOT FOUND
```

EZD1321I NSSD CONFIGURATION FILE WAS NOT SPECIFIED - USING DEFAULTS FOR ALL NSSD CONFIGURATION PARAMETERS

Explanation: No configuration file was specified, so the network security services daemon (NSSD) attempted to use the default configuration file. The default NSSD configuration file does not exist so the server uses the default configuration values.

System action: NSSD reverts to default values and processing continues.

Operator response: None.

System programmer response: If you want values other than the system supplied defaults, create a configuration file. See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1322I • EZD1323I

EZD1322I INTERNAL ERROR IN MODULE *modid* : *errid* | *value1* | *value2* | *value3*

Explanation: The network security services daemon (NSSD) detected an internal error. Additional diagnostic messages might be issued.

In the message text:

modid

An internal identifier that indicates the module that detected the error.

errid

An internal identifier for this error in the detecting module.

value1

Internal error information.

value2

Internal error information.

value3

Internal error information.

System action: Results are unpredictable. One or more address space dumps can be produced with dump titles that match the message text.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes this message. If available, provide CTRACE information for component SYSTCPNS. If available, provide any dumps associated with this message.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: Numerous.

Routing code: 10

Descriptor code: 12

Example:

EZD1322I INTERNAL ERROR IN MODULE MGRRWLSV : 1 | 1 | 121 | 0

EZD1323I CERTIFICATE (*label*) DOES NOT CONTAIN AN ISSUER NAME

Explanation: A certificate in the network security services (NSS) server certificate repository does not contain an issuer field. The NSS server requires that certificates contain an issuer field as defined in RFC 2459. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

In the message text:

label

The certificate repository label that identifies the certificate that did not contain an issuer field.

System action: The certificate is ignored by the network security server daemon.

Operator response: None.

System programmer response: Remove the certificate from the NSS server certificate repository. If this was a certificate to be used on behalf of an NSS client, obtain a new certificate containing an Issuer field.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1323I CERTIFICATE (CLIENT1CERT) DOES NOT CONTAIN AN ISSUER NAME

EZD1324I CERTIFICATE (*label*) CANNOT BE USED TO CREATE A SIGNATURE AND IS NOT A CERTIFICATE AUTHORITY CERTIFICATE

Explanation: A certificate in the network security server certificate repository cannot be used to create a digital signature and is not a Certificate Authority certificate. A certificate must contain a private key to be used to create a signature.

If a KeyUsage extension is present in the certificate the digitalSignature bit must be set.

To be a Certificate Authority certificate the certificate must meet one of the following conditions:

- The certificate contains a basic constraints extension that indicates that the subject of this certificate is a Certificate Authority.
- The certificate does not contain a basic constraints extension, but the certificate is marked as trusted in the certificate repository and the issuer name in the certificate is equal to the subject name in the certificate (that is, it is self signed).

In the message text:

label

The certificate repository label identifying the certificate.

System action: The certificate is ignored by the network security services daemon. Processing continues.

Operator response: None.

System programmer response: If this certificate is intended to be used on behalf of a network security services (NSS) client to create a signature, then verify that the private key is stored in the certificate repository. If the private key is not stored in the repository remove the certificate from the repository and add it back to the repository with its private key. If the KeyUsage extension is present in the certificate and the digitalSignature bit is not set, the certificate cannot be used to create a signature. A new certificate must be obtained. If this certificate is intended to be used as a Certificate Authority certificate and it is self-signed, then verify that it is marked as trusted. If it is not self-signed then the certificate cannot be used as a Certificate Authority certificate. A new certificate must be obtained.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1324I CERTIFICATE (CERTWITHNOKEY) CANNOT BE USED TO CREATE A SIGNATURE AND IS NOT A CERTIFICATE AUTHORITY CERTIFICATE

EZD1325I ERROR PROCESSING CERTIFICATE (*label* | **error: error)**

Explanation: An unexpected error was encountered while processing a certificate in the network security services (NSS) server certificate repository. Additional diagnostic messages might be issued.

In the message text:

label

The certificate repository label that identifies the certificate that was being processed when the error was encountered.

error

An internal identifier for this error in the detecting module.

EZD1326I

System action: The certificate is ignored by the network security services daemon (NSSD).

Operator response: None.

System programmer response: If the certificate is not intended to be used to create a signature or to be used as a certificate authority certificate, then remove the certificate from the certificate repository.

If the certificate is intended to be used to create a signature or used as a certificate authority certificate, then perform the actions in the problem determination.

User response: None.

Problem determination: If this problem persists, enable the CERTINFO syslog level in the NSSD configuration file and cause the certificate repository to be reprocessed. Check for additional messages relating to this certificate. The certificate repository can be reprocessed by stopping and restarting the NSSD or by modifying the certificate repository.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: 10

Descriptor code: 12.

Example:

```
EZD1325I ERROR PROCESSING CERTIFICATE ( LABEL: BADCERT | ERROR: 001F )
```

**EZD1326I REQUEST TYPE *request* WITH CORRELATOR ID *corrid* FROM CLIENT *clientname* FAILED -
RETURN CODE *returncode* REASON CODE *reasoncode***

Explanation: A request from a network security services (NSS) client failed.

In the message text:

request

An identifier that describes the type of request.

corrid

A 16-byte identifier used by a client to uniquely identify a request sent to the NSS server.

clientname

The name of the NSS client that originated the request.

returncode

Documents the type of failure. These return codes are listed and described in the networking management information in z/OS Communications Server: IP Programmer's Guide and Reference.

reasoncode

A reason code that documents the reason for the failure. See the information about network manager return and reason codes in z/OS Communications Server: IP Programmer's Guide and Reference.

System action: The error information is returned to the NSS client. The NSSD continues.

Operator response: Contact the system programmer.

System programmer response: See the information about diagnosing network security services (NSS) server problems in z/OS Communications Server: IP Diagnosis Guide to determine the appropriate response.

User response: None.

Problem determination: The NSS client might provide additional diagnostic messages containing the same correlator as message EZD1326I. If the administrator of the NSS client can provide diagnostic information, the matching correlator can be used to locate the specific failure condition in the NSS server log file.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: Various

Routing code: 10

Descriptor code: 12

Example:

EZD1326I Request type NSS_CreateSignatureReqToSrv with correlator ID 000000000000020D0000000000000000
 from client V1RAIPSECREG_TCPCS8_RGHT failed - return code EINVAL reason code NSSRsnBadLIDType

EZD1327I NSSD CTRACE INITIALIZATION ERROR - FUNCTION *function* RETURN CODE *rc* REASON CODE *rsn*

Explanation: The Network Security Services Daemon (NSSD) failed to initialize the CTRACE subsystem.

In the message text:

function

The function that is being processed when the CTRACE error occurred.

rc The error return code.

rsn

The error reason code.

System action: NSSD continues without CTRACE enabled.

Operator response: See the information about CTRACE in z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN for the return code and reason code explanations for the different CTrace functions. See the information about CTRACE—RESOLVER in z/OS Communications Server: IP Diagnosis Guide for more information about diagnosing CTRACE problems. Ensure that storage is available for the size of the trace buffers. Ensure that CTRACE definition parameters are set correctly. If these checks do not reveal the cause of the problem, contact the system programmer.

System programmer response: If the problem cannot be resolved, contact IBM software support services and provide a syslog that includes this message.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssTrace.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1327I NSSD CTRACE INITIALIZATION ERROR : FUNCTION CTSSM RETURN CODE 00000004 REASON CODE 00000004

EZD1328I CERTIFICATE REPOSITORY *name* SUCCESSFULLY PROCESSED FOR *event*

Explanation: The network security services daemon (NSSD) successfully updated its internal representation of the certificate repository.

In the message text:

name

The name of the network security services (NSS) server certificate repository.

event

The event that caused the certificate repository to be updated. Possible values are:

- NSS initialization
- NSS MODIFY command
- NSS certificate repository updated

System action: The NSS server uses the new certificate repository.

Operator response: None.

System programmer response: None.

User response: None.

EZD1329I • EZD1330I

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertMgr.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1328I CERTIFICATE REPOSITORY NSSD/KEYRING SUCCESSFULLY PROCESSED FOR NSS INITIALIZATION
```

EZD1329I ERROR ENCOUNTERED PROCESSING CERTIFICATE REPOSITORY *name* FOR *event*

Explanation: The network security services daemon (NSSD) was unsuccessful in updating its internal representation of the certificate repository.

In the message text:

name

The name of the network security services (NSS) server certificate repository.

event

The event that triggered the certificate repository to be updated. Possible values are:

- NSS initialization
- NSS MODIFY command
- NSS certificate repository update

System action: The NSS server continues to use its previous internal representation of the certificate repository. If a previous internal representation of the certificate repository did not exist, the NSS server will not be able to process certificate requests from network security clients until action is taken to correct the problem.

Operator response: None.

System programmer response: Correct the problem and issue the NSSD MODIFY command.

User response: Not applicable.

Problem determination: If this problem persists, enable the CERTINFO syslog level in the NSSD configuration file and cause the certificate repository to be reprocessed. Check for additional messages relating to this certificate. The certificate repository can be reprocessed by stopping and restarting the NSSD or by modifying the certificate repository.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertMgr.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1329I ERROR ENCOUNTERED PROCESSING CERTIFICATE REPOSITORY NSSD/KEYRING FOR NSS INITIALIZATION
```

EZD1330I ERROR (*gsk_rc* | *description*) WHILE OPENING CERTIFICATE REPOSITORY *name*

Explanation: The network security services daemon (NSSD) was unable to open the certificate repository specified on the NssConfig statement.

In the message text:

gsk_rc

The hexadecimal CMS status code. See the information about the CMS status codes in z/OS Cryptographic Services System SSL Programming.

description

Describes the meaning of the *gsk_rc* value.

name

The name of the certificate repository that the NSSD was unable to open.

System action: Processing continues.

Operator response: None.

System programmer response: Ensure that the repository name is defined correctly and that the user under which the NSSD was started is authorized to access the repository. When configured without the IBM Configuration Assistant for z/OS Communications Server, the certificate repository name is set on the KeyRing parameter of the NssConfig statement. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference. When configured with the IBM Configuration Assistant for z/OS Communications Server, the certificate repository name is set in the key ring database name located in the Image Information: NSSD Settings panel.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1330I ERROR ( 3353006 | FILE OR KEYRING NOT FOUND ) WHILE OPENING CERTIFICATE REPOSITORY
NSSD/KEYRING
```

EZD1331I *name* IS NOT A VALID CERTIFICATE REPOSITORY

Explanation: The repository specified on the NssConfig statement is not a certificate repository.

In the message text:

name

The repository specified on the KeyRing parameter of the NssConfig statement.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Specify a valid repository name on the KeyRing parameter of the NssConfig statement in the network security services (NSS) server configuration file. See the information about the NssConfig statement in z/OS Communications Server: IP Configuration Reference for more information.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1331I BADKEYRING IS NOT A VALID CERTIFICATE REPOSITORY
```

EZD1332I SYNTAX ERROR IN NSSD CTRACE PARMLIB MEMBER *pname*

Explanation: A syntax error was detected in the specified parmlib member, which is used to configure network security services daemon (NSSD) CTRACE options. NSSD CTRACE is initialized with the minimum tracing option.

In the message text:

EZD1333I • EZD1334I

pname

The name of the CTRACE parmlib member.

System action: NSSD CTRACE initializes with the minimum tracing option; NSSD continues.

Operator response: Correct the syntax error in the parmlib member. See the information about the Sockets API traces in z/OS Communications Server: IP Diagnosis Guide for more information about configuring the CTrace parmlib member.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssTrace.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1332I SYNTAX ERROR IN NSSD CTRACE PARMLIB MEMBER CTINSS00

EZD1333I KEYWORD OR KEYVALUE REJECTED - KEYWORD *keyword* KEYVALUE *keyvalue*

Explanation: The network security services daemon (NSSD) was processing a configuration file and either the keyword is unsupported or the key value is not valid for the keyword.

In the message text:

keyword

The keyword portion of the configuration line.

keyvalue

The value entered for the keyword.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes will be committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server will not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contains valid keywords and key values.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: StatementParser.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1333I KEYWORD OR KEYVALUE REJECTED - KEYWORD PORTTT KEYVALUE 4900

EZD1333I KEYWORD OR KEYVALUE REJECTED - KEYWORD PORT KEYVALUE -4900

EZD1334I RIGHT BRACE () EXPECTED, BUT NOT FOUND

Explanation: The network security services daemon (NSSD) was processing a configuration file and the right brace () of a configuration statement was missing. All statements begin with a left brace () and end with a right brace (). Each brace must be on a separate line.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contains valid keywords and key values.

User response: No action needed.

Problem determination: None

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: StatementParser.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1335I *statementname* IS NOT A RECOGNIZED STATEMENT TYPE

Explanation: An unrecognized statement type occurs in the network security services daemon (NSSD) configuration file.

In the message text:

statementname

The name of the statement that appears on the line preceding the left brace ({}).

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: If this message was unexpected, see the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contains valid contents.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: ConfigFileParser.cpp

Routing code: 10

Descriptor code: 12

Example: If the NssConfig statement name is spelled incorrectly, as in the following example, then the parser stops processing the configuration file:

```
NssConfigggg
{
PORT 4900
}
```

EZD1335I NssConfigggg IS NOT A RECOGNIZED STATEMENT TYPE

EZD1336I THE CONFIGURATION VALUE *value* ENTERED FOR *keywordname* IS OUTSIDE THE ALLOWABLE RANGE *lowvalue - highvalue*

Explanation: The value configured for the specified network security services daemon (NSSD) keyword is outside the allowable range.

EZD1337I

In the message text:

value

The value configured for the keyword in the NSSD configuration file.

keywordname

The name of the NSSD configuration keyword.

lowvalue

The lowest value allowed for the keyword.

highvalue

The highest value allowed for the keyword.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Correct the error in the configuration file and restart NSSD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1336I THE CONFIGURATION VALUE 9999 ENTERED FOR SYSLOGLEVEL IS OUTSIDE THE ALLOWABLE RANGE 0 - 255
```

EZD1337I NSS SERVER IS USING TCP PORT *portvalue*

Explanation: The TCP port of the network security services (NSS) server was successfully initialized or changed during the processing of a configuration file. This message is logged the first time the server starts up and each time thereafter that a MODIFY NSSD,REFRESH command causes the server to change to a different port.

In the message text:

portvalue

The TCP port that the NSS server will be listening to.

System action: Processing continues. Any existing NSS client connections are maintained on the previously configured port.

Operator response: No action needed.

System programmer response: No action needed.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1337I NSS IS USING TCP PORT 4999
```

EZD1338I NSS SERVER IS USING THE KEY RING *keyringvalue*

Explanation: The network security services (NSS) server key ring was successfully initialized or changed during the processing of the configuration file. This message is logged the first time the server starts up and each time thereafter that a REFRESH command causes the server to change to a different key ring.

In the message text:

keyringvalue

The name of the key ring that the NSS server is using for creating and verifying signatures.

System action: Processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1338I NSS IS USING THE KEY RING NSSD2/KEYRING

EZD1339I THE LENGTH *partlength* OF THE *parttype* PORTION OF THE KEYRING PARAMETER *keyringvalue* IS OUTSIDE OF THE ACCEPTABLE RANGE OF *lowvalue* - *highvalue*

Explanation: The network security services daemon (NSSD) was processing a configuration file and either the user ID portion or the ring name portion of the Keyring parameter is the wrong length.

In the message text:

partlength

The length of the value as it appeared in the configuration file.

parttype

Possible values are userid or keyring.

keyringvalue

The value entered for the keyword.

lowvalue

The shortest possible length of the value.

highvalue

The longest possible length of the value.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: See the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contents are valid.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

EZD1340I • EZD1341I

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1339I THE LENGTH 12 OF THE USERID PORTION OF THE KEYRING PARAMETER USER00001234/KEYRING IS  
OUTSIDE OF THE ACCEPTABLE RANGE OF 1 - 8
```

```
EZD1339I THE LENGTH 0 OF THE RINGNAME PORTION OF THE KEYRING PARAMETER USER023/ IS  
OUTSIDE OF THE ACCEPTABLE RANGE OF 1 - 237
```

EZD1340I THE keyword *VALUE* *keyvalue* CONTAINS CHARACTERS THAT ARE NOT 0-9

Explanation: The network security services daemon (NSSD) configuration file contains a value that is not a valid decimal number. The value must contain only the integers in the range 0–9. Negative numbers are not allowed.

In the message text:

keyword

The keyword portion of the configuration line.

keyvalue

The value entered for the keyword.

System action: The processing of the configuration file stops. If this occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contents are valid.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1340I THE PORT VALUE -4999 MAY CONTAIN ONLY THE DECIMAL CHARACTERS 0-9
```

```
EZD1340I THE PORT VALUE STARBOARD MAY CONTAIN ONLY THE DECIMAL CHARACTERS 0-9
```

EZD1341I THE NSS SERVER PORT VALUE *portvalue* IS INCORRECT BECAUSE IT IS OUTSIDE OF THE ALLOWABLE RANGE 1-*maxport*

Explanation: In the network security services daemon (NSSD) configuration file, the port value is not in the range supported by the server.

In the message text:

portvalue

The value specified for the port.

maxport

The maximum value of the port range portvalue is the value that was specified.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: See the system programmer.

System programmer response: No action needed.

User response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contains valid contents.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1341I THE NETWORK SECURITY SERVER PORT VALUE 750000 IS INCORRECT BECAUSE IT IS
OUTSIDE OF THE ALLOWABLE RANGE 1-65535
```

**EZD1342I THE NSS SERVER CANNOT PROVIDE CERTIFICATE SERVICES USING THE CURRENTLY
CONFIGURED CERTIFICATE REPOSITORY NAME (*repositoryname*)**

Explanation: The Keyring parameter of the network security services daemon (NSSD) does not specify a usable certificate repository. The Keyring value might appear to be syntactically valid, but it is not correctly configured for use by the user ID under which NSSD is running. Certificate related services cannot be provided.

In the message text:

repositoryname

The name of the certificate repository as configured with the Keyring parameter. This field will be blank if no key ring was specified in the configuration file.

System action: NSSD continues without support for remote certificate related services.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information. Correct the error in the configuration file and restart NSSD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1342I THE NSS SERVER CANNOT PROVIDE CERTIFICATE SERVICES USING THE CURRENTLY CONFIGURED
CERTIFICATE REPOSITORY NAME (USER100/MYKEYRING)
```

**EZD1343I THE VALUE IS MISSING FOR NETWORK SECURITY SERVER CONFIGURATION KEYWORD
*keywordname***

Explanation: The key word requires a value but no value was specified in the network security services (NSS) server configuration file.

In the message text:

keywordname

The name of the keyword that is missing a value.

EZD1344I

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the previous configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Correct the error in the configuration file and restart NSSD or reissue the MODIFY command.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1343I THE VALUE IS MISSING FOR NETWORK SECURITY SERVER CONFIGURATION KEYWORD SYSLOGLEVEL
```

EZD1344I AN ERROR OCCURRED WHILE READING THE NSS SERVER CONFIGURATION FILE *configfile* - RETURN CODE *retcode*

Explanation: A general error occurred while processing the network security services daemon (NSSD) configuration file. Additional messages will be issued to provide more specific information.

In the message text:

configfile

The name of the configuration file that is being processed.

retcode

The general configuration parsing return code. Possible values are:

2 Cannot open the configuration file.

3 There was a syntax or value error in the file.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file is present and that the server has permission to read it.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1344I AN ERROR OCCURRED WHILE READING THE NSS SERVER CONFIGURATION  
FILE, /etc/badpath/nssd.conf - RETURN CODE 2
```

EZD1345I THIS INSTANCE OF THE NSS SERVER CANNOT START BECAUSE THERE IS ALREADY ANOTHER INSTANCE OF THE SERVER RUNNING ON THIS SYSTEM - TOKEN *tokenname* LEVEL *level* PERSIST *persist* RETURN CODE *retcode*

Explanation: Only one network security services daemon (NSSD) can be running at the same time on the same system.

In the message text:

tokenname

The name of the MVS token that the server is trying to get exclusive access to. This value is NSSD for the NSSD.

level

The level of exclusivity required. This value is 4 for NSSD.

persist

Possible values are:

- 0 if the token is released when the server ends
- 1 if it persists after the server ends.

This value is 0 for NSSD.

retcode

The return code from the MVS token service. See the z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for a complete list of IEANTCR return and reason codes.

System action: This instance of the network security services (NSS) server does not start.

Operator response: If a copy of the NSSD is already running, then it must be shut down before starting a new instance. If the NSSD is not running, contact the system programmer.

System programmer response: Contact the IBM Service Center with this message.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1345I THIS INSTANCE OF THE NSS SERVER CANNOT START BECAUSE THERE IS ALREADY ANOTHER INSTANCE OF THE SERVER RUNNING ON THIS SYSTEM - TOKEN NSSD LEVEL 4 PERSIST 0 RETURN CODE 4

EZD1346I LEFT BRACE ({) EXPECTED, BUT NOT FOUND.

Explanation: The left brace ({) of a configuration statement was missing. All statements begin with a left brace ({) and end with a right brace (}). Each brace must be on a separate line.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: See the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file contents are valid. In particular, look for unmatched braces.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: StatementParser.cpp

EZD1347I • EZD1348I

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1347I INTERNAL ERROR *errid* IN MODULE *modname* - UNABLE TO OBTAIN MEMORY OF SIZE *size*

Explanation: The network security services daemon (NSSD) was unable to obtain the required amount of memory.

In the message text:

errid

The code that helps IBM service representatives identify the specific storage allocation request.

modname

The name of the module that encountered the error.

size

The amount of storage requested, in bytes.

System action: The current operation fails and the NSSD attempts to continue.

Operator response: Ensure that there is enough memory available on the system and try the operation again. The module name and error ID can be used to determine the exact location of the storage allocation request, if that level of problem determination is required. If so, contact the system programmer with these values.

System programmer response: If you contact IBM software support services in the process of correcting this problem, provide the module name *modname* and error ID *errid* so that the IBM software support services representative can identify the specific storage allocation call that failed.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: Numerous

Routing code: 10

Descriptor code: 12

Example:

EZD1347I INTERNAL ERROR 9 IN MODULE EZAINCLS - UNABLE TO OBTAIN MEMORY OF SIZE 840154

EZD1348I THE MODIFY COMMAND EXCEEDED THE MAXIMUM ALLOWED LENGTH OF *maxlen*

Explanation: The network security services (NSS) server MODIFY command can accept only the first *maxlen* value entered.

In the message text:

maxlen

The maximum number of characters that the MODIFY command can accept.

System action: Processing continues using the previous configuration values.

Operator response: Reissue the MODIFY command without exceeding the length limit.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyComandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1348I THE MODIFY COMMAND EXCEEDED THE MAXIMUM ALLOWED LENGTH OF 128

EZD1349I THE COMMAND ENTERED IS NOT A RECOGNIZED MODIFY REQUEST - *input*

Explanation: The operator entered an unsupported MODIFY request.

In the message text:

input

The MODIFY command text entered by the operator.

System action: The command is ignored.

Operator response: Correct and reissue the command.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1349I THE COMMAND ENTERED IS NOT A RECOGNIZED MODIFY REQUEST - zzzzz

EZD1350I THE MODIFY SUBCOMMAND IS NOT SUPPORTED BY THE NSS SERVER - *subcommand*

Explanation: The operator has entered a MODIFY subcommand that is not supported by the network security services (NSS) server.

In the message text:

subcommand

The portion of the MODIFY command that the operator entered on the console.

See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for more information about the MODIFY command.

System action: The command is ignored.

Operator response: Correct and reissue the command.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example: If the operator enters MODIFY nssd>Hello World then the following message would be sent to the console:

EZD1350I THE MODIFY COMMAND OPTION IS NOT SUPPORTED BY THE NSS SERVER - HELLO WORLD

EZD1351I • EZD1353I

EZD1351I NSS SERVER SHUTDOWN SEQUENCE HAS BEGUN

Explanation: The network security services (NSS) server has begun its shutdown sequence.

System action: The server is in the process of shutting down. No more work is processed.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example: Not applicable.

EZD1352I NSS SERVER RECEIVED THE STOP COMMAND

Explanation: The network security services (NSS) server recognizes that a STOP command was issued on the console.

System action: The NSS Server begins its shutdown sequence.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1352I NSS SERVER RECEIVED THE STOP COMMAND

EZD1353I NSS SERVER CONFIG PROCESSING COMPLETE USING FILE *filename*

Explanation: The network security services (NSS) server successfully completed processing the configuration file. This message can follow the successful startup of the server or a successful MODIFY REFRESH command.

In the message text:

filename

The US file or MVS data set name that contains NSS server configuration statements.

- USS file names are delimited by single quotation marks ('), as in this example: '/etc/security/nssd.conf'
- MVS data set names are prefixed with double slashes (//) and the remainder of the data set name is enclosed in single quotation marks ('), as in this example: //'MVS.FILENAME(MEMBER)'

System action: None.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NSSModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1353I NSS SERVER CONFIG PROCESSING COMPLETE USING FILE /etc/security/nssd.conf
```

EZD1354I NSS SERVER ERROR rc OCCURRED WHILE PROCESSING *filename* - MODIFY REFRESH COMMAND IS REJECTED

Explanation: An error occurred during the processing of a configuration file in response to a MODIFY REFRESH command.

In the message text:

rc The return code. Possible values are:

- 2** The file does not exist or could not be opened.
- 3** An error was detected while processing one of the statements in the file.

filename

The name of the configuration file that was being processed.

System action: The processing of the configuration file stops. No changes are committed and the server continues using the old configuration values.

Operator response: Reissue the MODIFY command using the correct file name. If problems persist, contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Verify that the configuration file exists, that it is accessible to the server and that the file content is valid.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NSSModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1354I NSS SERVER ERROR 2 OCCURRED WHILE PROCESSING /etc/security/nssd.conf3 - MODIFY REFRESH COMMAND IS REJECTED
```

EZD1355I INCORRECT VALUE FOR THE FILE KEYWORD ON THE NSS SERVER MODIFY COMMAND - *file*

Explanation: The file name was specified incorrectly on a MODIFY *procname*,REFRESH,FILE=*file* command.

In the message text:

file

The incorrect file name.

System action: The MODIFY command is ignored. Processing continues using the previous configuration values.

Operator response: Correct the file name and try again. If problems persist, contact the system programmer.

System programmer response: See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: Not applicable.

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Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1355I INCORRECT VALUE FOR THE FILE KEYWORD ON THE NSS SERVER MODIFY  
COMMAND - ///nssd.conf
```

EZD1356I NSS SERVER SHUTDOWN SEQUENCE HAS COMPLETED

Explanation: The network security services (NSS) server has completed its shutdown sequence and is terminating.

System action: The NSS Server ends.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1356I NSS SERVER SHUTDOWN SEQUENCE HAS COMPLETED
```

EZD1357I NSS SERVER INITIALIZATION SEQUENCE HAS BEGUN

Explanation: This is a notification that the server has begun its initialization sequence.

System action: The network security services (NSS) server is starting up.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1357I NSS SERVER INITIALIZATION SEQUENCE HAS BEGUN
```

EZD1358I NSS SERVER INITIALIZATION SEQUENCE HAS COMPLETED

Explanation: This is a notification that the network security services (NSS) server has completed its initialization sequence.

System action: The NSS Server is ready.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1358I NSS SERVER INITIALIZATION SEQUENCE HAS COMPLETED
```

EZD1359I NSS SERVER RELEASE *release* SERVICE LEVEL *level* CREATED ON *date*

Explanation: This message is the first message printed to the console when the network security services (NSS) server is started.

In the message text:

release

The release name.

level

The service level name.

date

The server build date.

System action: None.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1359I NSS SERVER RELEASE CS V1R9 SERVICE LEVEL CS060716 CREATED ON Jul 16 2006
```

EZD1360I TCP PORT *portnumber* IS CURRENTLY UNAVAILABLE TO THE NSS SERVER

Explanation: The network security services (NSS) server cannot connect to the specified port because the port is unavailable. The port might be in use by another program, it might be reserved for another program or NSS might not have the authority to access the port.

In the message text:

portnumber

The TCP port to which the NSS server is trying to bind.

System action: If this message is issued during server startup, then the server does not start. If this message is issued during a MODIFY REFRESH command, the refresh is rejected and the server continues to run using the configuration values that were in place prior to the refresh attempt.

Operator response: Contact the system programmer.

System programmer response: The network security services (NSS) server must be running on a unique TCP port.

EZD1361A • EZD1362A

In the case of a conflict, either the NSS server or the conflicting program must be reconfigured to use a different TCP port. If NSS does not have access to the port, verify that the port is not reserved for another program and that NSS has been granted sufficient authority to access the port. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1360I TCP PORT 4503 IS CURRENTLY UNAVAILABLE TO THE NSS SERVER

EZD1361A NSS SERVER IS WAITING FOR A TCP/IP STACK TO START

Explanation: The network security services (NSS) server is waiting for a stack to start.

System action: The NSS server suspends processing until a TCP/IP stack is available.

Operator response: Ensure that a TCP/IP stack is up and running on the NSS server machine. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for more information.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1361A NSS SERVER IS WAITING FOR A TCP/IP STACK TO START

EZD1362A NSS SERVER IS WAITING FOR TCP PORT *portnumber*

Explanation: The network security services (NSS) server has been configured to listen on TCP the specified port but it cannot bind to that port because another process is currently using it or because the port is not configured for access.

In the message text:

portnumber

The TCP port number to which the NSS server is trying to bind.

System action: The NSS server continues to wait for its port to become available. This message will remain on the console until one of the following occurs:

- The port is released and the NSS server is able to bind to it. Processing continues normally from this point.
- An unrecoverable error occurred while attempting to bind to the port. The NSS server ends.
- The operator clears the message from the console manually. The NSS server continues to wait for its port. Processing continues when either the port is obtained or the NSS server ends.

Operator response: Contact the system programmer.

System programmer response: Verify that the NSS server is configured to use the correct TCP port. If the NSS server is configured correctly, then determine which other process is using the TCP port or whether there is a

configuration error for the TCP port itself. See z/OS Communications Server: IP Configuration Guide for information about configuring the NSS server and z/OS TCP ports.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: ServerILM.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1362A NSS SERVER IS WAITING FOR TCP PORT 4519

**EZD1363I EXCEPTION *classname* ENCOUNTERED IN MODULE *modname* - ERROR ID *internal_error_ID* *rc* *rc*
ERRNO *errno* ERRNOJR *errnojr***

Explanation: A runtime exception was issued.

In the message text:

classname

The name of the exception class.

modname

The name of the module in which the exception was detected.

internal_error_ID

An internal error ID used by IBM to identify the code that detected the error

rc

The return code, if any, from the function call that caused or detected the error condition.

errno

The runtime errno value, if any, at the time the exception was detected.

errnojr

The runtime errno2 value, if any, at the time the exception was detected.

System action: Processing continues in most cases. In some cases the network security services (NSS) server might experience problems or end.

Operator response: Contact the system programmer

System programmer response: This message is not always a sign of an unrecoverable network security services daemon (NSSD) condition. However, any traces or logs containing this message should be forwarded to IBM Service if the server is unable to operate normally after these messages have been logged.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: Exception.cpp

Routing code: 10

Descriptor code: 12

Example:

EZD1363I EXCEPTION CONSTRUCTORError ENCOUNTERED IN MODULE EZAINCEM - ERROR ID 1 RC 1 ERRNO 0 ERRNOJR 0

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EZD1364I NSS SERVER CANNOT WRITE PROCESS ID NUMBER *pid* TO *filename* - ERRNO *errno* ERRNO DESCRIPTION *description*

Explanation: A file system error occurred when the network security services (NSS) server tried to write its process ID number to a file.

In the message text:

pid

The NSS server process ID.

filename

The file into which the NSS server was trying to write its process ID number.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: Network security services daemon (NSSD) processing continues.

Operator response: None.

System programmer response: This is not a problem unless the pid file will be used for automation (for example, to automate ending the NSSD). Information about setting the pid file location can be found in the z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1364I NSS SERVER CANNOT WRITE PROCESS ID NUMBER 83886209 TO /tmp-baddir/nssd.pid -  
ERRNO 129 ERRNO DESCRIPTION EDC5129I NO SUCH FILE OR DIRECTORY.
```

EZD1365I A MESSAGE-GENERATED DUMP HAS BEEN CREATED WITH TITLE *title*

Explanation: A network security services (NSS) server syslog message generated an address space dump. The message that generated the dump appears immediately after this message in the system log.

In the message text:

title

The text associated with the dump. The title contains the message number and associated message text that caused the dump to be generated.

System action: After the dump is created, the network security services daemon (NSSD) continues processing.

Operator response: Contact the system programmer.

System programmer response: Capture the system log and the generated dump. Contact IBM software support services to analyze this data.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssLog.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1365I A MESSAGE-GENERATED DUMP HAS BEEN CREATED WITH TITLE NSSD MESSAGE GENERATED
dump EZD1322I INTERNAL ERROR IN MODULE EZAINMAI 0003 - 0 | 0 | 0
```

EZD1366I A MESSAGE-GENERATED DUMP WAS SUPPRESSED FOR MESSAGE *message*

Explanation: A network security services (NSS) server syslog message attempted to generate an address space dump. However, no more than two message-generated dumps can be created in a 15-minute period, so the dump was suppressed. The message that attempted to generate the dump appears immediately after this message in the system log.

In the message text:

message

The message that attempted to generate the dump.

System action: Network security services daemon (NSSD) processing continues.

Operator response: Contact the system programmer.

System programmer response: Capture the system log and any message-generated dumps that were created earlier. Contact IBM software support services to analyze this data.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssLog.cpp

Routing code: 10

Descriptor code: 12

Example:

```
EZD1366I A MESSAGE-GENERATED DUMP WAS SUPPRESSED FOR MESSAGE
EZD1322I INTERNAL ERROR IN MODULE EZAINMAI 0003 - 0 | 0 | 0
```

EZD1367I NSS *discipline_type* **CLIENT** *client_name* CONNECTED TO THE NSS SERVER USING NULL-ENCRYPTION

Explanation: The network security services (NSS) server and the NSS client negotiated a connection that used the NULL encryption algorithm, but the connection should be encrypted.

In the message text:

discipline_type

The discipline that the NSS client is using.

client_name

The name of the client that is connected to the NSS server.

System action: The NSS server continues to process requests over the unencrypted session.

Operator response: Contact the system programmer.

System programmer response: Modify the AT-TLS policy to require encryption of connections to the NSS server. See the information about the AT-TLS policy statements in z/OS Communications Server: IP Configuration Reference for more information about AT-TLS policy statements.

User response: No action needed.

Problem determination: None

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssClient.cpp

EZD1368I • EZD1369I

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the operator console and syslog.

Example:

```
EZD1367I NSS XMLAPPLIANCE CLIENT XMLAPPLIANCEDOMAIN1 CONNECTED TO THE NSS SERVER USING NULL-ENCRYPTION
```

EZD1368I NSS SERVER CONFIGURATION FILE *parm* PARAMETER DOES NOT SUPPORT VALUE - *value*

Explanation: An unsupported value was configured for one of the network security services (NSS) parameters.

In the message text:

parm

The parameter that contains the unsupported value.

value

The unsupported value.

System action: Processing of the configuration file stops. If this error occurs during the processing of a MODIFY command, no changes are committed and the server continues using the old configuration values. If this error occurs during the server startup sequence, the server does not start.

Operator response: Contact the system programmer.

System programmer response: Verify that the configuration file contains valid keywords and key values. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: No action needed.

Problem determination: None

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the operator console and syslog.

Example:

```
EZD1368I NSS SERVER CONFIGURATION FILE DISCIPLINE PARAMETER DOES NOT SUPPORT VALUE - IPSEC
```

EZD1369I NSS SERVER CONFIGURATION FILE *parm* PARAMETER CONTAINS EXTRANEOUS INFORMATION - *text*

Explanation: Extraneous information was configured for one of the network security services (NSS) parameters.

In the message text:

parm

The parameter that contains extraneous information.

text

The extraneous information.

System action: Configuration file processing stops. If this error occurs during a MODIFY command, no changes are committed and the server continues using the old configuration values. If this error occurs during the server startup sequence, the server does not start.

Operator response: Contact the system programmer.

System programmer response: Verify that the configuration file contains valid keywords and key values. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the operator console and syslog.

Example: If the system programmer configured Discipline IPSec Enable Discipline XMLAppliance Disable in the NSS configuration file, the following message would be issued:

EZD1369I NSS SERVER CONFIGURATION FILE DISCIPLINE PARAMETER CONTAINS EXTRANEous INFORMATION - DISCIPLINE XMLAPPLIANCE DISABLE

EZD1370I INCORRECT SYNTAX ON THE MODIFY NSS SERVER SUBCOMMAND *subcommand*

Explanation: The syntax of the MODIFY network security services (NSS) server command is incorrect. The syntax error occurs after the subcommand.

In the message text:

subcommand

The subcommand portion of the MODIFY command that the operator entered on the console. The syntax error occurs after the subcommand.

System action: The command is ignored.

Operator response: Correct and reissue the command. See the information about the NSS MODIFY command in z/OS Communications Server: IP System Administrator's Commands for the command syntax.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is sent to the console.

Example: If the operator issued the MODIFY NSSD,DISPLAY,ALL command, the following message is issued:

EZD1370I INCORRECT SYNTAX ON THE MODIFY NSS SERVER SUBCOMMAND DISPLAY

EZD1371I AN NSS CLIENT ATTEMPTED TO USE A DISABLED DISCIPLINE *discipline_type* TO CONNECT TO THE NSS SERVER - THE CONNECTION IS CLOSED

Explanation: A network security services (NSS) client attempted to use a disabled discipline to connect to the NSS server. The connection is closed.

In the message text:

discipline_type

The discipline that is disabled.

System action: The NSS server closes the NSS client TCP connection.

Operator response: Contact the system programmer.

System programmer response: Modify the NSS configuration file to enable the specified discipline. See the information about the network security services (NSS) server in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

EZD1372I • EZD1373I

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: ConnectClientReqToSrv_server.cpp

Routing code: 10

Descriptor code: 12

Automation: This message will be written to the syslog.

Example:

EZD1371I NSS CLIENT ATTEMPTED TO CONNECT USING DISABLED DISCIPLINE IPSEC - THE CONNECTION WILL BE CLOSED.

EZD1372I MODIFY NSS SERVER *subcommand* SUBCOMMAND ACCEPTED

Explanation: The network security services (NSS) server accepted the MODIFY subcommand.

In the message text:

subcommand

The MODIFY subcommand that was accepted.

System action: The NSS server continues processing the MODIFY command.

Operator response: None.

System programmer response: None.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the operator console and syslog.

Example:

EZD1372I MODIFY NSS SERVER DISPLAY SUBCOMMAND ACCEPTED

EZD1373I NSS *discipline_name* DISCIPLINE *state*

Explanation: This message is displayed during initialization of the network security services (NSS) server and whenever the state of one of the configured disciplines changes.

In the message text:

discipline_name

The discipline state that is being displayed.

state

The state of the discipline. Possible values are ENABLED or DISABLED.

System action: The NSS server continues processing requests for enabled disciplines. When a discipline is disabled, any connections using that discipline are disconnected. New NSS clients that request a disabled discipline are not allowed to connect.

Operator response: None.

System programmer response: None.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the operator console and syslog.

Example:

EZD1373I NSS IPSEC DISCIPLINE ENABLED

EZD1373I NSS XMLAPPLIANCE DISCIPLINE ENABLED

EZD1374E ICSF services are currently unavailable to the NSS daemon

Explanation: The network security services (NSS) server detected that Integrated Cryptographic Services Facility (ICSF) services are unavailable. The NSS server uses ICSF services for various cryptographic functions. When ICSF services are not correctly configured and started, the NSS server is not fully functional to NSS clients. See the information about network security services in z/OS Communications Server: IP Configuration Guide for information about which NSS server functions require ICSF.

System action: The NSS daemon continues to run, but it cannot provide the services that rely on ICSF.

Operator response: Contact the system programmer.

System programmer response: Configure and start ICSF. See the z/OS Cryptographic Services ICSF Administrator's Guide for more information.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssAnchor.cpp

Routing code: 3

Descriptor code: 3

Automation: This message goes to the console and to syslog.

Example:

EZD1374E ICSF services are currently unavailable to the NSS daemon

EZD1375I THE keyword PARAMETER VALUE *value* EXCEEDS THE MAXIMUM ALLOWABLE LENGTH OF *maxlength* CHARACTERS

Explanation: The network security services daemon (NSSD) was processing a configuration file and encountered a configuration value that was too long.

In the message text:

keyword

The configuration parameter on which the erroneous value is specified.

value

The erroneous value.

maxlength

The maximum allowable length for this configuration value.

System action: Processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server exits.

Operator response: Contact the system programmer.

System programmer response: See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. Correct

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the configuration file and then restart NSSD or reissue the MODIFY command.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1375I THE CertificateURL PARAMETER VALUE certlabel012345678901234567890123 EXCEEDS THE MAXIMUM  
ALLOWABLE LENGTH OF 32 CHARACTERS
```

EZD1376I THE NSS SERVER IGNORED THE CHANGED CONFIGURATION FILE PARAMETER *pname* - VALUE REMAINS *current_value*

Explanation: The specified network security services (NSS) server configuration file parameter cannot be changed by using the MODIFY *jobname*,REFRESH command. The NSS server continues to use the specified value.

In the message text:

pname

The parameter that cannot be changed on a refresh.

current_value

The value that NSS continues to use.

System action: The NSS server ignores the change to this parameter and configuration processing continues.

Operator response: If you want to use the changed configuration file parameter for the NSS server, contact the system programmer.

System programmer response: If you want to use the changed configuration file parameter for the NSS server, stop and restart the server.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssConfiguration.cpp

Routing code: 10

Descriptor code: 12

Automation: Message EZD1376I is written to the system console and to syslogd.

Example:

```
EZD1376I THE NSS SERVER IGNORED THE CHANGED CONFIGURATION FILE PARAMETER FIPS140 - VALUE REMAINS Yes
```

EZD1377I FIPS 140 support is enabled for the IPSec Discipline of the NSS server

Explanation: This message reports that Federal Information Processing Standard (FIPS) publication 140 (FIPS 140) support is enabled for the IPSec Discipline of network security services (NSS) server. Cryptographic operations are performed by cryptographic modules that are designed to follow the Level 1 security requirements of FIPS 140.

System action: The NSS server processing continues.

Operator response: None.

System programmer response: If FIPS 140 support is not required for the NSS server, stop the server, configure FIPS140 No in the NSS server configuration file, and restart the server.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1377I FIPS 140 support is enabled for the IPSec Discipline of NSS server

EZD1378I FIPS 140 support is not enabled for the IPSec Discipline of the NSS server

Explanation: This message reports that Federal Information Processing Standard (FIPS) publication 140 (FIPS 140) support is not enabled for the IPSec Discipline of network security services (NSS) server. Cryptographic operations for the IPSec discipline may be performed by cryptographic modules that are not designed to follow the Level 1 security requirements of FIPS 140.

System action: The NSS server processing continues.

Operator response: If FIPS 140 support is required for the NSS server, contact the system programmer.

System programmer response: If FIPS 140 support is required for the NSS server, stop the server, configure **FIPS140 Yes** in the NSS server configuration file, and restart the server.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1378I FIPS 140 support is not enabled for the IPSec Discipline of NSS server

EZD1379I FIPS140 Yes is rejected by System SSL code description

Explanation: The network security services (NSS) server initial configuration specified **FIPS140 Yes** but System SSL rejected the request.

In the message text:

code

The hexadecimal gsk_status code returned from gsk_fips_state_set().

description

The description of the *code* value provided by the System SSL.

System action: The NSS server ends.

Operator response: Contact the system programmer.

System programmer response: For more information about the error, see CMS status codes in z/OS Cryptographic Services System SSL Programming. If the error indicates a problem with software installation or system configuration, correct the error and restart the NSS server. If the error indicates a problem with the NSS server application, contact IBM support.

User response: Not applicable.

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Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssReadConfiguration.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1379I FIPS140 Yes is rejected by System SSL 0335306C Attempt to execute in FIPS mode failed.
```

EZD1380I THE NSS SERVER IS SHUTTING DOWN DUE TO AN ERROR DURING INITIALIZATION (*errno* | *errnojr* | *description*)

Explanation: The network security services (NSS) server encountered an error during initialization. The server is shutting down.

In the message text:

errno

The UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes , where the reason codes are listed.

description

Describes the meaning of the *errno* value.

System action: The network security services (NSS) server shuts down.

Operator response: Contact the system programmer.

System programmer response: Correct the error indicated by the *errno*, *errnojr*, or *description* values. This message might be generated during server initialization as the result of a shortage of available disk space in the /var directory.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: NssMainThread.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

```
EZD1380I THE NSS SERVER IS SHUTTING DOWN DUE TO AN ERROR DURING INITIALIZATION ( 133 | 4010237980 |  
EDC5133I NO SPACE LEFT ON DEVICE. )
```

EZD1381I THE *parmvalue* VALUE IS MISSING FOR CONFIGURATION KEYWORD *keyword*

Explanation: The network security services daemon (NSSD) was processing a configuration file and encountered a configuration parameter that is missing an expected value. This message only appears for configuration parameters that expect multiple values.

In the message text:

parmvalue

The value that is missing.

keyword

The configuration parameter from which the expected value is missing.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues to use the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: Correct the configuration file and then restart NSSD or reissue the MODIFY command. See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: No response.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

Example:

EZD1381I THE URLVALUE IS MISSING FOR CONFIGURATION KEYWORD CertificateBundleURL

EZD1382I THE *keyword* PARAMETER URL VALUE *urlstring* IS FORMED INCORRECTLY: *explanation*

Explanation: The network security services daemon (NSSD) was processing a configuration file and encountered an incorrectly formed URL value on the specified configuration parameter.

In the message text:

keyword

The configuration parameter that contained the incorrect URL value.

urlstring

The incorrectly formed URL value.

explanation

a description of the specific reason for which the URL is considered to be incorrect.

System action: The processing of the configuration file stops. If this error occurs during a MODIFY command, then no changes are committed and the server continues using the old configuration values. If this error occurs during the initial startup sequence of the server, then the server does not start.

Operator response: Contact the system programmer.

System programmer response: Verify the exact syntax of the URL for HTTP resource and correct the URL in the NSSD configuration file. For information about the rules for forming HTTP URLs, see IETF RFC 3986 and RFC 2616. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs. See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file. When corrections have been made, restart NSSD or reissue the MODIFY command.

User response: No response.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to both the syslog and the system console.

EZD1383I • EZD1384W

Example:

EZD1382I THE CertificateURL PARAMETER URL VALUE http://www.ibm.com/test? IS FORMED INCORRECTLY:
URL query is missing

EZD1383I FIPS140 support is enabled for the NSS daemon but it has read access to CRYPTOZ resource FIPSEXEMPT.SYSTOK-SESSION-ONLY

Explanation: When the NSS daemon is configured for Federal Information Processing Standards (FIPS) 140 mode, the NSS daemon must have no access privileges (NONE) to the SAF resource FIPSEXEMPT.SYSTOK-SESSION-ONLY in the CRYPTOZ class. See the `NssConfig` statement in z/OS Communications Server: IP Configuration Reference for information about the FIPS140 parameter.

System action: The NSS daemon ends.

Operator response: Contact the system programmer.

System programmer response: Remove the NSS daemon access to the SAF resource, or disable FIPS 140 mode for the NSS daemon. See the `NssConfig` statement in z/OS Communications Server: IP Configuration Reference for information about the FIPS140 parameter.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: `NssConfiguration.cpp`

Routing code: 11

Descriptor code: 7

Automation: This message is output to the MVS console and to syslog.

Example: Not applicable.

EZD1384W URL value on *statement_type* statement for label *label* was specified on a previous CertificateURL statement

Explanation: The network security services (NSS) server, while processing a `CertificateURL` or `CertificateBundleURL` statement in the NSS configuration file, recognized that the URL on that statement matches the URL that was specified on a previous `CertificateURL` statement. Because `CertificateURL` statements represent a single certificate, the URL on each of the `CertificateURL` statements must be unique.

In the message text:

statement_type

This value indicates whether the duplicate URL was encountered on a `CertificateURL` or `CertificateBundleURL` statement.

label

The label on the `CertificateURL` or `CertificateBundleURL` statement that contained the duplicate URL value.

System action: Configuration file processing continues and the NSS server continues.

Operator response: Contact the system programmer.

System programmer response: If the retrieval of one of the certificates or certificate bundles is failing because the wrong URL is specified, locate the duplicate URLs in the NSS configuration file and remove or correct the statement that contains the duplicate URL, then use the `MODIFY` command to refresh the NSS server configuration. See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: `NssStatementParser.cpp`

Routing code: 10

Descriptor code: 12

Automation: This message is written to syslog only.

Example:

```
EZD1384W URL value on CertificateURL statement for label cert3 was specified on a previous
CertificateURL statement
```

EZD1385W URL value on CertificateURL statement for label *label_value* was specified on a previous CertificateURL or CertificateBundleURL statement

Explanation: While it was processing a CertificateURL statement in the NSS configuration file, the network security services (NSS) server recognized that the URL on the CertificateURL statement matched the URL that was specified on a previous CertificateURL or CertificateBundleURL statement. Because CertificateURL statements represent a single certificate, the URL on each of the CertificateURL statements must be unique.

In the message text:

label_value

The value of the label on the CertificateURL or CertificateBundleURL statement that contained the duplicate URL value.

System action: The processing of the configuration file continues and the NSS server continues.

Operator response: Contact the system programmer.

System programmer response: If the retrieval of one of the certificates or certificate bundles is failing because the wrong URL is specified, locate the duplicate URLs in the NSS configuration file and either remove or correct the statement that contains the duplicate URL and then refresh the NSS server configuration using the MODIFY command. See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the NSSD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssStatementParser.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is written to syslog only.

Example:

```
EZD1385W URL value on CertificateURL statement for label cert3 was specified on a previous CertificateURL
or CertificateBundleURL statement
```

EZD1386I DISPLAY NSS CONFIGURATION:

Explanation: The Network Security Server (NSS) daemon received the MODIFY NSSproc,DISPLAY subcommand.

See the information about the NSS MODIFY command in z/OS Communications Server: IP System Administrator's Commands.

System action: The Network Security Server daemon (NSS) continues processing the MODIFY DISPLAY command.

Operator response: None.

System programmer response: None.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

EZD1387I • EZD1388E

Module: NssModifyCommandHandler.cpp

Routing code: 2

Descriptor code: 5,8,9

Automation: This message is written to both the operator console and syslog.

Example:

EZD1386I DISPLAY NSS CONFIGURATION:

EZD1387I Certificate (*label*) contains a key that is too short for FIPS 140 mode. Certificate unavailable for the IPSec discipline

Explanation: The Network Security Services (NSS) server is configured to run in a mode that supports Federal Information Processing Standard 140 (FIPS 140). The NSS server detected that a certificate with the specified label contains an RSA key that is not allowed in FIPS 140 mode. The certificate will not be available for the NSS IPsec certificate service. See the information about FIPS 140 and IP security in z/OS Communications Server: IP Configuration Guide.

In the message text:

label

The label of the certificate.

System action: NSS server processing continues.

Operator response: None.

System programmer response: If FIPS 140 support is required and the certificate is required for the IPsec discipline, rekey the certificate with an RSA key that has a key size of 1024 bits or greater. If using IKEv2 you can rekey the certificate using an ECDSA key of any length instead of an RSA key. If FIPS 140 support is not required for the NSS server, stop the server, configure FIPS140 No in the NSS server configuration file, and restart the server.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CertRepository.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1387I Certificate (Certificate512) contains a key that is too short for FIPS 140 mode. Certificate unavailable for the IPsec discipline

EZD1388E ICSF FIPS mode services are currently unavailable to the NSS daemon

Explanation: The network security services (NSS) server is configured in Federal Information Processing Standards (FIPS) mode, and the server detected that Integrated Cryptographic Services Facility (ICSF) FIPS mode services are unavailable. The NSS server uses ICSF FIPS mode services for various cryptographic functions. When ICSF FIPS mode services are not correctly enabled, the NSS server will not be fully functional to NSS clients.

See the information about network security services in z/OS Communications Server: IP Configuration Guide for information about which NSS server functions require ICSF.

See the information about the network security services (NSS) server information in z/OS Communications Server: IP Configuration Reference for information about the FIPS140 keyword.

System action: The NSS server continues to run, but cannot provide the services that rely on ICSF FIPS mode services.

Operator response: Contact the system programmer.

System programmer response: Configure and start ICSF with FIPS mode enabled. The NSS server automatically detects when ICSF FIPS mode services become available. See the z/OS Cryptographic Services ICSF Administrator's Guide for more information. Alternatively, change the NSS server configuration to disable FIPS mode, and restart the NSS server.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssAnchor.cpp

Routing code: 3

Descriptor code: 3

Automation: This message goes to the console and to syslog.

Example:

EZD1388E ICSF FIPS mode services are currently unavailable to the NSS daemon

EZD1389I DISPLAY NSS URLCACHE:

Explanation: The Network Security Server (NSS) daemon received the MODIFY NSSproc,DISPLAY,URLCACHE subcommand.

See the information about the NSS MODIFY command in z/OS Communications Server: IP System Administrator's Commands.

System action: The NSS daemon continues processing the MODIFY DISPLAY,URLCACHE command.

Operator response: None.

System programmer response: None.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssModifyCommandHandler.cpp

Routing code: 2

Descriptor code: 5,8,9

Automation: This message is written to both the operator console and syslog.

Example:

EZD1389I DISPLAY NSS URLCACHE:

EZD1390I ICSF services are currently unavailable to the NSS daemon operating in FIPS 140 mode

Explanation: The NSS daemon has been configured for FIPS 140 mode and is initializing. ICSF is not currently active. The NSS daemon requires services from ICSF when configured for FIPS 140 mode.

System action: The NSS daemon ends.

Operator response: Contact the system programmer.

System programmer response: The NSS daemon fails to initialize if it is configured for FIPS 140 mode and ICSF is not active.

If you want the NSS daemon to operate in FIPS 140 mode, start ICSF and then restart the NSS daemon.

If you do not want the NSS daemon to operate in FIPS 140 mode, specify "FIPS140 No" in the IPsecDisciplineConfig section of the NSS configuration file and restart the NSS daemon.

User response: None.

Problem determination: See the system programmer response.

EZD1391I • EZD1392I

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 2, 8

Descriptor code: 12

Automation: This message is sent to the system console and to syslogd.

Example:

EZD1390I ICSF services are currently unavailable to the NSS daemon operating in FIPS 140 mode

EZD1391I FIPS 140 mode is configured for the IPSec Discipline of the NSS daemon

Explanation: "FIPS 140 Yes" has been specified in the configuration file of the NSS daemon.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: *

Descriptor code: *

Automation: This message is sent to syslogd.

Example:

EZD1391I FIPS 140 mode is configured for the IPSec Discipline of the NSS daemon

EZD1392I ICSF services are currently available to the NSS daemon

Explanation: The NSS daemon is initializing and ICSF is active.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: NssMainThread.cpp

Routing code: 2, 8

Descriptor code: 12

Automation: This message is sent to the system console and to syslogd.

Example:

EZD1392I ICSF services are currently available to the NSS daemon

EZD1526I Connect error for server daemon connection :function *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: This message is displayed by the ipsec UNIX command when an error occurred during a connect to the specified daemon.

In the message text:

server

The daemon (DM, IKE, or NSS) to which the ipsec command is trying to connect.

function

The name of the C/C++ run-time library function that detected the error.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: Ensure that the specified daemon is running and use the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Contact the system programmer.

Problem determination: Determine whether the daemon is running by issuing the MODIFY *procname*, DISPLAY command where the *procname* value is the member name of the catalogued procedure used to start the daemon.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: This error occurs when the ipsec command tries to connect to a daemon that is not running.

EZD1526I Connect error for NSSD connection : connect errno 1128 (EDC8128I Connection refused.)
errnojr 0x120D0253

EZD1527I Send error on server daemon connection :function *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: This message is displayed by the ipsec UNIX command when an error occurs during a write operation on the connection to the specified daemon.

In the message text:

server

The daemon (DM, IKE, or NSS) to which the ipsec command is trying to write a message.

function

The name of the C/C++ run-time library function that detected the error.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

EZD1528I

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: Ensure that the specified daemon is running and use the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Contact the system programmer.

Problem determination: Determine whether the daemon is running by issuing the MODIFY *procname*, DISPLAY command where the *procname* value is the member name of the cataloged procedure used to start the daemon.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: This error can occur when the NSS or IKE daemon is stopped while an ipsec command request is in progress.

EZD1527I Send error on NSSD connection : write errno 1124 (EDC8124I Socket not connected.)
errnojr 0x120D025C

EZD1528I Receive error on server daemon connection : *function* *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: This message is displayed by the ipsec UNIX command when an error occurs during a read operation on the connection from the server daemon.

In the message text:

server

The daemon (DM, IKE, or NSS) from which the ipsec command is trying to read a message.

function

The name of the C/C++ run-time library function that detected the error.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: Ensure that the specified daemon is running and use the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Contact the system programmer.

Problem determination: Determine whether the daemon is running by issuing the MODIFY *procname*, DISPLAY command where the *procname* value is the member name of the cataloged procedure used to start the daemon.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: This error can occur when the NSS or IKE daemon is stopped while an ipsec command request is in progress.

```
EZD1528I Receive error on NSSD connection : read errno 1124 (EDC8124I Socket not connected.)
errnojr 0x120D025C
```

EZD1529I Data received over the *server* daemon connection is not valid : return code *returncode*

Explanation: This message is displayed by the ipsec UNIX command when data received from the specified daemon is not in the expected format.

In the message text:

server

The daemon with the connection that received the illegal data. The possible values are DM, IKE, or NSS.

returncode

Possible values are:

- 1 The message header identifier is not valid.
- 2 The message header version number is not valid.
- 3 The message type is not valid.
- 5 The message header size is not valid.
- 6 The message size is not valid.
- 7 The message contains a reserved area that is not set to zeros.
- 8 The message contains a record length that is not valid.
- 9 The message contains a record count that is not valid.
- 10 The message contains a section with a length that is not valid.
- 11 The message contains a section with a count field that is not valid.
- 14 The response message contains a correlation ID that does not match the correlation ID in the request message.
- 15 The response message contains a message type that does not correspond to the message type in the request message.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: Run the ipsec command again with the -d option to determine the sequence of events leading up to the error. Contact the IBM Software Support Center.

User response: If the error persists, contact the system programmer.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example: The response message received from the daemon does not correspond to the request message sent to the daemon.

```
EZD1529I Data received over the NSSD connection is not valid : return code 14
```

EZD1530I • EZD1531I

EZD1530I Message received from server *daemon* with return code *returncode* (*description*) reason code *reasoncode*

Explanation: The server daemon returned a response message with a nonzero return code.

In the message text:

server

The daemon (DM, IKE, or NSS) from which the ipsec command received the message.

returncode

The return code contained in the response message. These return codes are listed and described in the network manager return and reason codes information in z/OS Communications Server: IP Programmer's Guide and Reference and in the diagnosing network security services (NSS) server problems information in z/OS Communications Server: IP Diagnosis Guide.

description

Describes the meaning of the return code.

reasoncode

The reason code contained in the response message. These reason codes are listed and described in the network manager return and reason codes information in z/OS Communications Server: IP Programmer's Guide and Reference and in the diagnosing network security services (NSS) server problems information in z/OS Communications Server: IP Diagnosis Guide. For reason codes with a mnemonic starting with **NSS** look first in the z/OS Communications Server: IP Diagnosis Guide. For reason codes with a mnemonic starting with the letters **NMs** look first in the z/OS Communications Server: IP Programmer's Guide and Reference.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: See the information about the network manager return and reason codes in z/OS Communications Server: IP Programmer's Guide and Reference and the diagnosing network security services (NSS) server problems in z/OS Communications Server: IP Diagnosis Guide to determine the appropriate response.

User response: Contact the system programmer.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

```
EZD1530I Message received from NSSD with return code 121 ( EDC5121I Invalid argument. )
      reason code NSSRsnUnknownClientName
```

EZD1531I Internal ipsec command error : return code *returncode*

Explanation: This message is displayed by the ipsec UNIX command when an internal error is detected.

In the message text:

returncode

The return code from the ipsec command.

System action: The ipsec command processing ends

Operator response: Not applicable.

System programmer response: Run the ipsec command again with the -d option to determine the sequence of events leading up to the error. Contact the IBM Software Support Center.

User response: Contact the system programmer.

Problem determination: See the system programmer response.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Record.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

```
EZD1531I Internal ipsec command error : return code 1
```

EZD1532I Client *clientname* is not available

Explanation: The network security services (NSS) client specified with the ipsec -z option cannot be found.

In the message text:

clientname

The name of an NSS client specified with the -z option of the ipsec UNIX command.

System action: The ipsec command processing ends.

Operator response: Not applicable.

System programmer response: Determine whether there is an `NssStackConfig` statement defining the client in the IKE daemon configuration file on the system where the client is running. See the information about IP security in z/OS Communications Server: IP Configuration Guide and the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference for information about configuring the `NssStackConfig` statement.

User response: Determine whether the NSS client is connected to the NSS server by issuing the ipsec -x display UNIX command on the system where NSS is running. Determine whether the *clientname* value is the name of a valid NSS client by issuing the ipsec -w display UNIX command on the system where the client is running. If the name is not valid, contact the system programmer.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: IPsecNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Example:

```
EZD1532I Client MVS134_TCPCS3 is not available
```

EZD1533I Only one defensive filter name may follow the -N option when used together with the -F *function* function

Explanation: More than one defensive filter name was specified for the -F function identified in the message. Only one defensive filter name is allowed.

In the message text:

function

The -F function specified by the user on the **ipsec** command.

System action: No action is taken for any of the defensive filters specified in the -N option. The **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command, specifying only one defensive filter name. If the action needs to be applied to multiple defensive filters, issue multiple **ipsec** commands.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

EZD1534I • EZD1535I

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1533I Only one defensive filter name may follow the -N option when used together with the -F Add function

EZD1534I The keyword keyword was specified multiple times

Explanation: The keyword identified in the message was specified more than once on the **ipsec** command. The keyword is allowed only once.

In the message text:

keyword

The keyword that was specified multiple times on the **ipsec** command.

System action: The **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command, specifying the keyword once.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1534I The srcip keyword was specified multiple times

EZD1535I No value specified with the keyword keyword

Explanation: A keyword is specified without a value on the **ipsec** command.

In the message text:

keyword

The keyword specified on the **ipsec** command that is missing a value.

System action: The **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command, specifying a value for the keyword identified in the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1535I No value specified with the srcip keyword

EZD1536I ALL is not a valid value for the -N option in this context

Explanation: ALL was specified as the value for the -N option on the **ipsec** command in a context that is not valid. The -N ALL option is allowed only when deleting all defensive filters with ipsec -F delete.

System action: The **ipsec** command processing ends

Operator response: Reissue the **ipsec** command, specifying a valid value for the -N option.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1536I ALL is not a valid value for the -N option in this context

EZD1537I *value* is not a valid *keywordname* value

Explanation: An incorrect value is specified for a keyword on the **ipsec** command.

In the message text:

value

The incorrect value specified on the **ipsec** command.

keywordname

The keyword that has the incorrect value.

System action: The **ipsec** command processing ends

Operator response: Reissue the **ipsec** command, specifying a valid value for the keyword identified in the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

EZD1538I • EZD1539I

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1538I 500000 is not a valid srcport value

EZD1538I Option keyword1 value1 conflicts with option keyword2 value2

Explanation: There is a conflict between the values specified for *keyword1* and *keyword2* on the **ipsec** command.

In the message text:

keyword1

A keyword specified on the **ipsec** command.

value1

The value specified for *keyword1* on the **ipsec** command.

keyword2

A second keyword specified on the **ipsec** command.

value2

The value specified for *keyword2* on the **ipsec** command.

System action: The **ipsec** command processing ends

Operator response: Reissue the **ipsec** command, correcting the conflict identified in the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1538I Option prot opaque conflicts with option routing either

EZD1539I protvalue conflicts with addresstype

Explanation: The protocol value is not valid with the address type (IPv4 or IPv6) on the **ipsec** command.

In the message text:

protvalue

The protocol value specified on the **ipsec** command.

addresstype

The IP address type of the defensive filter. Possible values are IPv4 or IPv6. The IP address type is determined by the srcip and destip keywords.

System action: The **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command, correcting the conflict identified by the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1539I opaque conflicts with IPv4

EZD1540I Defensive filter *filtername* successfully added to stack *stackname*

Explanation: This message is received in response to an **ipsec -F add** command that is directed to a specific TCP/IP stack. This message confirms that the defensive filter was added.

In the message text:

filtername

The name of the filter that was added.

stackname

The name of the TCP/IP stack to which the defensive filter was added.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1540I Defensive filter Block_inbound_10.1.1.1 successfully added to stack TCPCS

EZD1541I Global defensive filter *filtername* successfully added

Explanation: This message is received in response to an **ipsec -G -F add** command. This message confirms that the global defensive filter was successfully added to all eligible TCP/IP stacks on the z/OS image. An eligible stack is a stack that is enabled for IP security and defined with a mode of active or simulate in the Defense Manager daemon (DMD) configuration file.

In the message text:

filtername

The name of the filter that was added.

EZD1542I • EZD1543I

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about global defensive filter add processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1541I Global defensive filter Global_Block_inbound_10.1.1.1 successfully added
```

EZD1542I All defensive filters successfully deleted from stack *stackname*

Explanation: This message is received in response to an **ipsec -F delete -N all** command that is directed to a specific TCP/IP stack. This message confirms that all defensive filters were deleted from the stack indicated by *stackname*.

In the message text:

stackname

The name of the TCP/IP stack from which the defensive filters were deleted.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about defensive filter delete processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1542I All defensive filters successfully deleted from stack TCPICS
```

EZD1543I All global defensive filters successfully deleted

Explanation: This message is received in response to an **ipsec -F delete -N all -G** command. This message confirms that all global defensive filters were deleted.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about global defensive filter delete processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1543I All global defensive filters successfully deleted
```

EZD1544I Defensive filter *filtername* was successfully deleted from stack *stackname*

Explanation: This message is received in response to an **ipsec -F delete** command that is directed to a specific TCP/IP stack. This message confirms that the defensive filter was deleted from the stack indicated by *stackname*.

In the message text:

filtername

The name of the filter that was deleted.

stackname

The name of the TCP/IP stack from which the defensive filter was deleted.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about defensive filter delete processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1544I Defensive filter Block_inbound_10.1.1.1 was successfully deleted from stack TCPCS
```

EZD1545I Global defensive filter *filtername* was successfully deleted

Explanation: This message is received in response to an **ipsec -F delete -G** command. This message confirms that the global defensive filter was successfully deleted.

In the message text:

filtername

The name of the filter that was deleted.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about global defensive filter delete processing.

EZD1546I • EZD1547I

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1545I Global defensive filter Block_inbound_10.1.1.1_Global was successfully deleted
```

EZD1546I Defensive filter *filtername* was not found in stack *stackname*

Explanation: This message is received in response to an **ipsec -F delete** command directed to a specific TCP/IP stack. This message indicates that the defensive filter was not found in the stack.

In the message text:

filtername

The name of the filter specified by the -N option on the **ipsec** command.

stackname

The name of the TCP/IP stack to which the **ipsec** command was directed.

System action: The z/OS UNIX **ipsec** command processing ends.

Operator response: If the filter name specified on the **ipsec** command was incorrect, reissue the **ipsec** command, specifying the correct filter name. Issue the **ipsec -F display** command to display the defensive filters installed in the stack.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1546I Defensive filter filter1 was not found in stack TCPCS
```

EZD1547I Global defensive filter *filtername* was not found

Explanation: This message is received in response to an **ipsec -F delete -G** command. This message indicates that the global defensive filter was not found.

In the message text:

filtername

The name of the filter specified on the **ipsec** command by the -N option.

System action: The z/OS UNIX **ipsec** command processing ends.

Operator response: If the filter name specified on the **ipsec** command was incorrect, reissue the **ipsec** command, specifying the correct filter name. Issue the **ipsec -F display -G** command to display the global defensive filters. If the filter that you want to delete is not a global filter, reissue the **ipsec** command without the -G option.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1547I Global defensive filter filter1_global was not found
```

EZD1548I Defensive filter *filtername* was successfully updated in stack *stackname*

Explanation: This message is received in response to an **ipsec -F update** command that is directed to a specific TCP/IP stack. This message confirms that the defensive filter was updated in the stack indicated by *stackname*.

In the message text:

filtername

The name of the filter that was updated.

stackname

The name of the TCP/IP stack in which the defensive filter was updated.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about defensive filter update processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1548I Defensive filter Block_inbound_10.1.1.1 was successfully updated in stack TCPCS
```

EZD1549I Global defensive filter *filtername* was successfully updated

Explanation: This message is received in response to an **ipsec -G -F update** command. This message confirms that the global defensive filter was successfully updated.

In the message text:

filtername

The name of the filter that was updated.

See the information about global and stack-specific defensive filters in z/OS Communications Server: IP Configuration Guide for information about global defensive filter update processing.

System action: The z/OS UNIX **ipsec** command processing completes successfully.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1549I Global defensive filter Block_inbound_10.1.1.1_Global was successfully updated

EZD1550I Defense Manager daemon reported an error - *error_description*

Explanation: This message is received in response to an **ipsec -F** command. The Defense Manager daemon (DMD) detected an error and reported it to the **ipsec** command processor.

In the message text:

error_description

A description of the error that the DMD reported. Possible values are:

<i>error_description</i> value	Explanation
duplicate filter name	This error description is received in response to an ipsec -F add command that specifies a filter name with the -N option that conflicts with an unexpired defensive filter name.
filter is not found	This error description is received in response to an ipsec -F update command when the filter to be updated is not found.
stack is not configured for IPSECURITY	This error description is received in response to an ipsec -F add command directed to a specific stack when the stack is not configured for IP Security.
stack is not configured for IPv6 IPSECURITY	This error description is received in response to an ipsec -F add command for an IPv6 filter that is directed to a specific stack and the stack is not configured for IPv6 Security.
stack is not configured	This error description is received in response to an ipsec -F add command directed to a specific stack when the stack is not configured with a DmStackConfig statement in the DMD configuration file.

<i>error_description</i> value	Explanation
stack mode is INACTIVE	This error description is received in response to an ipsec -F add command directed to a specific stack when the stack is configured as Inactive on the DmStackConfig statement in the DMD configuration file.
user ID is not authorized	This error description is received in response to an ipsec -F command when the user ID is not authorized to the EZB.IPSECCMD profiles through the security access facility.
too many connections	This error description is received in response to an ipsec -F command when the ipsec command is unable to process the request because it has reached its limit of concurrent ipsec command connections.
log no is not allowed for a filter with mode simulate	This error description is received in response to an ipsec -F update log no command for an existing defensive filter with a mode of simulate. Logging cannot be turned off for a filter with a mode of simulate.
bad data IOCTL failure connection ID is not valid internal error is reported by the Defense Manager daemon memory allocation error cannot retrieve user ID credentials client is already connected	These error descriptions are received in response to an ipsec -F command when an internal error has occurred.

System action: The z/OS UNIX **ipsec** command processing ends.

Operator response: The operator response is based on the *error_description* value as shown in the following table.

<i>error_description</i> value	Operator response
duplicate filter name	Reissue the ipsec -F add command with a unique defensive filter name. See the information about defensive filter names in z/OS Communications Server: IP Configuration Guide for more information.
filter is not found	If the filter name specified on the ipsec command was incorrect, reissue the ipsec command, specifying the correct filter name. Issue the ipsec -F display command to display the defensive filters installed in the stack. See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the man ipsec command in a z/OS UNIX shell to obtain information about the ipsec command syntax and options.
stack is not configured for IPSECURITY	Contact the system programmer.
stack is not configured for IPv6 IPSECURITY	Contact the system programmer.
stack is not configured	Contact the system programmer.

<i>error_description</i> value	Operator response
stack mode is INACTIVE	Contact the system programmer.
user ID is not authorized	Contact the system programmer.
too many connections	Reissue the ipsec command. If the command continues to fail, contact the system programmer.
log no is not allowed for a filter with mode simulate	None.
bad data IOCTL failure connection ID is not valid internal error is reported by the Defense Manager daemon memory allocation error cannot retrieve user ID credentials client is already connected	Reissue the ipsec command. If the command continues to fail, contact the system programmer.

System programmer response: The system programmer response is based on the *error_description* value as shown in the following table.

<i>error_description</i> value	System programmer response
duplicate filter name	None.
filter is not found	None.
stack is not configured for IPSECURITY	If you want to allow defensive filters to be installed for the TCP/IP stack, enable IP security. See the information about enabling the IP security function in z/OS Communications Server: IP Configuration Guide.
stack is not configured for IPv6 IPSECURITY	If you want to allow IPv6 defensive filters to be installed for the TCP/IP stack, enable IP security for IPv6. See the information about enabling the IP security function in z/OS Communications Server: IP Configuration Guide.
stack is not configured	If you want to allow defensive filters to be installed for the TCP/IP stack, configure a DmStackConfig statement for the stack in the DMD configuration file. The Mode keyword must be set to Active or Simulate to enable defensive filtering. See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

<i>error_description</i> value	System programmer response
stack mode is INACTIVE	<p>If you want to allow defensive filters to be installed for the TCP/IP stack, the defensive filtering mode for the stack must be Active or Simulate. If the DmStackConfig statement for this stack in the DMD configuration file has Mode Inactive specified, update the mode to Active or Simulate. Issue the MODIFY REFRESH command to begin using the new value.</p> <p>If the mode is already Active or Simulate, a MODIFY FORCE_INACTIVE command might have been issued, forcing defensive filtering to Inactive. Issue a MODIFY <i>procname</i>,REFRESH,FILE=<i>file</i> command to enable defensive filtering.</p> <p>See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.</p>
user ID is not authorized	<p>Create the required SERVAUTH profiles to authorize the user ID that is issuing the ipsec command. If the SERVAUTH profiles exist, give the user ID that is issuing the ipsec command permission to access the profiles.</p> <p>See the information about ipsec command security in z/OS Communications Server: IP System Administrator's Commands for more information about the required SERVAUTH profiles.</p>
too many connections	<p>This error might be received as the result of automation that is attempting to add, update, or delete a large number of defensive filters simultaneously. Update the automation to issue the ipsec commands sequentially. If automation is not being used, this error might be the result of an internal error. For an internal error, contact IBM software support services. Provide a dump of the DMD. If available, provide CTRACE information for component SYSTCPDM.</p>
log no is not allowed for a filter with mode simulate	None.
bad data IOCTL failure connection ID is not valid internal error is reported by the Defense Manager daemon memory allocation error cannot retrieve user ID credentials client is already connected	Contact IBM software support services. Provide a dump of the DMD. If available, provide CTRACE information for component SYSTCPDM.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server z/OS UNIX **ipsec** command

Module: Not applicable.

Routing code: 10

EZD1551I • EZD1552I

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1550I Defense Manager daemon reported an error - duplicate filter name

EZD1551I *option1* is valid only when used with the *option2* primary option

Explanation: An option on the **ipsec** command is valid only with a specific primary option. The **ipsec** command has been issued with a combination of options that is not valid or the primary option is missing.

In the message text:

option1

An option specified on the **ipsec** command.

option2

The primary option on the **ipsec** command for which *option1* is valid.

System action: The z/OS UNIX **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command with a valid combination of options.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1551I -G is valid only when used with the -F primary option

EZD1552I The keyword *keyword* is not valid in the context in which it appears

Explanation: A valid keyword is specified out of context on the **ipsec -F add** or **ipsec -F update** command.

In the message text:

keyword

The keyword specified out of context on the **ipsec** command.

System action: z/OS UNIX **ipsec** command processing ends.

Operator response: Reissue the **ipsec** command, correcting the error identified in the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: In the following example, the **fragmentsonly** keyword is specified without specifying routing routed.

```
ipsec -F add srcip 10.1.1.1 fragmentsonly yes -N filter1
```

This example command is incorrect and results in the following message:

EZD1552I The keyword **fragmentsonly** is not valid in the context in which it appears

EZD1553I *keyword* is not a valid keyword

Explanation: An incorrect keyword was specified on the **ipsec -F add** or **ipsec -F update** command.

In the message text:

keyword

The incorrect keyword specified on the **ipsec** command.

System action: The **ipsec** command processing ends

Operator response: Reissue the **ipsec** command, specifying a valid keyword for the incorrect keyword identified in the message.

See the information about managing network security in z/OS Communications Server: IP System Administrator's Commands or issue the **man ipsec** command in a z/OS UNIX shell to obtain information about the **ipsec** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX ipsec command

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1553I protocol is not a valid keyword

EZD1576 PAGENT IS READY FOR SERVICES CONNECTION REQUESTS

Explanation: This message is issued when the ServicesConnection configuration statement is specified in the Policy Agent main configuration file and the Policy Agent is ready to provide connections for its services requestors.

See the information about the ServicesConnection statement in z/OS Communications Server: IP Configuration Reference for information about configuring the ServicesConnection statement.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

EZD1577 • EZD1578

Descriptor code: 12

Automation: This message is written to the system console and syslog on the Policy Agent. You might want to automate on this message to determine when the Policy Agent is ready to provide services for import requestors.

Example: Not applicable.

EZD1577 PAGENT SERVICESCONNECTION STATEMENT CONTAINS ERRORS

Explanation: A ServicesConnection statement in the main configuration file contains errors on the Policy Agent.

System action: The Policy Agent continues but does not listen for services requestors using the ServicesConnection statement.

Operator response: Contact the system programmer. If the system programmer indicates that more information is required in the Policy Agent log file, restart the Policy Agent with a minimum of LogLevel 127 configured in the main configuration file, or with the **-d 1** start option.

System programmer response: Examine the log file to determine the cause of the problem. Correct the Policy Agent configuration errors identified in the log and restart the Policy Agent. If you need more information to diagnose the errors, restart the Policy Agent with a minimum of LogLevel 127 or start the policy server with the **-d 1** start option to see the configuration errors.

See the information about the ServicesConnection statement in z/OS Communications Server: IP Configuration Reference for information about configuring the ServicesConnection statement.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog on the Policy Agent. You might want to automate on this message to determine whether there are configuration errors that will prevent import requestors from connecting to the Policy Agent.

Example: Not applicable.

EZD1578 PAGENT IS UNABLE TO PROCESS REQUESTS FROM SERVICES REQUESTORS

Explanation: The Policy Agent is unable to process requests from services requestors. One possible reason is that the information configured on the ServicesConnection configuration statement is incorrect.

See the information about the ServicesConnection statement in z/OS Communications Server: IP Configuration Reference for information about configuring the ServicesConnection statement.

See the information about import requestor connection problems in z/OS Communications Server: IP Diagnosis Guide for possible reasons this message was issued.

System action: The Policy Agent continues but does not respond to services connection requests.

Operator response: Contact the system programmer. If the system programmer indicates that more information is required in the Policy Agent log file, restart the Policy Agent with a minimum of LogLevel 127 configured in the main configuration file, and with the **-d 128** start option.

System programmer response: Examine the log file to determine the cause of the problem. If the problem is the result of a socket or bind failure, the problem might be an incorrect port specified on the ServicesConnection configuration statement. Verify that the port is valid and correct the statement if necessary. Otherwise, restart the Policy Agent with the LogLevel 127 and the **-d 128** start option and recreate the problem to diagnose the errors.

See the information about gathering diagnostic information about Policy Agent problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog on the Policy Agent. You might want to automate on this message to determine whether there are problems that will prevent import requestors from connecting to the Policy Agent or from retrieving import policies. You might also want to automate on the following related message: EZD1576I PAGENT IS READY FOR SERVICES CONNECTION REQUESTS

Example: Not applicable.

EZD1579I PAGENT POLICIES ARE NOT ENABLED FOR *image : type*

Explanation: The policies indicated by the *type* value that is defined in a configuration file are not enabled for the TCP/IP stack indicated by the *image* value. The policies are not enabled because the underlying stack function (for example, AT-TLS or IPsec) is not enabled on the stack.

In the message text:

image

The name of the TCP/IP stack.

type

The policy type that is not enabled. Possible values are:

IPSEC IP Filtering, KeyExchange and LocalDynVpn policies

TTLS Application Transparent Transport Layer Security (AT-TLS) policies

System action: The results depend on the *type* value as follows:

IPSEC Policy Agent does not parse or read the IPsec configuration file for this image.

TTLS Policy Agent reads and parses the AT-TLS configuration file and installs the policies, but the TCP/IP stack does not enforce the policies.

If the ServicesConnection statement is configured with Security Secure, then Policy Agent automatically creates an AT-TLS policy for the connection, but the TCP/IP stack does not enforce the policy and the generated AT-TLS policy is not in effect.

Operator response: See the system programmer response.

System programmer response: The action depends on the *type* value as follows:

IPSEC If you want IP security to be enabled for IPv4, use the IPCONFIG IPSECURITY statement in the TCP/IP profile to configure the stack for IPv4 IP security. If you want IP security enabled for IPv6, use the IPCONFIG6 IPSECURITY statement in the TCP/IP profile to configure the stack for IPv6 IP security. See the information about IPCONFIG IPSECURITY and IPCONFIG6 IPSECURITY in z/OS Communications Server: IP Configuration Reference and the information about default IP filter policy and IP security Policy in z/OS Communications Server: IP Configuration Guide for more information.

TTLS If you want AT-TLS enabled, configure the stack for AT-TLS using the TTLS parameter on the TCPCONFIG statement in the TCP/IP profile. See the information about the TCPCONFIG statement in z/OS Communications Server: IP Configuration Reference for more information. See the information about the AT-TLS configuration in PROFILE.TCPIP in z/OS Communications Server: IP Configuration Guide for information about how to enable AT-TLS.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc.c

Routing code: 10

EZD1580I • EZD1581I

Descriptor code: 12

Example:

EZD1579I PAGENT POLICIES ARE NOT ENABLED FOR TCPCS1 : IPSEC

EZD1580I PAGENT IS RESTARTING *application*

Explanation: Policy Agent detected that an application that is configured for monitoring on the AutoMonitorApps configuration statement is not running. Policy Agent is preparing to restart the application.

In the message text:

application

The name of the application that is to be restarted. If the application runs one instance per stack, the corresponding TCP/IP stack name precedes the application name, separated by a forward slash (/).

System action: Policy Agent processing continues.

Operator response: Not Applicable.

System programmer response: Not Applicable.

User response: Not applicable.

Problem determination: Not Applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pmonapps

Routing code: 10

Descriptor code: 12

Automation: Not Applicable.

Example:

EZD1580I PAGENT IS RESTARTING TCPIP1/TRMD

EZD1581I PAGENT IS UNABLE TO START *application*

Explanation: Policy Agent attempted to start or restart an application that is configured for monitoring on the AutoMonitorApps configuration statement. The application failed to start successfully within the retry limits configured on the AutoMonitorApps configuration statement.

In the message text:

application

The name of the application that failed to start. If the application runs one instance per stack, the corresponding TCP/IP stack name precedes the application name, separated by a forward slash (/).

System action: Policy Agent processing continues.

Operator response: Contact the system programmer.

System programmer response: Look for messages issued by the application to determine the reason why the application failed to start successfully. See the information about running the application in z/OS Communications Server: IP Configuration Reference to determine whether additional logging or tracing is needed. See the information about the application in z/OS Communications Server: IP Diagnosis Guide for additional diagnosis information. When the problem with the application has been resolved, issue a `MODIFY procname,MON,START,applname` command to the Policy Agent to start the application and to resume Policy Agent monitoring of the application. See the information about the Policy Agent MODIFY command in z/OS Communications Server: IP System Administrator's Commands for details.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pmonapps

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1581I PAGENT IS UNABLE TO START NSSD

EZD1582I PAGENT MODIFY COMMAND UNSUCCESSFUL - *application* ALREADY *status*

Explanation: A MODIFY command was issued to the Policy Agent to start or stop one application or all applications that are configured for monitoring on the AutoMonitorApps configuration statement, but the application or applications were already started or stopped.

In the message text:

application

The name of the application that was specified on the MODIFY command. If the application runs one instance per stack, the corresponding TCP/IP stack name precedes the application name, separated by a forward slash (/). If the MODIFY command was issued for all applications, the *application* value is APPLICATIONS.

status

The status of the application.

System action: The MODIFY command is ignored.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pzosinit

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: F PAGENT,MON,START,DMD

EZD1582I PAGENT MODIFY COMMAND UNSUCCESSFUL - DMD ALREADY STARTED

EZD1583I PAGENT MODIFY COMMAND UNSUCCESSFUL - *application* NOT CONFIGURED FOR MONITORING

Explanation: A MODIFY command was issued to the Policy Agent to start, restart, or stop an application, but the application is not configured for monitoring on the AutoMonitorApps configuration statement.

In the message text:

application

The name of the application that was specified on the MODIFY command. If the application runs one instance per stack, the corresponding TCP/IP stack name precedes the application name, separated by a forward slash (/).

System action: The MODIFY command is ignored.

Operator response: See the system programmer response.

System programmer response: If you want to monitor the application, configure the application for monitoring. See the information about configuring Policy Agent to automatically monitor applications in z/OS Communications Server: IP Configuration Guide and the AutoMonitorApps statement in z/OS Communications Server: IP Configuration Reference for.

User response: Not applicable.

EZD1584I • EZD1585I

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pzosinit

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: F PAGENT,MON,START,DMD

EZD1583I PAGENT MODIFY COMMAND UNSUCCESSFUL - DMD NOT CONFIGURED FOR MONITORING

EZD1584I PAGENT IS ALREADY STARTING *application*

Explanation: A MODIFY command was issued to the Policy Agent to start, restart, or stop an application, but the application is in the process of being started by the Policy Agent.

In the message text:

application

The name of the application that was specified on the MODIFY command. If the application runs one instance per stack, the corresponding TCP/IP stack name precedes the application name, separated by a forward slash (/).

System action: The MODIFY command is ignored.

Operator response: If you issued a MODIFY *procname*,MON,STOP,*app* command, then wait for the application to successfully start and then reissue the command.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pzosinit

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: F PAGENT,MON,RESTART,TRMD,P=TCPIP3

EZD1584I PAGENT IS ALREADY STARTING TCPIP3/TRMD

EZD1585I PAGENT *statement* STATEMENT CONTAINS ERRORS

Explanation: A configuration statement in the main configuration file contains errors.

In the message text:

statement

The name of the configuration statement that contains errors.

System action: Policy Agent processing continues. The specific action that Policy Agent takes depends on the configuration statement, as follows:

AutoMonitorApps

Automatic application monitoring does not occur.

AutoMonitorParms

Automatic application monitoring takes place using default values.

Operator response: Contact the system programmer. If the system programmer indicates that more information is required in the log file, restart the Policy Agent with a minimum of LogLevel 127 configured in the configuration file, or with the **-d 1** start option.

System programmer response: Examine the log file to determine the cause of the problem. Correct the Policy Agent configuration errors identified in the log and restart the Policy Agent. If you need more information to diagnose the errors, re-create the error with a minimum of LogLevel 127 or start the Policy Agent with the **-d 1** start option to generate the configuration errors. See the information about policy configuration files in z/OS Communications Server: IP Configuration Reference for the syntax of the failing statement.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pinit

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1585I PAGENT AUTOMONITORAPPS STATEMENT CONTAINS ERRORS
```

EZD1586I PAGENT HAS INSTALLED ALL LOCAL POLICIES FOR *image*

Explanation: Policy Agent finished installing all locally defined policies that were successfully processed in a configured TCP/IP stack. This message is issued only during Policy Agent initialization; it is not issued for the MODIFY UPDATE or REFRESH commands or for any policy updates that are detected after initialization has completed.

If there are errors in some policies that prevent those policy types from being installed, then this message indicates only that the policy types that were successfully processed have been installed. If errors prevent all configured policy types from being installed, this message is still issued but no policies are installed. You should always check for message EZZ8438I which indicates that policy errors have been detected, and take appropriate actions to correct those errors.

In the message text:

image

The name of the TCP/IP stack.

System action: Policy Agent processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog. This message is a good candidate for automation. Automation can alert you to when Policy Agent has installed all locally defined policies, so that applications that use those policies can be started.

Example:

```
EZD1586I PAGENT HAS INSTALLED ALL LOCAL POLICIES FOR TCPIP1
```

EZD1587I PAGENT IS UNABLE TO MONITOR APPLICATIONS

Explanation: Policy Agent is unable to monitor applications to determine whether they are active or inactive, or to start, restart, or stop the applications. Possible reasons for this error include configuration errors on the AutoMonitorApps or AutoMonitorParms statement, or an internal error.

System action: Policy Agent processing continues but the automatic application monitoring function is not available.

Operator response: Contact the system programmer. If the system programmer indicates that more information is required in the log file, restart the Policy Agent with a minimum of LogLevel 127 configured in the configuration file, or with the **-d 1** start option.

System programmer response: Examine the log file to determine the cause of the problem. If message EZD1585I was issued, correct the Policy Agent configuration errors identified in the log and restart the Policy Agent. If you need more information to diagnose the errors, re-create the error with a minimum of LogLevel 127 or start the Policy Agent with the **-d 1** start option. See the information about the AutoMonitorApps statement and the AutoMonitorParms statement in z/OS Communications Server: IP Configuration Reference for the syntax of the statements. See the information about diagnosing Policy Agent problems in z/OS Communications Server: IP Diagnosis Guide for information about gathering documentation for internal errors.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pmonapps

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD1588I PAGENT MONITOR INFORMATION

Explanation: A MODIFY *procname*,MON,DISPLAY command was issued. This message is followed by information about the set of applications that are eligible for automatic monitoring by the Policy Agent.

System action: Policy Agent processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: pzosinit

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD1589I PAGENT HAS INSTALLED ALL REMOTE POLICIES FOR *image*

Explanation: Policy Agent finished installing all policies that are defined on a remote policy server and were successfully processed in a configured TCP/IP stack. This message is issued only during Policy Agent initialization; it is not issued for the MODIFY UPDATE or REFRESH commands, or for any policy updates that are detected after initialization has completed.

If there are errors in some policies that prevent those policy types from being installed, then this message indicates

only that the policy types that were successfully processed have been installed. If errors prevent all configured policy types from being installed, this message is still issued but no policies are installed. You should always check for message EZZ8438I which indicates that policy errors have been detected, and take appropriate actions to correct those errors.

In the message text:

image

The name of the TCP/IP stack.

System action: Policy Agent processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog. This message is a good candidate for automation. Automation can alert you to when Policy Agent has installed all remotely defined policies, so that applications that use those policies can be started.

Example:

EZD1589I PAGENT HAS INSTALLED ALL REMOTE POLICIES FOR TCPIPI1

EZD1590I PAGENT UPDATE NOTIFICATION FAILED WITH RETURN CODE *errno* REASON CODE *errnojr*

Explanation: This message is received when one of the following types of Policy Agent update notification fails:

- Stack startup notification for every stack defined on the TcpImage statement. See TcpImage and PEPIInstance statements in z/OS Communications Server: IP Configuration Reference for details.
- If the Policy Agent is started with the -i/I option, update notification in real time for changes to local files (all configuration files). See starting Policy Agent from the z/OS shell in z/OS Communications Server: IP Configuration Reference for details.

errno is the z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

errnojr is the hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: Processing continues without update notification with the following results:

- If the Policy Agent is not notified about starting stacks, the stacks do not have their required policies.
- If the Policy Agent is not notified about updates to local configuration files, new policies are not updated in real time.

Operator response: Contact the system programmer.

System programmer response: Look up the return code and reason code values for the proper action to take. Also examine the Policy Agent log file to determine the name of the files that are having the problem. The following example shows what to look for in the Policy Agent log file:

```
SYSERR :004: plfm_update_event_register: Error Registering file '/tmp/tcpname.Pagent.tmp', IPC msg type = 9,
token = '0', rc=-1, errno (247) = EDC5247I Operation not supported., errno2=11800631
```

Correct the problem and instruct the operator to restart the Policy Agent if you want update notification.

EZD1591I

When the registering file is of the form '/tmp/tcpname.Pagent.tmp' and the file is located in a read/write sysplex-aware zFS file system, a symbolic link can be created to a file in a z/OS UNIX file system or in a read-only zFS file system.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

Module: plfmmisc

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog for the Policy Agent. You might want to automate on this message to determine when the Policy Agent is not providing update notification and take corrective action.

Example:

```
$HASP100 PAGENT    ON STCINRDR
IEF695I START PAGENT    WITH JOBNAME PAGENT    IS ASSIGNED TO USER IBMUSER
, GROUP SYS1
$HASP373 PAGENT    STARTED
IEF403I PAGENT - STARTED - TIME=09.54.14
EZZ8431I PAGENT STARTING
EZZ8432I PAGENT INITIALIZATION COMPLETE
EZD1590I PAGENT UPDATE NOTIFICATION FAILED WITH RETURN CODE 247 REASON CODE 11800631
```

| EZD1591I CONNECTION TO POLICY SERVER FAILED DUE TO DUPLICATE CLIENT NAME *clientName*

| **Explanation:** The attempt to establish a connection between the Policy Agent that is acting as a policy client and the Policy Agent that is acting as a policy server failed because of duplicate client names on the policy server. For the policy client for each TCP/IP stack, the PolicyServer statement provides the processing and security information for the policy server, including the client's name. If you have configured multiple clients to connect to a policy server you need to verify that each client has a unique name by checking the PolicyServer statement ClientName parameter.

| In the message text:

| *clientName*

| The duplicate client name of the client that attempted to connect to a policy server.

| **System action:** The policy server continues processing. The policy client uses the configured connection-wait parameter and connection-retry parameter on the ServerConnection statement to automatically retry the primary and backup connections until a connection is established. The policy client can retrieve the configured remote policies only after the connection is established.

| **Operator response:** Save the system log for problem determination and contact the system programmer.

| **System programmer response:** Verify that the client name for each policy client that connects to the policy server is unique. The client name is specified on the ClientName parameter of the PolicyServer statement for each TCP/IP stack for which policy is being retrieved. See "Steps for configuring the Policy Agent" in z/OS Communications Server: IP Configuration Guide for information on setting up the policy server and client configurations. Correct any configuration errors and restart the Policy Agent on the system where the configuration changes were made.

| If needed, examine the log files to determine the duplicate client name that prevented a connection between the policy client and the policy server. If you need more information to diagnose the errors, re-create the error with a minimum of LogLevel 127 and start the policy server or policy client with the -d 128 start option.

| **User response:** No action is needed.

| **Problem determination:** See the System Programmer Response.

| **Source:** z/OS Communications Server TCP/IP: Policy Agent (PAGENT)

| **Module:** paapi.c

| **Routing code:** 10

- | **Descriptor code:** 12
- | **Automation:** This message is written to the system console and syslog for the Policy Agent. You might want to automate on this message to determine when a client connection fails due to a duplicate name.
- | **Example:**
- | EZD1591I CONNECTION TO POLICY SERVER FAILED DUE TO DUPLICATE CLIENT NAME CLIENT1

EZD1601I INTERNAL ERROR IN MODULE *mod_id* : *err_id* | *value1* | *value2* | *value3*

Explanation: The Defense Manager daemon (DMD) detected an internal error. Additional diagnostic messages might be issued.

In the message text:

mod_id

An internal identifier that indicates the module that detected the error.

err_id

An internal identifier for this error in the detecting module.

value1

Internal error information.

value2

Internal error information.

value3

Internal error information.

System action: Results are unpredictable. One or more address space dumps might be produced with dump titles that match the message text.

Operator response: Contact the system programmer.

System programmer response: Contact IBM software support services and provide the syslog that includes this message. If available, provide CTRACE information for component SYSTCPDM and any dumps associated with this message.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1601I INTERNAL ERROR IN MODULE EZADMSSP : 0001 | 0 | 0 | 0

EZD1602I Internal Error *err_id* in module *modname* - unable to obtain memory of size *size*

Explanation: The Defense Manager daemon (DMD) was unable to obtain the required amount of memory.

In the message text:

err_id

The code that helps IBM service representatives identify the specific memory allocation request.

modname

The name of the module that encountered the error.

size

The amount of memory requested, in bytes.

EZD1603I

System action: The current operation fails and the DMD attempts to continue processing.

Operator response: Free some memory and try the operation again. If the operation continues to fail, contact the system programmer with the message information.

System programmer response: See the information about diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems. If you cannot resolve the memory allocation shortage, contact IBM software support services and provide the *modname* value and the *err_id* value.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1602I Internal Error 0001 in module EZADMMTH - unable to obtain memory of size 288
```

**EZD1603I THE DEFENSE MANAGER DAEMON FAILED TO WRITE ITS PROCESS ID *pid* TO *filename* -
ERRNO *errno* ERRNO DESCRIPTION *description***

Explanation: A file system error occurred when the Defense Manager daemon (DMD) tried to write its process ID to a file.

In the message text:

pid

The DMD process ID.

filename

The file into which the DMD was trying to write its process ID.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: Defense Manager daemon (DMD) processing continues without a record of the process ID written to the file system.

Operator response: This error is not a problem unless the process ID file will be used for automation (for example, to automate the process of ending the DMD). Contact the System Programmer if the process ID file will be used for automation.

System programmer response: This error is not a problem unless the process ID file will be used for automation (for example, to automate the process of ending the DMD). Use the error information in the message to resolve the problem and restart the DMD. See the information about configuring the DMD in z/OS Communications Server: IP Configuration Guide for information about setting the pid file location.

The directory for the process ID file must exist and the DMD user ID must have authority to write to the directory.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1603I THE DEFENSE MANAGER DAEMON FAILED TO WRITE ITS PROCESS ID 19 TO /tmp-baddir/dmd.pid - ERRNO 129
ERRNO DESCRIPTION EDC5129I No such file or directory.

EZD1604I THE DEFENSE MANAGER DAEMON SHUTDOWN SEQUENCE HAS BEGUN

Explanation: The Defense Manager daemon (DMD) has begun its shutdown sequence.

System action: The daemon is in the process of shutting down. No more work is processed.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1604I THE DEFENSE MANAGER DAEMON SHUTDOWN SEQUENCE HAS BEGUN

EZD1605I THE DEFENSE MANAGER DAEMON SHUTDOWN SEQUENCE HAS COMPLETED

Explanation: The Defense Manager daemon (DMD) has completed its shutdown sequence.

System action: The DMD ends.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1605I THE DEFENSE MANAGER DAEMON SHUTDOWN SEQUENCE HAS COMPLETED

EZD1606I The ExcludeAddress value *value* on line *linenum* is not valid - *reason*

Explanation: A value that is not valid was detected for the ExcludeAddress keyword in the Defense Manager daemon (DMD) configuration file.

In the message text:

value

The value that is not valid.

EZD1607I

linenum

The line number in the DMD configuration file where the value occurs.

reason

The reason the value is not valid.

System action: The processing of the configuration file stops. If this error occurred during the processing of a MODIFY command, then no changes are committed and the daemon continues using the old configuration values. If this error occurred during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the ExcludeAddress value that is in error.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1606I The ExcludeAddress value 10.1.1.1 on line 156 is not valid - ipaddress is not valid

EZD1607I The ExcludeAddress value *value* on line *linenum* cannot be accepted because the limit of *limit* exclusion addresses for a single stack has already been reached

Explanation: The number of ExcludeAddress keywords that can be specified for a DmStackConfig statement is limited. More ExcludeAddress keywords were specified for a DmStackConfig statement in the Defense Manager daemon (DMD) configuration file than is allowed.

In the message text:

value

The ExcludeAddress value that cannot be accepted.

linenum

The line number in the DMD configuration file where ExcludeAddress keyword occurs.

limit

The number of ExcludeAddress keywords allowed on a DmStackConfig statement.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Update the DmStackConfig statement so that it does not specify too many ExcludeAddr keywords.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1607I The ExcludeAddress value 10.7.7.7 on line 163 cannot be accepted because the limit of 10 exclusion addresses for a single stack has already been reached

EZD1608I THE DEFENSE MANAGER DAEMON FAILED TO START BECAUSE THE DAEMON IS ALREADY RUNNING - TOKEN *tokenname* LEVEL *level* PERSIST *persist* RETURN CODE *retcode*

Explanation: The Defense Manager daemon (DMD) started and determined that another instance of the DMD is already running. Only one DMD can be running at a time.

In the message text:

tokenname

The name of the MVS token to which the server is trying to get exclusive access. This value is DEFENSE MANAGER for the DMD.

level

The level of exclusivity required. This value is 4 for the DMD.

persist

Possible values are:

- 0** The token is released when the server stops. This is the value for the DMD.
- 1** The token persists after the server ends.

retcode

The return code from the MVS token service. See z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for a complete list of IEANTCR return and reason codes.

System action: This instance of the DMD ends.

Operator response: If you want to start a new instance of the DMD, stop the active DMD first.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1608I THE DEFENSE MANAGER DAEMON FAILED TO START BECAUSE THE DAEMON IS ALREADY RUNNING - TOKEN DEFENSE MANAGER LEVEL 4 PERSIST 0 RETURN CODE 4

EZD1609I DEFENSE MANAGER DAEMON RELEASE *release* SERVICE LEVEL *level* CREATED ON *date*

Explanation: This message is the first message printed to the console when the Defense Manager daemon (DMD) is started.

In the message text:

release

The release name.

level

The service level name.

date

The build date of the daemon.

EZD1610I • EZD1611I

System action: None.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1609I DEFENSE MANAGER DAEMON RELEASE CS V1R10 SERVICE LEVEL CS070815 CREATED ON Aug 15 2007
```

EZD1610I THE DEFENSE MANAGER DAEMON INITIALIZATION SEQUENCE HAS BEGUN

Explanation: This message is a notification that the Defense Manager daemon (DMD) has begun its initialization sequence.

System action: The Defense Manager daemon (DMD) is starting.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1610I THE DEFENSE MANAGER DAEMON INITIALIZATION SEQUENCE HAS BEGUN
```

EZD1611I THE DEFENSE MANAGER DAEMON INITIALIZATION SEQUENCE HAS COMPLETED

Explanation: This message is a notification that the Defense Manager daemon (DMD) has completed its initialization sequence.

System action: The DMD is ready.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1611I THE DEFENSE MANAGER DAEMON INITIALIZATION SEQUENCE HAS COMPLETED
```

EZD1612I ERROR (*errno* | *errnojr* | *description*) WHILE OPENING MESSAGE CATALOG *name* - DEFAULT MESSAGES WILL BE USED

Explanation: The Defense Manager daemon (DMD) was unable to open the message catalog. Default messages will be used.

In the message text:

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

description

Describes the meaning of the *errno* value.

name

The message catalog file that the DMD was attempting to open.

System action: DMD processing continues. DMD will use the internal default messages instead of the messages from the external message catalog.

Operator response: If the default messages are acceptable, no action is necessary. Otherwise, contact the system programmer.

System programmer response: Correct the error indicated by the *errno*, *errnojr*, and *description* values. There are several possible causes of this error, such as file or directory permissions that do not allow read access. See z/OS XL C/C++ Runtime Library Reference for more information about the catopen() function call. A common cause of this error message is an incorrectly set NLSPATH environment variable. See the information about the NLSPATH environment variable in z/OS UNIX System Services Programming Tools.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1612I ERROR ( 129 | C90F001E | EDC5129I No such file or directory. ) WHILE OPENING MESSAGE CATALOG
dmdmsg.cat - DEFAULT MESSAGES WILL BE USED
```

EZD1613I A message-generated dump has been created with the title *title*

Explanation: A Defense Manager daemon (DMD) syslog message generated an address space dump.

In the message text:

title

The text associated with the dump. The title contains the message number and associated message text that caused the dump to be generated.

System action: After the dump is created, the DMD continues processing.

EZD1614I • EZD1615I

Operator response: Contact the system programmer.

System programmer response: Obtain the system log and the generated dump, and contact IBM software support.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1613I A message-generated dump has been created with title DMD Message generated dump EZD1601I  
INTERNAL ERROR IN MODULE EZADMMTH 0015 - 0 | 0 | 0
```

EZD1614I A message-generated dump was suppressed for message *message*

Explanation: A Defense Manager daemon (DMD) syslog message attempted to generate an address space dump; however, no more than two message-generated dumps can be created in a 15-minute period, so the dump was suppressed.

In the message text:

message

The message that attempted to generate the dump.

System action: DMD processing continues.

Operator response: Contact the system programmer.

System programmer response: Capture the system log and any message-generated dumps that were created earlier. Contact IBM software support services to analyze this data.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1614I A message-generated dump was suppressed for message EZD1601I INTERNAL ERROR IN MODULE  
EZADMMTH 0015 - 0 | 0 | 0
```

**EZD1615I INCORRECT SYNTAX FOR THE FILE= PORTION OF THE DEFENSE MANAGER DAEMON
MODIFY COMMAND (*specification*)**

Explanation: The file specification on a MODIFY *procname*,REFRESH,FILE=*file* command was incorrect. The file name must be a fully qualified z/OS UNIX file name or an MVS data set name. A z/OS UNIX file name must be enclosed by single quotation marks. MVS data set names must begin with two forward slashes and the data set name must be enclosed by single quotation marks.

In the message text:

specification

The incorrect FILE= specification.

System action: The MODIFY command is ignored. Processing continues using the previous configuration values.

Operator response: Correct the file name specification and issue the command again. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the syntax of the file name specification.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: In the following example, the z/OS UNIX file name was not enclosed by single quotation marks which causes the error.

```
EZD1615I INCORRECT SYNTAX FOR THE FILE= PORTION OF THE DEFENSE MANAGER DAEMON
MODIFY COMMAND ( ,FILE=/U/USER1/DMD.CONF )
```

In the following example, FILE was misspelled.

```
EZD1615I INCORRECT SYNTAX FOR THE FILE= PORTION OF THE DEFENSE MANAGER DAEMON
MODIFY COMMAND ( ,FILE='/etc/security/dmd.conf' )
```

**EZD1616I AN ERROR OCCURRED WHILE READING THE DEFENSE MANAGER DAEMON
CONFIGURATION FILE *filename* - RETURN CODE *rc* - MODIFY REFRESH COMMAND IS
REJECTED**

Explanation: An error occurred during the processing of a Defense Manager daemon (DMD) configuration file in response to a MODIFY REFRESH command.

In the message text:

filename

The name of the configuration file that was being processed.

rc

The return code. The possible return codes are:

- 2** The file does not exist or could not be opened.
- 3** An error was detected while processing one of the statements in the file.

System action: Processing of the configuration file stops. No changes are committed and the DMD continues using the old configuration values.

Operator response: If the *rc* value is 2, check that the name of the configuration was specified correctly. Reissue the MODIFY command using the correct file name. If problems persist or if the *rc* value is 3, contact the system programmer.

System programmer response: Verify that the configuration file exists and that the DMD has permission to read it. If the *rc* value is 3, check for a more specific configuration error message in the system log and correct the DMD configuration file error.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

EZD1617I • EZD1618I

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1616I AN ERROR OCCURRED WHILE READING THE DEFENSE MANAGER DAEMON CONFIGURATION FILE /u/user1/dmd.conf  
- RETURN CODE 2 - MODIFY REFRESH COMMAND IS REJECTED
```

EZD1617I AN ERROR OCCURRED WHILE READING THE DEFENSE MANAGER DAEMON CONFIGURATION FILE *filename* - RETURN CODE *rc*

Explanation: An error occurred while processing the Defense Manager daemon (DMD) configuration file during the initial startup sequence. Additional messages will be issued to provide more specific information.

In the message text:

filename

The name of the configuration file that is being processed.

rc

The return code. Possible values are:

- 2** The file does not exist or could not be opened.
- 3** An error was detected while processing one of the statements in the file.

System action: DMD initial startup processing fails and the DMD ends.

Operator response: Contact the system programmer.

System programmer response: Verify that the configuration file exists and that the DMD has permission to read it. If the *rc* value is 3, check for a more specific configuration error message in the system log and correct the DMD configuration file error.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1617I AN ERROR OCCURRED WHILE READING THE DEFENSE MANAGER DAEMON CONFIGURATION FILE  
/etc/security/dmd.conf - RETURN CODE 3
```

EZD1618I Configuration keyword *keyword* on line *linenum* requires a value

Explanation: The keyword requires a value but a value was not specified in the Defense Manager daemon (DMD) configuration file.

In the message text:

keyword

The name of the keyword that is missing a value.

linenum

The line number in the DMD configuration file of the keyword that requires a value.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the previous configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Correct the error in the configuration file and restart the DMD or reissue the MODIFY command.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1618I Configuration keyword SyslogLevel on line 74 requires a value

EZD1619I The configuration value *value* for keyword *keyword* on line *linenum* contains one or more characters that are not allowed

Explanation: The Defense Manager daemon (DMD) was processing a configuration file and the keyword value contained one or more characters that are not allowed.

In the message text:

value

The keyword value that contains one or more characters that are not allowed.

keyword

The keyword with the incorrect value.

linenum

The line number in the DMD configuration file where the incorrect keyword value occurs.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Correct the error in the configuration file and restart the DMD or reissue the MODIFY command.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1619I The configuration value FF for keyword SyslogLevel on line 75 contains one or more characters that are not allowed

EZD1620I • EZD1621I

EZD1620I The keyword **value** on line **linenum** is outside of the allowable range **lowvalue - highvalue**

Explanation: The value configured for the specified Defense Manager daemon (DMD) keyword is outside the allowable range.

In the message text:

keyword

The name of the DMD configuration keyword.

value

The value configured for the keyword in the configuration file

linenum

The line number where the error occurred in the configuration file.

lowvalue

The lowest value allowed for the keyword.

highvalue

The highest value allowed for the keyword.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Correct the error in the configuration file and restart the DMD or reissue the MODIFY command.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1620I The SyslogLevel value 256 on line 75 is outside of the allowable range of 0 - 255

EZD1621I AN ERROR OCCURRED WHILE TRYING TO ACCESS DEFENSIVE FILTER DIRECTORY *dirname* -
ERRNO *errno* *description*

Explanation: An error occurred when the Defense Manager daemon (DMD) tried to access the defensive filter directory.

In the message text:

dirname

The defensive filter directory that the DMD was trying to access.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: If this error occurs during the initial startup sequence of the daemon, the daemon ends. Message EZD1611I indicates the completion of the startup sequence. If this error occurs during the operation of the daemon,

DMD processing will continue without access to the directory. If the DMD stops and is restarted it will no longer have any access to previously created defensive filters. The DMD must be able to write to the directory so that defensive filters persist when the DMD stops.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DefensiveFilterDirectory keyword in the DMD configuration file.

Ensure that the defensive filter directory exists, that it is on an undamaged file system, and that the DMD user ID has the authority to create, delete, and write to files in the defensive filter directory.

If this error occurs during the DMD initial startup sequence, restart the DMD after you correct the error condition. If this error occurs during operation of the daemon, attempt to correct the error without stopping the DMD. After you correct the error, the DMD will be able to update its persistent filter storage that is preventing any loss of unexpired filters. The DMD does not need to be restarted after correcting the error condition.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1622I AN ERROR OCCURRED WHILE TRYING TO ACCESS DEFENSIVE FILTER DIRECTORY /var/dm_filters_alt2 -  
ERRNO 129 EDC5129I No such file or directory
```

EZD1622I DEFENSE MANAGER DAEMON CONFIGURATION PROCESSING IS COMPLETE USING FILE *filename*

Explanation: The Defense Manager daemon (DMD) successfully completed processing the configuration file. This message can follow the successful startup of the daemon or a successful MODIFY REFRESH command.

In the message text:

filename

The z/OS UNIX file name or MVS data set name that contains DMD configuration statements.

System action: None.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1622I DEFENSE MANAGER DAEMON CONFIGURATION PROCESSING IS COMPLETE USING FILE /etc/security/dmd.conf
```

EZD1623I DEFENSE MANAGER DAEMON CONFIGURATION FILE NOT SPECIFIED AND DEFAULT CONFIGURATION FILE *filename* MISSING OR NOT VALID - USING DEFAULTS FOR CONFIGURATION PARAMETERS

Explanation: No configuration file was specified, so the Defense Manager daemon (DMD) attempted to use the default configuration file. The default configuration file does not exist or cannot be read so the DMD uses the default configuration values.

In the message text:

filename

The default configuration file name.

System action: DMD processing continues using the default values for configuration parameters.

Operator response: Contact the system programmer.

System programmer response: When there is not a configuration file, defensive filtering is inactive for all TCP/IP stacks on your system. The system-supplied defaults do not include any DmStackConfig statements. If you want values other than the system-supplied defaults, create a configuration file and activate it using the MODIFY REFRESH command.

See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1623I DEFENSE MANAGER DAEMON CONFIGURATION FILE NOT SPECIFIED AND DEFAULT CONFIGURATION FILE
/etc/security/dmd.conf MISSING OR NOT VALID - USING DEFAULTS FOR CONFIGURATION PARAMETERS

EZD1624I The Defense Manager daemon socket directory *directory* does not exist and cannot be created - *errno* *description*

Explanation: The Defense Manager daemon (DMD) did not find a preexisting socket directory and was unable to create the directory.

In the message text:

directory

The socket directory that does not exist and that cannot be created by DMD.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: DMD initialization stops and the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the socket directory exists or that the DMD has the correct permissions to create it. If the DMD needs to create the socket directory, all elements of the directory path must exist, except for the last element. For example, if the socket directory identified in the message is /var/sock, then at least the /var directory must exist. If the DMD is defined with a nonzero UID, create the /var/dm directory before starting the

DMD. The directory should be owned by the DMD user ID and the DMD should be able to create, delete, read, and write files to the directory.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EDC5129I no such file or directory.EZD1624I The Defense Manager daemon socket directory /var/dm does
not exist and cannot be created - errno 111 EDC5111I Permission denied.
```

EZD1625I THE DEFENSE MANAGER DAEMON COULD NOT INITIALIZE MODIFY AND STOP COMMAND SUPPORT

Explanation: The Defense Manager daemon (DMD) was unable to initialize the MODIFY and STOP command support.

System action: DMD processing continues. The MODIFY and STOP command service is not available.

Operator response: If you require the MODIFY or STOP command service, restart the DMD. If the problem persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide the syslog that includes this message. If available, provide CTRACE information for component SYSTCPDM.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1625I THE DEFENSE MANAGER DAEMON COULD NOT INITIALIZE MODIFY AND STOP COMMAND SUPPORT
```

EZD1626I THE DEFENSE MANAGER DAEMON CTRACE PARMLIB MEMBER *pname* WAS NOT FOUND

Explanation: The Defense Manager daemon (DMD) was unable to find the specified parmlib member and was initialized with the MINIMUM tracing option.

In the message text:

pname

The name of the CTRACE parmlib member.

System action: DMD CTRACE initializes with the MINIMUM tracing option; the DMD continues processing.

Operator response: If different CTRACE options are required, contact the system programmer.

System programmer response: If different CTRACE options are required, configure the CTRACE parmlib member.

See the information about TCP/IP services component trace for DMD in z/OS Communications Server: IP Diagnosis Guide for more information about configuring the CTRACE parmlib member and enabling CTRACE after DMD initialization.

EZD1627I • EZD1628I

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1626I THE DEFENSE MANAGER DAEMON CTRACE PARMLIB MEMBER CTIDMD00 WAS NOT FOUND
```

EZD1627I SYNTAX ERROR IN THE DEFENSE MANAGER DAEMON CTRACE PARMLIB MEMBER *pname*

Explanation: A syntax error was detected in the specified parmlib member, which is used to configure the Defense Manager daemon (DMD) CTRACE options. The DMD CTRACE is initialized with the MINIMUM tracing option.

In the message text:

pname

The name of the CTRACE parmlib member.

System action: The DMD CTRACE initializes with the MINIMUM tracing option; the DMD continues processing.

Operator response: Contact the system programmer.

System programmer response: Correct the syntax error in the parmlib member.

See the information about TCP/IP services component trace for DMD in z/OS Communications Server: IP Diagnosis Guide for more information about configuring the CTRACE parmlib member and enabling CTRACE after DMD initialization.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1627I SYNTAX ERROR IN THE DEFENSE MANAGER DAEMON CTRACE PARMLIB MEMBER CTIDMD00
```

EZD1628I DEFENSE MANAGER DAEMON CTRACE INITIALIZATION ERROR - FUNCTION *function* RETURN CODE *rc* REASON CODE *rsn*

Explanation: The Defense Manager daemon (DMD) failed to initialize the CTRACE subsystem.

In the message text:

function

The function that was being processed when the CTRACE error occurred.

rc

The error return code.

rsn

The error reason code.

System action: The DMD continues processing without CTRACE enabled.

Operator response: See the information about defining a user application to the component trace service in z/OS

MVS Programming: Authorized Assembler Services Reference ALE-DYN for the return code and reason code explanations for the different CTRACE functions.

See the information about TCP/IP services component trace for the DMD in z/OS Communications Server: IP Diagnosis Guide for more information about configuring the CTRACE parmlib member and enabling CTRACE after DMD initialization.

Ensure that storage is available for the size of the trace buffers. If these checks do not reveal the cause of the problem, contact the system programmer. If you want the DMD to be enabled for CTRACE, stop and restart the DMD when the cause of the problem is identified and resolved.

System programmer response: If the problem cannot be resolved, contact IBM software support services and provide the syslog that includes this message.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1628I DEFENSE MANAGER DAEMON CTRACE INITIALIZATION ERROR - FUNCTION CTSSM RETURN CODE 00000004
REASON CODE 00000004
```

EZD1629I Keyword or value rejected - Keyword *keyword* Value *value*

Explanation: The Defense Manager daemon (DMD) was processing a configuration file and either the keyword is unsupported or the value is not valid for the keyword.

In the message text:

keyword

The keyword portion of the configuration line.

value

The value entered for the keyword. If a value was not entered for the keyword, this field is not displayed.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Check for a more specific configuration error message preceding this one. See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the keyword or value that is in error.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1629I Keyword or value rejected - Keyword SysLogLevel Value FF
```

EZD1630I Right brace () expected, but not found

Explanation: The Defense Manager daemon (DMD) was processing a configuration file and the right brace () of a configuration statement was missing. All statements begin with a left brace ({) and end with a right brace (}). Each brace must be on a separate line with no other text.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the error in the configuration file and restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1630I Right brace () expected, but not found

EZD1631I *statementname* is not a recognized statement type

Explanation: An unrecognized statement type is in the Defense Manager daemon (DMD) configuration file.

In the message text:

statementname

The name of the unrecognized statement.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the error in the configuration file and restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1631I DmStkConfig is not a recognized statement type

EZD1632I Left brace ({} expected, but not found

Explanation: The left brace ({) of a configuration statement was missing. All statements begin with a left brace ({) and end with a right brace (}). Each brace must be on a separate line with no other text.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the error in the configuration file and restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1632I Left brace ({} expected, but not found

EZD1633I THE MODIFY COMMAND EXCEEDED THE MAXIMUM ALLOWED LENGTH OF *maxlen*

Explanation: The Defense Manager daemon (DMD) MODIFY command can accept only the first maxlen characters entered.

In the message text:

maxlen

The maximum number of characters that the MODIFY command can accept.

System action: The MODIFY command is ignored.

Operator response: Reissue the MODIFY command without exceeding the length limit.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1633I THE MODIFY COMMAND EXCEEDED THE MAXIMUM ALLOWED LENGTH OF 128

EZD1634I THE COMMAND ENTERED IS NOT A RECOGNIZED MODIFY REQUEST - *input*

Explanation: You entered an unsupported MODIFY request.

In the message text:

EZD1635I • EZD1636I

input

The MODIFY command that is not supported.

System action: The MODIFY command is ignored.

Operator response: Correct and reissue the MODIFY command. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands for more information about the MODIFY command.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
THE COMMAND ENTERED IS NOT A RECOGNIZED MODIFY REQUEST - this is the bad input
```

EZD1635I THE MODIFY SUBCOMMAND IS NOT SUPPORTED BY THE DEFENSE MANAGER DAEMON - subcommand

Explanation: You entered a MODIFY command that included the specified subcommand. This MODIFY subcommand is not supported by the Defense Manager daemon (DMD).

In the message text:

subcommand

The MODIFY subcommand that is not supported by the DMD.

System action: The MODIFY command is ignored.

Operator response: Correct and reissue the MODIFY command. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the MODIFY command.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1635I THE MODIFY SUBCOMMAND IS NOT SUPPORTED BY THE DEFENSE MANAGER DAEMON - REFRSH
```

EZD1636I THE DEFENSE MANAGER DAEMON RECEIVED THE STOP COMMAND

Explanation: The Defense Manager daemon (DMD) recognizes that a STOP command was issued on the console.

System action: The DMD begins its shutdown sequence.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1636I THE DEFENSE MANAGER DAEMON RECEIVED THE STOP COMMAND

**EZD1637I Exception classname encountered in module modname - error id internal_error_ID rc rc errno errno
errnojr errnojr**

Explanation: A runtime exception was issued.

In the message text:

classname

The name of the exception class.

modname

The name of the module in which the exception was detected.

internal_error_ID

An internal error ID used by IBM to identify the error detected in the module.

rc

The return code, if any, from the function call that caused or detected the error condition.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: Processing continues in most cases. In some cases, the Defense Manager daemon (DMD) might experience problems or end.

Operator response: Contact the system programmer.

System programmer response: This message does not always indicate an unrecoverable DMD condition. However, any traces or logs that contain this message should be forwarded to IBM software support services if the daemon is unable to operate normally after these messages are logged.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1637I Exception ConstructorError encountered in module EZADMMTH - error id 1 rc 1 errno 0 errnojr 0

EZD1638I The stackname for the DmStackConfig statement on configuration file line *linenum* is missing or incorrect - *stackname*

Explanation: The stack name specified on a DmStackConfig statement in the Defense Manager daemon (DMD) configuration file is missing or incorrect.

In the message text:

linenum

The line number in the DMD configuration file where the missing or incorrect stack name occurs.

stackname

The incorrect stack name. If the stack name is missing, this field is not displayed.

System action: The processing of the configuration file stops. If this error occurs during the processing of a MODIFY command, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the DmStackConfig statement with the incorrect or missing stack name. Restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1638I The stackname for the DmStackConfig statement on configuration file line 157 is missing or incorrect - TCP S2

EZD1639I THE DEFENSIVEFILTERDIRECTORY VALUE MAY NOT BE CHANGED BY A REFRESH OPERATION - IN USE *initialdirectory* FAILED *refreshdirectory*

Explanation: The Defense Manager daemon (DMD) configuration file used for the MODIFY REFRESH command contained a different DefensiveFilterDirectory value than the DMD configuration file with which DMD was started. If DefensiveFilterDirectory was not specified in the REFRESH configuration file the default value /var/dm/filters was used. The defensive filter directory cannot be changed with a MODIFY REFRESH command. Stop DMD, then restart DMD with the new defensive filter directory.

In the message text:

initialdirectory

The name of the defensive filter directory with which DMD was started.

refreshdirectory

The name of the defensive filter directory in the REFRESH configuration file that was rejected.

System action: Processing of the configuration file stops. No changes are committed and the daemon continues using the old configuration values.

Operator response: If the DMD should use a different defensive filter directory than the one with which it was started, stop and restart DMD with the configuration file containing the new defensive filter directory name.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1639I THE DEFENSIVEFILTERDIRECTORY VALUE MAY NOT BE CHANGED BY A REFRESH OPERATION - IN USE
/var/dm/filters FAILED /var/dm/filters1
```

EZD1640I MISSING OR INCORRECT STACKNAME SPECIFIED FOR FORCE_INACTIVE MODIFY COMMAND - *stackname*

Explanation: The stack name was specified incorrectly on a MODIFY *procname*,FORCE_INACTIVE,*stackname* command.

In the message text:

stackname

The incorrect stack name. If the stack name is missing, this field is not displayed.

System action: The MODIFY command is ignored.

Operator response: Reissue the MODIFY command with the correct stack name. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the MODIFY command.

System programmer response: None.

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: In this example, an incorrect stack name was specified for the MODIFY FORCE_INACTIVE command.

```
MODIFY DMD,FORCE_INACTIVE,TCP CS
```

The following message is the result:

```
EZD1640I MISSING OR INCORRECT SYNTAX FOR STACKNAME PORTION OF FORCE_INACTIVE MODIFY COMMAND - ,TCP CS
```

In this example, a stack name was not specified for the MODIFY FORCE_INACTIVE command.

```
MODIFY DMD,FORCE_INACTIVE
```

The following message is the result:

```
EZD1640I MISSING OR INVALID SYNTAX FOR STACKNAME PORTION OF FORCE_INACTIVE MODIFY COMMAND -
```

EZD1641I STACK *stackname* IS NOT STARTED AND IS NOT CONFIGURED IN THE DEFENSE MANAGER DAEMON CONFIGURATION FILE

Explanation: The MODIFY FORCE_INACTIVE command was issued for a TCP/IP stack that is not defined in the Defense Manager daemon (DMD) configuration file. The TCP/IP stack is also down. Defensive filtering is inactive for the specified TCP/IP stack so there is no action for DMD to take to force the defensive filter mode to inactive.

In the message text:

EZD1642I • EZD1643I

stackname

The name of the TCP/IP stack specified on the MODIFY FORCE_INACTIVE command.

System action: The MODIFY FORCE_INACTIVE command is ignored.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1641I STACK STACK1 IS NOT STARTED AND IS NOT CONFIGURED IN THE DEFENSE MANAGER DAEMON  
CONFIGURATION FILE
```

EZD1642I INCORRECT SYNTAX ON THE MODIFY SUBCOMMAND *subcommand*

Explanation: The syntax of the MODIFY command is incorrect.

In the message text:

subcommand

The subcommand portion of the MODIFY command.

System action: The MODIFY command is ignored.

Operator response: Correct and reissue the MODIFY command. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the MODIFY command.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example: In this example, a stack name was incorrectly specified for the MODIFY DISPLAY command.

```
MODIFY DMD,DISPLAY,TCPCS
```

The following message is the result:

```
EZD1642I INCORRECT SYNTAX ON THE MODIFY SUBCOMMAND DISPLAY
```

EZD1643I THE DEFENSIVE FILTER MODE FOR STACK *stackname* WAS SUCCESSFULLY FORCED TO INACTIVE

Explanation: A MODIFY FORCE_INACTIVE command was processed successfully, which forced the stack defensive filter mode to inactive.

In the message text:

stackname

The name of the TCP/IP stack specified on the MODIFY FORCE_INACTIVE command.

System action: Defensive filters are deleted from the TCP/IP stack and the defensive filter mode is set to inactive. The Defense Manager daemon (DMD) will not add any defensive filters to the TCP/IP stack while the mode is inactive.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1643I THE DEFENSIVE FILTER MODE FOR STACK TCPCS2 WAS SUCCESSFULLY FORCED TO INACTIVE
```

EZD1644I THE DEFENSIVE FILTER MODE FOR STACK *stackname* COULD NOT BE FORCED TO INACTIVE

Explanation: A MODIFY FORCE_INACTIVE command was not successful as the result of an internal error in the Defense Manager daemon (DMD) or TCP/IP stack.

In the message text:

stackname

The name of the TCP/IP stack on the MODIFY FORCE_INACTIVE command.

System action: Results are unpredictable. One or more address space dumps might be produced.

Operator response: Contact the system programmer.

System programmer response: Check the system log for related error messages. Contact IBM software support services and provide the syslog and any dumps.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1644I THE DEFENSIVE FILTER MODE FOR STACK TCPCS2 COULD NOT BE FORCED TO INACTIVE
```

EZD1645I There are multiple DmConfig statements in the configuration file - only one DmConfig statement is permitted

Explanation: Multiple DmConfig statements are specified in the Defense Manager daemon (DMD) configuration file. Only one DmConfig statement is allowed.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

EZD1646I

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the error in the configuration file and restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1645I There are multiple DmConfig statements in the configuration file - only one DmConfig statement is permitted

EZD1646I The *keywordname* keyword on configuration file line *linenum* is a duplicate - only one is permitted in each *statementname* statement

Explanation: A duplicate keyword occurs on the specified statement in the Defense Manager daemon (DMD) configuration file.

In the message text:

keywordname

The name of the duplicate keyword.

linenum

The line number in the DMD configuration file where the duplicate keyword occurs.

statementname

The name of the statement in which the duplicate keyword occurs.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Correct the error in the configuration file and restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1646I The SyslogLevel keyword on configuration file line 76 is a duplicate - only one is permitted in each DmConfig statement

EZD1647I The TCP/IP stack name *stackname* was used on multiple DmStackConfig statements

Explanation: Multiple DmStackConfig statements specify the same TCP/IP stack in the Defense Manager daemon (DMD) configuration file.

In the message text:

stackname

The name of the TCP/IP stack that appears on multiple DmStackConfig statements.

System action: The processing of the configuration file stops. If this error occurs while a MODIFY command is being processed, then no changes are committed and the daemon continues using the old configuration values. If this error occurs during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Specify a unique TCP/IP stack name for each DmStackConfig statement. Restart the DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1647I The TCP/IP stack name TCPCS was used on multiple DmStackConfig statements

EZD1648I DefensiveFilterDirectory cannot be a relative path - *dirname*

Explanation: The DefensiveFilterDirectory in the Defense Manager daemon (DMD) configuration file was specified as a relative path. The DefensiveFilterDirectory must be specified as an absolute path.

In the message text:

dirname

The name of the DefensiveFilterDirectory specified in the configuration file.

System action: DMD initial startup processing fails and the DMD ends.

Operator response: Contact the system programmer.

System programmer response: Correct the directory specified for DefensiveFilterDirectory in the DMD configuration file and restart the DMD. See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1648I DefensiveFilterDirectory cannot be a relative path - var/dm_filters

EZD1649I • EZD1650I

EZD1649I Extra text at end of configuration file line *linenum* is not permitted

Explanation: Extraneous text was found on a line in the Defense Manager daemon (DMD) configuration file.

In the message text:

linenum

The line number in the DMD configuration file where the extraneous text was found.

System action: The processing of the configuration file stops. If this error occurred during the processing of a MODIFY command, then no changes are committed and the daemon continues using the old configuration values. If this error occurred during the initial startup sequence of the daemon, then the daemon ends.

Operator response: Contact the system programmer.

System programmer response: Extraneous text cannot be placed at the end of the line in the DMD configuration file. A comment must be specified on a separate line beginning with a number sign (#). All statements begin with an opening brace ({) and end with a closing brace (}). Each brace must be on a separate line with no other text. See the information about the Defense Manager daemon (DMD) in z/OS Communications Server: IP Configuration Reference for information about the DMD configuration file. Remove the extra text at the end of the specified line in the DMD configuration file. Restart DMD or reissue the MODIFY command.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1649I Extra text at end of configuration file line 75 is not permitted

EZD1650I Unable to open message catalog *cat*: *errno* *errno* (*description*) *errnojr* *errnojr* - Default messages will be used

Explanation: An attempt was made to open the **nssct1** command message catalog in the message catalog directory, but the catalog could not be opened for the specified reason. The default location for the message catalog is set by the NLSPATH environment variable.

In the message text:

cat

The name of the catalog the **nssct1** command attempted to open.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes , where the reason codes are listed.

System action: The **nssct1** command processing continues. Default messages will be used.

Operator response: If the default messages are acceptable, no action is necessary. Otherwise, contact the system programmer to correct the indicated error.

System programmer response: If you want to use the message catalog, correct the indicated error. If the default messages are acceptable, no action is necessary.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1650I Unable to open message catalog nssctlmsg.cat: errno 113 (EDC5113I Bad file descriptor.)
errnojr 0xC90F0003 - Default messages will be used
```

EZD1651I Unsupported option *opt*

Explanation: Parsing for the **nssctl** command detected an unsupported option.

In the message text:

opt

The option that is not supported.

System action: The **nssctl** command processing ends.

Operator response: See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1651I Unsupported option -e
```

EZD1652I Option *opt* is missing a required value

Explanation: The specified **nssctl** command option requires a value, but no value was specified on the command.

In the message text:

opt

The specified option.

System action: The **nssctl** command processing ends.

Operator response: Correct and reissue the command. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

EZD1653I • EZD1654I

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1652I Option -D is missing a required value

EZD1653I Option *opt* value length exceeds limit of *limit* characters

Explanation: The **nssctl** command option value that was specified exceeds the character limit.

In the message text:

opt

The option that was specified.

limit

The maximum number of characters allowed for the option value.

System action: The **nssctl** command processing ends.

Operator response: Correct and reissue the command. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1653I Option -c value length exceeds limit of 24 characters

EZD1654I Option *opt* does not support value *val*

Explanation: The specified value is not supported for this **nssctl** command option.

In the message text:

opt

The option that was specified.

val

The unsupported value.

System action: The **nssctl** command processing ends.

Operator response: Correct and reissue the command. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1654I Option -c does not support value abc
```

EZD1655I Primary option not specified

Explanation: The **nssctl** command requires a primary option but none was provided.

System action: The **nssctl** command processing ends.

Operator response: Correct and reissue the command. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: Not applicable.

EZD1656I Requester is not authorized to perform the request

Explanation: The **nssctl** command requires the user to have authorization from the System Authorization Facility (SAF). The requester does not have authority to perform the requested action.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer to obtain the appropriate authority to use the **nssctl** command.

System programmer response: Give the user the appropriate authority to use the **nssctl** command. See the information about the nssctl command in z/OS Communications Server: IP System Administrator's Commands for more information about the SAF permission required by the **nssctl** command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: Not applicable.

EZD1657I Memory could not be obtained to complete the request

Explanation: There is not enough memory to satisfy the **nssctl** command request.

System action: The **nssctl** command processing ends.

Operator response: The error might be transient; reissue the request. If the error persists, contact the system programmer

System programmer response: Trace or log entries might provide more information about the error. Ensure that there is enough memory available on the system. See the information about diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: Not applicable.

EZD1658I sigaction() failed for signal : errno errno (description)

Explanation: An error occurred during the establishment of a signal handler in support of the **nssctl** command request.

In the message text:

signal

The signal that the **nssctl** command attempted to register with the signal handler.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the error indicated by *errno* and *description*, and reissue the command.

User response: Not applicable.

nssctl

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1658I sigaction() failed for SIGABND : errno 121 (EDC5121I Invalid argument.)

EZD1659I The nssctl command is not APF authorized

Explanation: The **nssctl** command is an APF-authorized application, but the APF bit is not set.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the **nssctl** command is installed correctly. Issue the **extattr** command to ensure that the APF-authorized attribute is set to ON. See the z/OS UNIX System Services Command Reference for information about the **extattr** command syntax and options.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: Not applicable.

EZD1660I Extraneous parameter *parm*

Explanation: An extraneous parameter was specified on an **nssctl** command.

In the message text:

parm

The extraneous parameter.

System action: The **nssctl** command processing ends.

Operator response: Remove the extraneous parameter and issue the **nssctl** command again. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1660I Extraneous parameter abc

EZD1663I Signal *signum* received - nssctl command processing ended

Explanation: A system signal was received, which forced the **nssctl** command to end. See z/OS UNIX System Services Command Reference for more information about signals.

In the message text:

signum

The signal that was received.

System action: The **nssctl** command processing ended.

EZD1664I

Operator response: The condition might be temporary; try the command again and specify the debug (-Z) option on the command specification. If the failure persists, contact the system programmer.

System programmer response: Contact IBM software support services and provide a syslog that includes the time of the command failure. If available, provide a CTRACE for component SYSTCPIK.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1663I Signal SIGTERM received - nssctl command processing ended
```

EZD1664I Connect error for server daemon connection :function errno errno (description) errnojr errnojr

Explanation: This message is displayed by the z/OS UNIX **nssctl** command when an error occurred while connecting to the server daemon.

In the message text:

server

The network security services (NSS) daemon to which the **nssctl** command is trying to connect.

function

The name of the C/C++ runtime library function that detected the error.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Verify that the daemon is running by issuing the MODIFY *procname*, DISPLAY command, where *procname* is the member name of the cataloged procedure used to start the daemon. Use the information from the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: The following message is displayed if the **nssctl** command tries to connect to a daemon that is not running.

EZD1664I Connect error for NSS daemon connection : connect errno 1128 (EDC8128I Connection refused.)
errnojr 0x120D0253

EZD1665I Send error on server daemon connection :function *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: This message is displayed by the z/OS UNIX **nssctl** command when an error occurs during a write operation while connecting to the server daemon.

In the message text:

server

The network security services (NSS) daemon to which the **nssctl** command is trying to connect.

function

The name of the C/C++ runtime library function that detected the error.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Verify that the daemon is running by issuing the MODIFY *procname*, DISPLAY command, where *procname* is the member name of the cataloged procedure used to start the daemon. Use the information from the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: The following message is displayed if the NSS daemon is stopped while an **nssctl** command request is in progress.

EZD1665I Send error on NSS daemon connection : write errno 1124 (EDC8124I Socket not connected.)
errnojr 0x120D025C

EZD1666I Receive error on server daemon connection :function *errno* *errno* (*description*) *errnojr* *errnojr*

Explanation: This message is displayed by the z/OS UNIX **nssctl** command when an error occurs during a read operation while connecting from the server daemon.

In the message text:

server

The network security services (NSS) daemon to which the **nssctl** command is trying to connect.

function

The name of the C/C++ runtime library function that detected the error.

EZD1667I

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer

System programmer response: Verify that the daemon is running by issuing the MODIFY *procname*, DISPLAY command, where *procname* is the member name of the cataloged procedure used to start the daemon. Use the information from the *function*, *errno*, and *errnojr* values to fix the problem.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: The following message is displayed if the NSS daemon or IKE daemon is stopped while a **nssctl** command request is in progress.

```
EZD1666I Receive error on NSS daemon connection : read errno 1124 (EDC8124I Socket not connected.)  
errnojr 0x120D025C
```

EZD1667I Data received over the *server* daemon connection is not valid : return code *returncode*

Explanation: This message is displayed by the z/OS UNIX **nssctl** command when data received from the daemon is not in the expected format

In the message text:

server

The daemon whose connection received the illegal data.

returncode

Possible values are:

- 1 The message header identifier is not valid.
- 2 The message header version number is not valid.
- 3 The message type is not valid.
- 5 The message header size is not valid.
- 6 The message size is not valid.
- 7 The message contains a reserve area that is not set to zeros.
- 8 The message contains a record length that is not valid.
- 9 The message contains a record count that is not valid.
- 10 The message contains a section with a length that is not valid.
- 11 The message contains a section with a count field that is not valid.

- 14 The response message contains a correlation ID that does not match the correlation ID in the request message.
- 15 The response message contains a message type that does not correspond to the message type in the request message.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Issue the **nssctl** command again with the -Z option to determine the sequence of events leading up to the error. Contact the IBM Software Support Center.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: The following message is displayed if the response message received from the daemon does not correspond to the request message sent to the daemon.

```
EZD1667I Data received over the NSS daemon connection is not valid : return code 14
```

EZD1668I Message received from server daemon with return code *returncode* (*description*) reason code *reasoncode*

Explanation: The server daemon returned a response message with a nonzero return code.

In the message text:

server

The NSS daemon from which the **nssctl** command received the message.

returncode

The return code contained in the response message. See the information about network manager return and reason codes in z/OS Communications Server: IP Programmer's Guide and Reference and the diagnosing network security services (NSS) server problems information in z/OS Communications Server: IP Diagnosis Guide to determine the appropriate response.

description

Describes the meaning of the *returncode* value.

reasoncode

The reason code contained in the response message. See the information about network manager return and reason codes in z/OS Communications Server: IP Programmer's Guide and Reference and the information about diagnosing network security services (NSS) server problems in z/OS Communications Server: IP Diagnosis Guide to determine the appropriate response. For reason codes that have a mnemonic starting with NSS, look first in the z/OS Communications Server: IP Programmer's Guide and Reference. For reason codes that have a mnemonic starting with the letters NM, look first in the z/OS Communications Server: IP Diagnosis Guide.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the problem using the network manager return and reason codes in z/OS Communications Server: IP Programmer's Guide and Reference or using the information about diagnosing network security services (NSS) server problems in z/OS Communications Server: IP Diagnosis Guide.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

EZD1669I • EZD1670I

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1668I Message received from NSS daemon with return code 121 ( EDC5121I Invalid argument. )
      reason code NMsRsnInvalidAPIVersion
```

EZD1669I Internal nssctl command error : return code *returncode*

Explanation: This message is displayed by the z/OS UNIX **nssctl** command when an internal error is detected.

In the message text:

returncode

The return code from the **nssctl** command.

System action: The **nssctl** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Issue the **nssctl** command again with the -Z option to determine the sequence of events leading up to the error. Contact the IBM Software Support Center.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1669I Internal nssctl command error : return code 1
```

EZD1670I Client *clientname* is not available

Explanation: The Network Security Services (NSS) client specified with the **nssctl** command -c option cannot be found.

In the message text:

clientname

The name of the NSS client that was specified with the -c option of the z/OS UNIX **nssctl** command.

System action: The **nssctl** command processing ends.

Operator response: Determine whether the NSS client is connected to the NSS server by issuing the z/OS UNIX **nssctl -d** command on the system where the NSS daemon is running.

System programmer response:

- For an NSS IPsec client, determine whether there is an **NssStackConfig** statement that defines the client in the IKE daemon configuration file on the system where the client is running.

See the information about the IKE daemon in z/OS Communications Server: IP Configuration Reference and the information about IP security in z/OS Communications Server: IP Configuration Guide for information about configuring the **NssStackConfig** statement.

- For an NSS XMLAppliance client, see the XML appliance documentation for NSS server configuration.

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctlNMI_Transaction.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1670I Client MVS134_TCPCS3 is not available

EZD1671I Incorrect *opt* option value *value* is ignored

Explanation: An incorrect option value was specified and ignored.

In the message text:

opt

The **nssctl** command option that was specified

value

The value that was specified for the **nssctl** command option.

System action: The **nssctl** command continues, using any specified valid values or any default values.

Operator response: Specify an option value that is in the accepted value range and issue the **nssctl** command again. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1671I Incorrect -Z option value 44 is ignored

EZD1672I Primary options *opt1* and *opt2* cannot both be specified

Explanation: The **nssctl** command can specify only one primary option at a time.

In the message text:

opt1 and opt2

The primary options that were specified.

System action: The **nssctl** command processing ends.

Operator response: Issue the **nssctl** command again with only one primary option. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

EZD1673I • EZD1721I

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1672I Primary options -d and -? cannot both be specified

EZD1673I Filter options *opt1* and *opt2* cannot both be specified

Explanation: The **nssctl** command can specify only one filter option at a time.

In the message text:

opt1 and *opt2*

The filter options that were specified.

System action: The **nssctl** command processing ends.

Operator response: Issue the **nssctl** command again with only one filter option. See the information about the **nssctl** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man nssctl** command in a z/OS UNIX shell to obtain information about the **nssctl** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server: z/OS UNIX nssctl command

Module: nssctl.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1673I Filter options -c and -D cannot both be specified

EZD1721I Packet denied by defensive filter: *timestamp* *filter rule=* *rulename ext=* *instance* *sipaddr=* *sipaddr* *dipaddr=* *dipaddr proto=* *proto tag1 tag2 tag3 Interface=* *ifcaddr (dir)* *secclass=* *secclass dest=* *dest len=* *len ifcname=* *ifcname fragment=* *frag*

Explanation: An IP packet matched the indicated defensive filter rule and was denied. For this message to be written, the matching defensive filter must have logging enabled.

In the message text:

timestamp

The stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX **ipsec** command.

instance

The rule name extension that indicates which instance of the rule name was matched.

sipaddr

The source IP address of the packet.

dipaddr

The destination IP address of the packet.

proto

The protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

tag1

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **=** which indicates that the data is not applicable.

tag2

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **=** which indicates that the data is not applicable.

tag3

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.
- If the *proto* value is any value not previously mentioned, the *tag3* value is **=** which indicates that the data is not applicable.

ifcaddr

The interface address over which the packet was received or sent.

dir

Possible values are:

- I** The packet is inbound.
- O** The packet is outbound.

EZD1722I

secclass

The security class assigned to the interface. The security class is a numeric value in the range of 1-255.

dest

Possible values are:

local

The destination is a local destination.

routed

The packet is being routed.

len

The packet length.

ifcname

The interface name.

frag

Possible values are:

Y The packet is a fragment.

N The packet is not a fragment.

routed

The packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

```
EZD1722I Packet denied by defensive filter: 07/11/2007 23:40:08.78 filter rule= Block_192.30.30.0/24
ext= 1 sipaddr= 192.30.30.1 dipaddr= 192.1.1.1 proto= tcp(6) sport= 65000 dport= 21 --
Interface= 192.1.1.1 (1) secclass= 255 dest= local len= 88 ifcname= LINK1 fragment= N
```

```
EZD1722I Packet would have been denied by defensive filter: timestamp filter rule= rulename ext= instance
sipaddr= sipaddr dipaddr= dipaddr proto= proto tag1 tag2 tag3 Interface= ifcaddr (dir ) secclass= secclass
dest= dest len= len ifcname= ifcname fragment= frag
```

Explanation: An IP packet matched the indicated defensive filter rule and the defensive filter mode is simulate. You can set the defensive filter mode to simulate for a single defensive filter or you can set the mode to simulate for the stack, which overrides the mode on the individual defensive filter rules.

Use the simulate mode to monitor the impact of enabling defensive filters without discarding traffic. When an IP packet matches a defensive filter and the mode is simulate, this message is logged, which indicates that the packet would have been discarded if the mode had been block. The packet is not discarded and IP filtering continues.

In the message text:

timestamp

The stack timestamp that indicates the time at which the IP packet was processed by the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX **ipsec** command.

instance

The rule name extension that indicates which instance of the rule name was matched.

sipaddr

The source IP address of the packet.

dipaddr

The destination IP address of the packet.

proto

The protocol from the packet. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- Unknown
- The protocol number

tag1

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is OSPF, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the OSPF header is not present in the packet as the result of fragmentation.
- If the *proto* value is MIPv6, the *tag1* value is **type=** followed by the type, or followed by the value Unknown if the MIPv6 header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **=** which indicates that the data is not applicable.

tag2

tag2 value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value Unknown if the ICMP header is not present in the packet as the result of fragmentation.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port, or followed by the value Unknown if the TCP or UDP header is not present in the packet as the result of fragmentation.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **=** which indicates that the data is not applicable.

tag3

tag3 value varies depending on the *proto* value and direction.

- If the *proto* value is TCP or UDP, the direction is inbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original source port.
- If the *proto* value is TCP or UDP, the direction is outbound, and the port has been translated by the CommServer NAT Traversal function, the *tag3* value is **origport=** followed by the original destination port.

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- If the *proto* value is any value not previously mentioned, the *tag3* value is **=** which indicates that the data is not applicable.

ifcaddr

The interface address over which the packet was received or sent.

dir

Possible values are:

- I** The packet is inbound.
- O** The packet is outbound.

secclass

The security class assigned to the interface. The security class is a numeric value in the range of 1-255.

dest

Possible values are:

local

The destination is a local destination.

routed

The packet is being routed.

len

The packet length.

ifcname

The interface name.

frag

Possible values are:

- Y** The packet is a fragment.
- N** The packet is not a fragment.

routed

The packet is not a fragment.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

```
EZD1722I Packet would have been denied by defensive filter: 07/11/2007 23:40:08.78 filter rule=
  Block_192.30.30.0/24 ext= 1 sipaddr= 192.30.30.1 dipaddr= 192.1.1.1 proto= tcp(6)
  sport= 65000 dport= 21 -- Interface= 192.1.1.1 (I) secclass= 255 dest= local len= 88
  ifcname= LINK1 fragment= N
```

EZD1723I **Defensive filter added:** *date time filter rule= rulename ext= instance sipaddr= sipaddr / sip_prefix_length dipaddr= dipaddr / dip_prefix_length proto= proto tag1 tag2 fragmentsonly= fragments_only dir= dir routing= routing mode= mode log= log lifetime= lifetime userid= userid global= global_setting loglimit= loglimit*

Explanation: A defensive filter is added to the TCP/IP stack.

In the message text:

date

The date on which the defensive filter was added to the stack. This date is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

time

The time at which the defensive filter was added to the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX **ipsec** command.

instance

The rule name extension.

sipaddr / sip_prefix_length

The source IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all source IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all source IPv6 addresses.

dipaddr / dip_prefix_length

The destination IP address specification for the defensive filter rule. The value 0.0.0.0/0 indicates that the defensive filter rule applies to all destination IPv4 addresses. The value ::/0 indicates that the defensive filter rule applies to all destination IPv6 addresses.

proto

The protocol specification for the defensive filter rule. Possible values are:

- ICMP(1)
- IGMP(2)
- IP(4)
- TCP(6)
- UDP(17)
- ESP(50)
- AH(51)
- ICMPv6(58)
- OSPF(89)
- IPIP(94)
- MIPv6(135)
- The protocol number
- ALL

tag1

The *tag1* value varies depending on the *proto* value.

- If the *proto* value is ICMP or ICMPv6, the *tag1* value is **type=** followed by the ICMP or ICMPv6 type, or followed by the value **all**.
- If the *proto* value is TCP or UDP, the *tag1* value is **sport=** followed by the source port range. For example, **sport= 1024-65535**. For a defensive filter that applies to all source ports the *tag1* value is **sport= 1-65535**.
- If the *proto* value is any value not previously mentioned, the *tag1* value is **--** which indicates that the data is not applicable.

tag2

The *tag2* value varies depending on the protocol.

- If the *proto* value is ICMP or ICMPv6, the *tag2* value is **code=** followed by the ICMP or ICMPv6 code, or followed by the value **a11**.
- If the *proto* value is TCP or UDP, the *tag2* value is **dport=** followed by the destination port range. For example, **dport= 21-21**. For a defensive filter that applies to all destination ports, the *tag2* value is **dport= 1-65535**.
- If the *proto* value is any value not previously mentioned, the *tag2* value is **--** which indicates that the data is not applicable.

fragments_only

Possible values are:

yes

The defensive filter rule applies only to fragments.

no The defensive filter rule does not apply only to fragments.***dir***

The direction specified for the defensive filter rule. Possible values are inbound and outbound.

routing

The routing specified for the defensive filter rule. Possible values are local, routed, and either.

mode

The defensive filtering mode specified for the defensive filter rule. Possible values are block and simulate.

log

The log specified for the defensive filter rule. Possible values are yes and no. If the *mode* value is Simulate, the *log* value is not applicable and logging is always performed.

lifetime

The lifetime of the defensive filter rule in minutes.

userid

The user ID of the user who added the defensive filter rule.

global_setting

Possible values are:

yes

The defensive filter rule was created as a global filter rule.

no The defensive filter rule was created as a stack-specific filter rule.***loglimit***

The limit on the number of filter-match messages generated for this filter in a 5-minute interval. A value of 0 indicates that there is no limit.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

```
EZD1723I Defensive filter added: 07/11/2012 23:40:08.78 filter rule= Block_192.30.30.0/24 ext= 1
    sipaddr= 192.30.30.0 / 24 dipaddr= 0.0.0.0 / 0 proto= tcp(6) sport= 1024 - 65535 dport= 21 - 21
    fragmentsonly= no dir= inbound routing= local mode= block log= yes lifetime= 30 userid= USER1
    global= no loglimit= 100
```

EZD1724I Defensive filter deleted: timestamp filter rule= rulename ext= instance reason= reason userid= userid

Explanation: A defensive filter is deleted from the TCP/IP stack.

In the message text:

timestamp

The stack timestamp that indicates the time at which the defensive filter was deleted from the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX **ipsec** command.

instance

The rule name extension.

reason

The reason that the defensive filter was deleted from the TCP/IP stack. Possible *reason* values are:

expire

The defensive filter lifetime expired and the filter was deleted from the stack.

delete_specific

The defensive filter was deleted because a z/OS UNIX **ipsec** command was issued to delete this filter by name.

delete_all

The defensive filter was deleted because a z/OS UNIX **ipsec** command was issued to delete all the defensive filters on this stack.

defensive_mode_inactive

The defensive filter was deleted because the user changed the defensive filter mode to inactive. The defensive filter mode can be set to inactive by editing the Defense Manager daemon (DMD) configuration file or by issuing the MODIFY *procname*,FORCE_INACTIVE command.

userid

The user ID of the user who deleted the defensive filter. If the *reason* value is expire or **defensive_mode_inactive**, the *userid* value is N/A.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

```
EZD1724I Defensive filter deleted: 07/11/2007 23:40:08.78 filter rule= Block_192.30.30.0/24
    ext= 1 reason= delete_specific userid= USER2
```

EZD1725I Defensive filter updated: date time filter rule= rulename ext= instance mode= mode log= log lifetime= lifetime userid= userid loglimit= loglimit

Explanation: One or more values have been updated for a defensive filter in the TCP/IP stack. These updates were made using the z/OS UNIX **ipsec** command.

In the message text:

date

The date on which the defensive filter was updated in the stack. This date is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

time

The time at which the defensive filter was updated in the stack. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

rulename

The defensive filter rule name as specified on the -N option when the defensive filter was added with the z/OS UNIX **ipsec** command.

instance

The rule name extension.

mode

The defensive filtering mode specification for the defensive filter. If the defensive filtering mode was updated with the z/OS UNIX **ipsec** command, the *mode* value is **block** or **simulate**. If the defensive filtering mode was not updated, the *mode* value is N/A.

log

The log specification for the defensive filter. If the log setting was updated with the z/OS UNIX **ipsec** command, the *log* value is yes or no. If the log setting was not updated, the *log* value is N/A.

lifetime

The lifetime of the defensive filter in minutes. If the lifetime was updated with the z/OS UNIX **ipsec** command, the *lifetime* value is the new lifetime value. If the lifetime was not updated, the value is N/A.

userid

The user ID of the user who updated the defensive filter.

loglimit

The limit on the number of filter-match messages generated for this filter in a 5-minute interval. A value of 0 indicates that there is no limit. If the log limit was not updated, the value is N/A.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: EZATRZOS

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

```
EZD1725I Defensive filter updated: 07/11/2012 23:40:08.78 filter rule= Block_192.30.30.0/24 ext= 1 mode= simulate log= N/A lifetime= N/A userid= USER1 loglimit= 100
```

EZD1726I SWSA shadow tunnel installation failed *timestamp vpnafter= vpnafter tunnelID= tunID AHSPIndex AHIndex ESPSPIndex= ESPIndex reason= rsn reason code= rsncode*

Explanation: The installation of a Sysplex-Wide Security Associations (SWSA) shadow tunnel for a distributed DVIPA on a target stack failed.

The SWSA function enables a distributing TCP/IP stack to negotiate IPSec tunnels for distributed DVIPAs. The IPSec tunnels are installed on target stacks for the distributed DVIPA as shadow tunnels. SWSA requires that the IP filter policy that applies to the DVIPA be consistent between the target stack and the distributing stack. One reason the tunnel installation might fail is if the IP filter policies are not consistent, therefore the shadow tunnel cannot be installed because the target stack does not have IP filter rules that correspond to that tunnel.

In the message text:

timestamp

Indicates when the installation failure occurred. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This time stamp might be different than the syslogd message time stamp.

vpnafter

The vpnafter name.

- If configured with the IBM Configuration Assistant for z/OS Communications Server, the *vpnafter* name corresponds to the name of the security level in the GUI. The *vpnafter* name also contains a suffix appended to the security level name to guarantee uniqueness.
- If configured in the Policy Agent configuration file, the *vpnafter* name is the name specified on the IpDynVpnAction statement.

tunID

The tunnel ID.

AHIndex

The AH security parameter index.

ESPIndex

The ESP security parameter index.

rsn

Indicates the specific reason the installation failed.

reason	Explanation	Comments
1	Error encountered while you try to install the shadow tunnel.	See the reason codes below for additional information.
2	Error encountered while you try to install the dynamic filter associated with the shadow tunnel.	See the reason codes below for additional information.
3	Target stack is FIPS140 enabled, and the tunnel was not negotiated in FIPS140 compliant mode.	A target stack that is enabled for FIPS140 will not accept a tunnel from a distributing stack that is not enabled for FIPS140.

rsncode

Provides additional information about the installation failure.

reason code	Explanation	Comments
0	No additional information provided.	This value is only applicable when reason has a value of 3.
7	The dynamic filter did not match an anchor filter.	Ensure that the policy on the target stack is consistent with the policy on the distributing stack.
8	Default policy is in use.	The shadow tunnel cannot be installed if the policy from the policy agent is not currently in use.

EZD1727I

reason code	Explanation	Comments
24	ICSF failure occurred.	This message will be preceded by message EZD1730I that indicates the return and reason Codes from ICSF. See the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.
25	ICSF is not active.	Services from ICSF are required to install this shadow tunnel. ICSF must be started.
114	Tunnel could not be added to internal structures because of duplicates.	Contact the IBM Software Support Center.
121	The authentication algorithm provided is not supported.	Ensure that the policy on the target stack is consistent with the policy on the distributing stack. Some algorithms are not supported because of export restrictions. Ensure that the algorithm that is being used is supported.
132	Storage shortage	Storage to complete the request is not currently available. Determine the cause of the storage failure.
134	The encryption algorithm provided is not supported.	Ensure that the policy on the target stack is consistent with the policy on the distributing stack. Some encryption algorithms are not supported because of export restrictions. Ensure that the algorithm that is being used is supported.
1008	The dynamic filter being added conflicted with an existing dynamic filter.	Ensure that the policy on the target stack is consistent with the policy on the distributing stack.

See the information about Sysplex-wide Security Associations in z/OS Communications Server: IP Configuration Guide.

System action: The tunnel installation fails; TCP/IP processing continues.

Operator response: None.

System programmer response: Ensure that the IP filter policy on the distributing stack for all traffic pertaining to the distributed DVIPA is correctly mirrored on the target stack. Also, take any additional action dictated by the reason code.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: ezatrzos.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1726I SWSA shadow tunnel installation failed: 04/30/2009 19:47:27.99 vpnaction= IPSec_Gold
tunne1ID= Y4 AHSPi= 0 ESPSPI= 3517985610 reason= 3 reason code= 0
```

EZD1727I FIPS140 support is enabled for IPSec

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is enabled for IPSec in the TCP/IP stack. All cryptographic operations are performed by cryptographic modules that are designed to follow the Level 1 security requirements of FIPS publication 140-2.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: No action needed.

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP: TRMD

Module: ezatrzos.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1727I FIPS140 support is enabled for IPSec

EZD1728I FIPS140 support is not enabled for IPSec

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is not enabled for IPSec in the TCP/IP stack. Cryptographic operations might be performed by cryptographic modules that are not designed to follow the Level 1 security requirements of FIPS publication 140-2.

System action: TCP/IP processing continues.

Operator response: No action needed.

System programmer response: If FIPS 140 support is required for IPSec, then configure **FIPS140 Yes** on the **IpFilterPolicy** statement; otherwise, no action is needed.

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP: TRMD

Module: ezatrzos.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1728I FIPS140 support is not enabled for IPSec

EZD1730I ICSF Service CSFPTRC failed: *timestamp* ICSF Return Code= *return_code* ICSF Reason Code= *reason_code*

Explanation: The Integrated Cryptographic Service Facility (ICSF) service CSFPTRC returned an error. This service is called to create a session object.

In the message text:

timestamp

The time at which the failure occurred. This time is retrieved from the system time-of-day clock, which usually reflects coordinated universal time (UTC). This timestamp might be different than the syslogd message timestamp.

return_code

The return code value, in hexadecimal format, that was returned by the ICSF service.

reason_code

The reason code value, in hexadecimal format, that was returned by the ICSF service.

System action: The cryptographic request fails and TCP/IP processing continues.

Operator response: None.

EZD1731I

System programmer response: See the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide for the specific actions to be taken.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: TRMD

Module: ezatrzos.c

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1730I ICSF Service CSFPTRC failed: 04/30/2009 19:35:31.04 ICSF Return Code=8 ICSF Reason Code=1024

EZD1731I The Defense Manager daemon marked the persistent filter data for stack *stackname* as untrusted

Explanation: When the Defense Manager daemon (DMD) was restarted, an error was detected in the persistent filter data for the stack specified by *stackname*. The persistent filter data file that was named active.*stackname* was renamed to untrusted.*stackname.timestamp*.

In the message text:

stackname

The name of the TCP/IP stack for which the persistent filter data is not trusted.

System action: Defense Manager daemon (DMD) processing continues.

Operator response: Contact the system programmer.

System programmer response: The persistent filter data is maintained for each stack in binary files created by the DMD. The files are created in the directory specified by the DefensiveFilterDirectory keyword on the DmConfig statement in the DMD configuration file. These binary files are managed by the DMD and must not be modified manually. See the information about the DefensiveFilterDirectory parameter in the DMConfig statement in z/OS Communications Server: IP Configuration Reference for information about the persistent filter data files.

This message can be the result of a change to the DefensiveFilterDirectory value, a damaged file system, or manual editing of the persistent filter data file. Restore the valid persistent data, if available, and restart the DMD. For example, if the DefensiveFilterDirectory value was changed and the new directory had an outdated persistent data file for the stack, copy the persistent data from the previous directory to the new directory or restore the DefensiveFilterDirectory value to its previous value.

If you cannot restore valid persistent data (for example, the file system is damaged), any defensive filters in the stack remain in effect. However, the DMD has no knowledge of the filters. As a result, you cannot update or delete the filters by name. Also, if the stack ends, the DMD cannot reinstall the filters in the stack when the stack is restarted. You can delete all defensive filters from the stack with the **ipsec -F delete -N all** command if you do not want the filters to remain in effect until their lifetime expiration. New defensive filters can be successfully added, updated, and deleted.

If you are starting the DMD following the migration and IPL of your system to a new z/OS release, this message might be the result of a change to the internal structure of the persistent filter data. Defensive filters in the persistent data cannot be processed and are not installed. New defensive filters can be successfully added, updated, and deleted. No action is necessary.

If the persistent filter data in the directory specified by DefensiveFilterDirectory appears to be valid, contact IBM support services. Provide a dump of the DMD and the file named *untrusted.stackname.timestamp*.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1731I The Defense Manager daemon marked the persistent filter data for stack TCPCS as untrusted

**EZD1732I AN ERROR OCCURRED WHILE TRYING TO CREATE THE DMD /var/dm/dmd.sock FILE -
ERRNO *errno* *description***

Explanation: An error occurred when the Defense Manager daemon (DMD) tried to create the /var/dm/dmd.sock file.

In the message text:

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

System action: DMD initial startup processing fails and the DMD ends.

Operator response: Contact the system programmer.

System programmer response: The DMD user ID must have the authority to create, delete, read, and write the /var/dm/dmd.sock file. The most probable cause of the error is that the DMD user ID does not have the authority to create, delete, read, and write files in the /var/dm directory. See the information about configuring the DMD in z/OS Communications Server: IP Configuration Guide. After correcting the error, restart the DMD.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: Not applicable.

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1732I AN ERROR OCCURRED WHILE TRYING TO CREATE THE DMD /var/dm/dmd.sock FILE - ERRNO 111 EDC5111I
Permission denied.

EZD1733I DISPLAY DMD CONFIGURATION:

Explanation: The Defense Manager daemon (DMD) received the MODIFY DMDproc,DISPLAY subcommand. See the information about the Defense Manager daemon MODIFY command in z/OS Communications Server: IP System Administrator's Commands.

System action: The Defense Manager daemon (DMD) continues processing the MODIFY DISPLAY command.

Operator response: None.

System programmer response: None.

User response: No action needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Defense Manager daemon

Module: DmModifyCommandHandler.cpp

Routing code: 2

Descriptor code: 5,8,9

EZD1751I • EZD1752I

Automation: This message is written to both the operator console and syslog.

Example:

EZD1733I DISPLAY DMD CONFIGURATION:

EZD1751I *exchange_type exchange retransmit timed out from src_ip port src_port to dest_ip port dest_port*

Explanation: The Internet Key Exchange (IKE) daemon exhausted the retransmit limit set for an Internet Key Exchange version 2 (IKEv2) exchange retransmission.

Additional diagnostic messages that have the same message instance number are issued to identify the affected Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

exchange_type

The type of the IKEv2 exchange.

src_ip

The local security endpoint IP specification.

src_port

The source port.

dest_ip

The remote security endpoint IP specification.

dest_port

The destination port.

System action: The IKEv2 exchange fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Check the connectivity to the remote security endpoint. If connectivity exists, then the remote security endpoint is not responding.

User response: None

Problem determination: None

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Exchange.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1751I IKE_SA_INIT exchange retransmit timed out from 9.1.2.3 port 500 to 9.4.5.6 port 500

EZD1752I No applicable policy for IKEv2 negotiation using *policy_object_type policy_object_name*

Explanation: The Internet Key Exchange (IKE) daemon is attempting to negotiate an Internet Key Exchange version 2 (IKEv2) Security Association (SA), but the policies defined for that SA are not allowed for IKEv2. This situation can occur when the local policy is written for IKEv1, but the IKE peer uses IKEv2 for SA negotiation. For example, an IpDynVpnAction statement must include at least one IpDataOffer specification. For IKEv2, IpDataOffer specifications that include a HowToEncrypt parameter value other than DoNot and a HowToAuth parameter value of AH are omitted at SA negotiation time because IKEv2 does not support this combination. If all of the IpDataOffer specifications are omitted from the IpDynVpnAction statement due to this restriction, the IKE daemon fails IKEv2 SA negotiation and issues this message.

In the message text:

policy_object_type

The type of the incomplete policy object.

policy_object_name

The name of the incomplete policy object.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: If you did not use the IBM Configuration Assistant for z/OS Communications Server to configure your policy, ensure that the specified policy object has the correct IpDynVpnAction objects for an IKEv2 negotiation. If you did use the IBM Configuration Assistant for z/OS Communications Server to configure your policy, run the Configuration Assistant Health Check to locate policy configuration errors.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2DomainOfInterpretation.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1752I No applicable policy for IKEv2 negotiation using IpDynVpnAction AHandESP
```

EZD1753I IKE version *ike_version* exchange *exchange_type* message *message_id* from *remote_ip* port *remote_port* to *local_ip* port *local_port* is incorrect because *reason*

Explanation: The specified message is ignored for the given reason.

In the message text:

ike_version

The version of Internet Key Exchange (IKE) from the message header.

exchange_type

The exchange field value in the IKE message header.

message_id

The message ID in the message header.

remote_ip

The remote security endpoint IP specification.

remote_port

The remote port of the IKE daemon peer.

local_ip

The local security endpoint IP specification.

local_port

The local port of the IKE daemon.

reason

The textual description of why the message is incorrect.

Additional diagnostic messages that have the same message instance number are issued to identify the affected Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

System action: The IKE message is ignored; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that it has sent an incorrect message.

User response: Not applicable.

EZD1754I

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: simple_net.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1753I IKE version 1.0 exchange 32 message 0 from 1.2.3.4 port 500 to 5.6.7.8 port 500 is incorrect  
because the message length indicated in the header of the message is too large
```

EZD1754I Validation failed for COOKIE notify payload received from *remote_ip* port *remote_port* to *local_ip* port *local_port*

Explanation: When the Internet Key Exchange (IKE) daemon detects a large number of half-open IKE security associations (SAs), it sends a notify payload of type COOKIE to the peer. The peer must duplicate and send back the COOKIE notify payload. The IKE daemon periodically updates the local cookie information and requires that the data in all received COOKIE notify payloads match the local cookie information. If the received cookie data does not match the local cookie information, then it might indicate that the sender is attempting a denial-of-service (DoS) attack against the IKE daemon. This message might be issued with a benign IKE daemon peer if the local cookie information is updated before the peer is able to respond, although such an occurrence is unlikely. A large number of these messages probably indicates a DoS attack.

In the message text:

remote_ip

The remote security endpoint IP specification.

remote_port

The port of the remote IKE daemon peer.

local_ip

The local security endpoint IP specification.

local_port

The port of the local IKE daemon.

System action: IKE daemon processing continues.

Operator response: If more than one EZD1754I message is issued in quick succession, contact the system programmer.

System programmer response: If a large number of EZD1754I messages are issued for the same remote IP address, then the host with that IP address might be mounting a DoS attack against the IKE daemon. Install an IP filter rule to deny IP traffic from that address. If a large number of EZD1754I messages are issued for different remote IP addresses, then it might indicate that an attacker is forging IP addresses. In this case, install IP filter rules to deny IP traffic from all the IP addresses reported as the *remote_ip* value in the EZD1754I messages. See the information about IP security in z/OS Communications Server: IP Configuration Guide for information about implementing IP filter rules.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAInitResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1754I Validation failed for COOKIE notify payload received from 1.2.3.4 port 500 to 5.6.7.8 port 500
```

EZD1755I Transform *transform_name local_attribute_name attribute value local_attribute_value* in local proposal *local_proposal_number* does not match *remote_attribute_name attribute value remote_attribute_value* in remote proposal *remote_proposal_number*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because the local and remote IKEv2 Security Association (SA) transform attribute values were not the same. IKE daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. This failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_name

The name of the transform for which the mismatch occurred.

local_attribute_name and remote_attribute_name

The names of the attributes for which the mismatch occurred.

local_attribute_value and remote_attribute_value

The attribute values that were not the same.

local_proposal_number and remote_proposal_number

The proposal numbers.

System action: IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: If the proposal with the mismatch is the one that should be accepted, notify the administrator of the remote and local security endpoints about the mismatch specification and ask that the configuration be updated with correct values. If the proposal with the mismatch is not the one that should be accepted, you can ignore message EZD1755I. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAAttribute.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1755I Transform ENCR_AES_CBC Key_Length attribute value 128 in local proposal 1 does not match Key_Length attribute value 256 in remote proposal 1

EZD1756I The *message_type* for *exchange_type exchange* with message ID *message_id* from *remote_ip port remote_port* to *local_ip port local_port* will not be processed because *reason*

Explanation: The message with the specified ID is ignored for the specified reason.

In the message text:

message_type

The type of message that was ignored. Possible *message_type* values are request or response.

exchange_type

The type of exchange as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

message_id

The message ID as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

EZD1757I

remote_ip

The remote security endpoint IP specification.

remote_port

The port of the remote Internet Key Exchange (IKE) daemon peer.

local_ip

The local security endpoint IP specification.

local_port

The port of the local IKE daemon.

reason

The description of why the message will not be processed.

System action: The IKE message is ignored; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that a protocol error has occurred.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Exchange.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1756I The request for CREATE_CHILD_SA exchange with message ID 2 from 1.2.3.4 port 500 to 5.6.7.8 port 500 will not be processed because the IKE_SA for the message is half-closed

EZD1757I The *protection_type payload_type payload* is ignored because *reason*

Explanation: An Internet Key Exchange version 2 (IKEv2) payload is being ignored for the reason given.

In the message text:

protection_type

Specifies whether the payload is protected or unprotected. A protected payload is one that has been decrypted and has passed the integrity check. An unprotected payload is one that was neither encrypted nor checked for integrity.

payload_type

The payload type as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

reason

The reason for ignoring the payload.

System action: The Internet Key Exchange (IKE) message is ignored; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that you received an incorrect IKE message.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Request.cpp and IKEv2Response hierarchy.

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1757I The protected SA payload is ignored because it was not expected in this message

EZD1758I Transform *transform_name* attribute type *local_attribute_type* in local proposal *local_proposal_number* does not match attribute type *remote_attribute_type* in remote proposal *remote_proposal_number*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because the local and remote IKEv2 Security Association (SA) transform attribute types are not the same. IKE daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. This failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_name

The name of the transform for which the mismatch occurred.

local_attribute_type and remote_attribute_type

The attribute types that are not the same.

local_proposal_number and remote_proposal_number

The proposal numbers.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: If the proposal with the mismatch is the one that should be accepted, notify the administrator of the remote and local security endpoints about the mismatch specification and ask that the configuration be updated with correct values. If the proposal with the mismatch is not the one that should be accepted, then you can ignore message EZD1758I. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAProposal.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1758I Transform ENCR_AES_CBC attribute type 14 in local proposal 1 does not match attribute type 16384 in remote proposal 1

EZD1759I Transform *transform_name* attribute type *local_attribute_type* with *local_attribute_format* format in local proposal *local_proposal_number* does not match attribute type *remote_attribute_type* with *remote_attribute_format* format in remote proposal *remote_proposal_number*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because the local and remote IKEv2 Security Association (SA) transform attribute formats were not the same. IKE daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. Failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_name

The name of the transform for which the mismatch occurred.

EZD1760I

local_attribute_type and remote_attribute_type
The attribute types.

local_attribute_format and remote_attribute_format
The attribute formats that are not the same.

local_proposal_number and remote_proposal_number
The proposal numbers.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote and local security endpoints that a transform attribute was sent in the wrong format.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAProposal.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1759I Transform ENCR_AES_CBC attribute type 14 with fixed-length format in local proposal 1 does not match attribute type 14 with variable-length format in remote proposal 1

EZD1760I *Proposal proposal_number contains an unsupported transform ID transform_id for transform type transform_type*

Explanation: The Security Association (SA) proposal is not accepted because it contains a transform with an unsupported ID. Internet Key Exchange (IKE) daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. Failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

proposal_number

The number of the proposal that contains the transform with the unsupported ID.

transform_id

The transform identifier that is not supported.

transform_type

The transform type of the transform with the unsupported ID. The transform types are listed in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an SA payload with an unsupported transform ID was received.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SATransforms.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1760I Proposal 3 contains an unsupported transform ID 1 for transform type Encryption Algorithm (ENCR)

EZD1761I *protocol_name protocol proposal proposal_number is incorrectly formatted - reason*

Explanation: The Security Association (SA) proposal is not accepted because it is not formatted correctly. Internet Key Exchange (IKE) daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. Failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

protocol_name

The name of the protocol.

proposal_number

The proposal number within the payload.

reason

The reason that the proposal is incorrectly formatted.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an incorrectly formatted SA proposal was received.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAProposal.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1761I IKE protocol proposal 1 is incorrectly formatted - proposal too long for payload

EZD1762I In the response SA payload there is more than one transform type *transform_type*

Explanation: Internet Key Exchange version 2 (IKEv2) allows at most one transform of each type in a response Security Association (SA) payload.

In the message text:

transform_type

The transform type, described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an incorrectly formatted SA payload was received in a response.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

EZD1763I • EZD1764I

Module: IKEv2SAInitResponse.cpp IKEv2AuthResponse.cpp IKEv2CreateChildResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1762I In the response SA payload there is more than one transform type 2 - Pseudo-random Function (PRF)

EZD1763I There is more than one proposal in the response SA payload

Explanation: Internet Key Exchange version 2 (IKEv2) requires that a Security Association (SA) payload in a response include only one proposal.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an SA payload with more than one proposal was received in a response.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAInitResponse.cpp IKEv2AuthResponse.cpp IKEv2CreateChildResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1763I There is more than one proposal in the response SA payload

EZD1764I Multiple proposals with proposal number *proposal_num* were received in the SA payload

Explanation: Internet Key Exchange version 2 (IKEv2) Security Association (SA) payloads can contain multiple proposals. The first proposal in an SA payload must be numbered proposal number 1 and each proposal number must be one greater than the previous. This message indicates that the SA payload contained multiple proposals with the same proposal number.

In the message text:

proposal_num

The proposal number that appears multiple times in the SA payload.

System action: Proposals with the same proposal number are ignored; IKE daemon processing continues

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an incorrectly formatted SA payload was received.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAProposal.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog

Example:

EZD1764I Multiple proposals with proposal number 2 were received in the SA payload

EZD1765I Received an IKEv2 notify payload with status type *notify_type* in *exchange_type message_type*

Explanation: The Internet Key Exchange (IKE) daemon received an IKEv2 notify payload that contains the specified status type. Status type notify payloads convey information about the payload sender or the tunnel, and are not an indication of an error.

In the message text:

notify_type

The decimal value of the notify type field, followed by a short text description of the type as defined in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs. If the decimal value that is received is not a known type, the text description is UNKNOWN and the notify payload is ignored.

exchange_type

The type of exchange as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

message_type

The type of the message. Possible *message_type* values are request or response.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2NotifyPayload.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog

Example:

EZD1765I Received an IKEv2 notify payload with status type 40000 (UNKNOWN) in INFORMATIONAL response

EZD1766I The *payload_type* payload length is *reason*

Explanation: The specified payload length is incorrect.

In the message text:

payload_type

The payload notation as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs. Possible *payload_type* values are:

AUTH An authentication payload

CERT A certification payload

CERTREQ

A certification request payload

CP A configuration payload

D A delete payload

E An encrypted payload

EAP An extensible authentication payload

EZD1767I

IDi	An initiator identification payload
IDr	A responder identification payload
KE	A key exchange payload
Nonce	A nonce payload
N	A notify payload
SA	A Security Association payload
TSi	An initiator traffic selector payload
TSr	A responder traffic selector payload
V	A vendor identifier payload

Unknown

A payload that is unknown to the Internet Key Exchange (IKE) daemon

reason

The reason why the length is not correct.

System action: The payload is ignored; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that you received a payload with an incorrect length.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Message.cpp and IKEv2Payload subclasses

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1766I The TSi payload length is too short for the message

EZD1767I A required *payload_type* payload is missing for a *exchange_type message_type*

Explanation: An Internet Key Exchange version 2 (IKEv2) request or response is ignored because it is missing a required payload.

In the message text:

payload_type

The payload notation as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs. Possible *payload_type* values are:

AUTH An authentication payload

CERT A certification payload

CERTREQ
A certification request payload

CP A configuration payload

D A delete payload

E An encrypted payload

EAP An extensible authentication payload

IDi An initiator identification payload

IDr	A responder identification payload
KE	A key exchange payload
Nonce	A nonce payload
N	A notify payload
SA	A Security Association payload
TSi	An initiator traffic selector payload
TSr	A responder traffic selector payload
V	A vendor identifier payload
Unknown	A payload that is unknown to the IKE daemon

exchange_type
The type of message that contains the missing payload.

message_type
The either request or response.

System action: The Internet Key Exchange (IKE) message is ignored; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that you received an incorrect message.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAInitRequest/Response IKEv2AuthRequest/Response IKEv2CreateChildRequest/Response

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1767I A required SA payload is missing for a IKE_AUTH request

EZD1768I Transform *transform_name* attribute type *local_attribute_type* length *local_attribute_length* in local proposal *local_proposal_number* does not match the length *remote_attribute_length* of attribute type *remote_attribute_type* in remote proposal *remote_proposal_number*

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because the local and remote IKEv2 Security Association (SA) transform attribute lengths are not the same. IKE daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. This failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_name
The name of the transform for which the mismatch occurred.

local_attribute_type and *remote_attribute_type*
The attribute types.

local_attribute_length and *remote_attribute_length*
The attribute lengths that are not the same.

local_proposal_number and *remote_proposal_number*
The proposal numbers.

System action: IKE daemon processing continues.

EZD1769I

Operator response: None.

System programmer response: If the proposal with the mismatch is the one that should be accepted, notify the administrator of the remote and local security endpoints about the mismatch specification and ask that the configuration be updated with correct values. If the proposal with the mismatch is not the one that should be accepted, you can ignore message EZD1768I. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2NotifyPayload.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1768I Transform ENCR_AES_CBC attribute type 16384 length 4 in local proposal 1 does not match the  
length 8 of attribute type 16384 in remote proposal 2
```

EZD1769I An unsupported transform type *transform_type* was found in proposal *proposal_num*

Explanation: The Security Association (SA) proposal with the specified number is not accepted because it contains a transform with an unsupported type. Internet Key Exchange (IKE) daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. This failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_type

The transform type that is not supported.

proposal_num

The proposal number in the payload.

System action: If the IKE daemon does not accept any of the proposals, the negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that an SA payload with an unsupported transform type was received.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SATransform.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1769I An unsupported transform type 6 was found in proposal 2
```

**EZD1770I Transform *transform_name* value for attribute type *local_attribute_type* in local proposal
local_proposal_number does not match value for attribute type *remote_attribute_type* in remote proposal
remote_proposal_number**

Explanation: The Internet Key Exchange (IKE) daemon was unable to accept a proposal because the local and remote IKEv2 Security Association (SA) transform attribute values are not the same. IKE daemon processing continues to the next proposal. If no proposals are accepted, the SA negotiation fails. This failure is indicated by message EZD0985I, EZD1021I, or EZD1022I being issued later in syslog.

In the message text:

transform_name
The name of the transform for which the mismatch occurred.

local_attribute_type and remote_attribute_type
The attribute types.

local_proposal_number and remote_proposal_number
The proposal numbers.

The attribute values are not included in the message because they are variable length and might be as large as 64 kilobytes of data. To obtain the remote proposal value, activate the formatting of IKE messages by using IKE syslog level 8 and attempt the SA negotiation.

System action: IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: If the proposal that contains the mismatch is the one that should be accepted, either alter the local policy to accept the value in this proposal or notify the administrator of the remote security endpoint about the mismatch and ask the administrator to alter the remote configuration to use the correct values. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy and the IkeSyslogLevel statement.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SAAttribute.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1770I Transform ENCR_AES_CBC value for attribute type 16384 in local proposal 1 does not match value for attribute type 16384 in remote proposal 2

EZD1771I IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* rekeyed

Explanation: This message indicates that a Security Association (SA) was rekeyed. Internet Key Exchange (IKE), Encapsulated Security Payload (ESP), and Authentication Header (AH) SAs use secret keys that should be used only for a limited amount of time and to protect a limited amount of data. Rekeying is the reestablishment of SAs to take the place of ones that expire.

Additional diagnostic messages with the same message instance number are issued to identify the affected SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

version
The version of the IKE protocol for the SA that was rekeyed.

EZD1772I

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1771I IKE version 1.0 Security Association 2 for tunnel Y17 rekeyed
```

EZD1772I IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* reauthenticated

Explanation: This message indicates that a Security Association (SA) was reauthenticated.

Additional diagnostic messages with the same message instance number are issued to identify the affected SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

version

The version of the IKE protocol for the SA that was reauthenticated.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1772I IKE version 1.0 Security Association 2 for tunnel K11 reauthenticated
```

EZD1773I Received an IKEv2 notify payload with error type *notify_type* in *exchange_type* *message_type*

Explanation: The Internet Key Exchange (IKE) daemon received an IKEv2 notify payload that contains an error of the specified type. Additional diagnostic messages that have the same message instance number are issued to identify the affected SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

notify_type

The decimal value of the notify type field, followed by a short text description of the type as defined in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs. If the decimal value received is not a known error type, the text description is UNKNOWN.

exchange_type

The type of exchange as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

message_type

The type of the message. Possible *message_type* values are request or response.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: Use the *notify_type* value to identify the error. For some error types, you might have to make changes to the security policy, or request that the peer IKE node make changes to its policy, to resolve the issue. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Response.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1773I Received an IKEv2 notify payload with error type 17 (INVALID_KE_PAYLOAD) in IKE_SA_INIT response

EZD1774I IKEv2 payload type *payload_type* was received but was ignored because it is not supported

Explanation: An Internet Key Exchange version 2 (IKEv2) payload type that is not supported was received, but it was ignored.

In the message text:

payload_type

The payload type in the Internet Key Exchange (IKE) message that is not supported. IKEv2 payload types are described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs. The payload types that are supported are described in z/OS Communications Server: IP Configuration Guide.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that a payload type is being ignored.

User response: None.

Problem determination: None.

EZD1775I

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2Payload.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1774I IKEv2 payload type 5 was received but was ignored because it is not supported

EZD1775I **IKE version** *version* **Security Association** *sa_generation* **for tunnel** *tunnel_id* **created for protecting**
 proto_name **traffic between** *local_ip* *local_selector_type* *local_selectors* **and** *remote_ip* *remote_selector_type*
 remote_selectors

Explanation: A new Security Association (SA) has been created with the characteristics given.

In the message text:

version

The IKE protocol version used to create the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a given tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

proto_name

The protocol of the traffic protected by the tunnel.

local_ip

The IP address of the local traffic protected by the tunnel.

local_selector_type **and** *remote_selector_type*

The type of upper-layer selectors protected by the tunnel.

local_selectors

The upper-layer selectors of the local traffic protected by the tunnel.

remote_ip

The IP address of the remote traffic protected by the tunnel.

remote_selectors

The upper-layer selectors of the remote traffic protected by the tunnel.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2SecurityAssociation.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1775I IKE version 1.0 Security Association 1 for tunnel K1 created for protecting IKE traffic between 10.11.5.4 port 500 and 10.11.4.5 port 500

EZD1775I IKE version 1.0 Security Association 1 for tunnel Y2 created for protecting ALL(0) traffic between 10.81.2.1 N/A N/A and 10.81.8.1 N/A N/A

EZD1776I IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* deleted

Explanation: This message indicates that a Security Association (SA) was deleted. Multiple SAs are created and deleted to carry tunnel traffic. The deletion of an SA does not imply that the tunnel has ended or is unavailable.

In the message text:

version

The IKE protocol version used to delete the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonIPsecSA.cpp, CommonIKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1776I IKE version 1.0 Security Association 1 for tunnel K1 deleted

EZD1777I IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* has the following attributes

- **identities** : *id_protection* local authentication : *local_auth_method* remote authentication : *remote_auth_method* encryption : *encr_function* integrity : *integ_function* PRF : *pseudo_random_function* DH : *dh_group_name* lifetime : *lifetime* lifesize : *lifesize*

Explanation: This message displays the attributes of a new IKE Security Association (SA).

In the message text:

version

The version of the IKE protocol that was used to create the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the IKE tunnel. The tunnel prefix is K.

id_protection

Indicates whether the confidentiality of the local and remote IKE identities is ensured for the IKE tunnel.

local_auth_method

The method that the remote peer must use to authenticate the local endpoint.

EZD1778I

remote_auth_method

The method that IKED must use to authenticate the remote endpoint.

encr_function

The name of the encryption function that the IKE tunnel used to provide data confidentiality.

integ_function

The name of the integrity function that the IKE tunnel used to provide data integrity.

pseudo_random_function

The name of the pseudo-random function that was used to seed the keying material.

dh_group_name

The Diffie-Hellman group ID that was used to generate the keying material.

lifetime

The length of time that the SA lives in seconds.

lifesize

The life size of the SA in kilobytes.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1778I IKE version 1.0 Security Association 1 for tunnel K1 has the following attributes -  
    identities : unprotected local authentication : PresharedKey remote authentication :  
    PresharedKey encryption : AES-CBC integrity : HMAC-SHA1 PRF : PRF_HMAC_SHA1 DH : Group5  
    lifetime : 28800 lifesize : NONE
```

EZD1778I exchange_name message_type message_ID msg_id replay detected from remote_ip port remote_port to local_ip port local_port

Explanation: The Internet Key Exchange (IKE) daemon received a message that is a copy of a message that was received and processed earlier. The previously received and processed messages (replays) are ignored.

In the message text:

exchange_name

The name of the exchange for the message.

message_type

The message type.

msg_id

The message ID number.

remote_ip

The remote security endpoint IP specification.

remote_port

The remote port of the IKE daemon peer.

local_ip

The local security endpoint IP specification.

local_port

The local port of the IKE daemon.

System action: The IKE message is not processed; IKE daemon processing continues.

Operator response: None.

System programmer response: Replays are not errors. Replays might be caused by lost packets or network congestion. Usually, no action is required. If there are a large number of replays, notify the administrator of the remote security endpoint that you are receiving a large number of replays.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2ExchangeList.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1778I IKE_SA_INIT request message ID 0 replay detected from 1.2.3.4 port 500 to 5.6.7.8 port 500
```

EZD1779I IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* has the following attributes
*- encapsulation : *encap_mode* encryption : *encr_function* integrity : *integ_function* lifetime : *lifetime**
*lifesize : *lifesize* VpnLife : *vpn_life* PFS : *dh_group_name**

Explanation: A new Security Association (SA) has been created with the specified characteristics.

In the message text:

version

The IKE protocol version used to create the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA created for a given tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the dynamic tunnel. The tunnel prefix is Y.

encap_mode

The tunnel encapsulation mode, which is either TUNNEL or TRANSPORT.

encr_function

The name of the encryption function used by the dynamic tunnel to provide data confidentiality.

integ_function

The name of the integrity function used by the dynamic tunnel to provide data integrity.

lifetime

The length of time that the SA lives in seconds.

lifesize

The SA lifesize, in kilobytes.

vpn_life

Specifies how long IPsec SAs should continue to be rekeyed, in seconds. The *vpn_life* value is set for a dynamic tunnel when the first SA is established for the tunnel.

dh_group_name

The Diffie-Hellman (DH) group ID used for perfect forward secrecy. For IKE version 2.0, the first IPsec SA created under each IKE SA uses the DH group that is configured for the IKE SA, regardless of what was configured in the policy for that IPsec SA. In all other cases, the DH group used is the one that is configured in the policy for the IPsec SA.

System action: IKE daemon processing continues.

EZD1780I

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2ChildSA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1779I IKE version 1.0 Security Association 1 for tunnel Y2 has the following attributes -  
    encapsulation : TRANSPORT encryption : DES_CBC_8 integrity : HMAC_SHA1 lifetime : 14400  
    lifesize : NONE VpnLife : NONE PFS : GROUP1
```

EZD1780I *The message_type for exchange_type exchange with message ID message_id from remote_ip port remote_port to local_ip port local_port is outside the expected window of lowest_expected to highest_expected*

Explanation: The message in the exchange with the specified ID is ignored because the ID is not in the expected message ID window.

In the message text:

message_type

The type of message. Possible *message_type* values are request or response.

exchange_type

The type of exchange as described in RFC 5996 *Internet Key Exchange (IKEv2) Protocol*. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

message_id

The ID of the message.

remote_ip

The remote security endpoint IP specification.

remote_port

The remote port of the Internet Key Exchange (IKE) daemon peer.

local_ip

The local security endpoint IP specification.

local_port

The local port of the IKE daemon.

lowest_expected

The lowest message ID number that is expected from the remote security endpoint.

highest_expected

The highest message ID number that is expected from the remote security endpoint.

System action: The IKE message is not processed; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that a protocol error occurred.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2ExchangeList.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1780I The request for IKE_AUTH exchange with message ID 2 from 1.2.3.4 port 500 to 5.6.7.8 port 500 is outside the expected window of 1 to 1

EZD1781I Received a delete payload with an unrecognized SPI value for protocol *protocol*

Explanation: The Internet Key Exchange (IKE) daemon received a delete payload command from an IKE peer that contains an unrecognized security parameter index (SPI) value that represents an IPsec tunnel that is to be deleted. This situation might occur if IKED was restarted, if a sysplex-wide Security Association (SWSA) takeover occurred recently, or if packets are being dropped in the network.

In the message text:

value

The hexadecimal SPI value that was received.

protocol

The name of the protocol. Possible *protocol* values are AH or ESP.

System action: The SPI that is to be deleted is ignored; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Compare local IKE syslog output with any log information available at the remote IKE security endpoint to determine whether the SPI value should have been known to IKE.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp infoXchng.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1781I Received a delete payload with an unrecognized SPI 44BA7983 for protocol ESP

EZD1782I Received a delete payload with SPI *spi_value* for protocol *protocol* that does not belong to this IKE_SA

Explanation: The Internet Key Exchange (IKE) daemon received a message from an IKEv2 peer that contained a security parameter index value that represents a child Security Association (SA) that is to be deleted. However, the message was protected by an IKE SA other than the IKE SA to which the child SA belongs. The IKEv2 peer is in error; RFC 5996 *Internet Key Exchange (IKEv2) Protocol* section 1.4 requires that notification messages for child SAs are to be protected only by the IKE SA that generated the child SA. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

In the message text:

spi_value

The hexadecimal SPI value that was received.

protocol

The protocol value. Possible *protocol* values are AH or ESP.

System action: The tunnel to be deleted is ignored; IKE daemon processing continues.

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Operator response: Contact the system programmer.

System programmer response: Examine the logging information that is available at the remote IKE security endpoint to determine whether the child SA was incorrectly deleted.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1782I Received a delete payload with SPI 44BA7983 for protocol ESP that does not belong to this IKE_SA

EZD1783I Received a notify payload with an unrecognized SPI value for protocol protocol

Explanation: The Internet Key Exchange (IKE) daemon received a notify payload command from an IKE peer that contains an unrecognized security parameter index (SPI) value that represents an IPsec tunnel. This situation might occur if IKED was restarted, if a sysplex wide Security Association (SWSA) takeover occurred recently, or if packets are being dropped in the network.

In the message text:

value

The hexadecimal SPI value that was received.

protocol

The name of the protocol. Possible *protocol* values are AH or ESP.

System action: The notify payload is ignored; IKE daemon processing continues.

Operator response: Contact the systems programmer.

System programmer response: Compare IKE syslog output with any log information available at the remote IKE security endpoint to determine whether the SPI value should have been known to IKE.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: infoXchg.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1783I Received a notify payload with an unrecognized SPI 44BA7983 for protocol ESP

EZD1784I Received optional IDr payload but could not find applicable KeyExchangeRule - LocalIp : LSIP RemoteIp : RSIP LocalID : LSID RemoteID : RSID

Explanation: The remote IKEv2 peer provided an optional Identification - Responder (IDr) payload in its IKE_SA_INIT request to the local Internet Key Exchange (IKE) daemon. This IDr payload contained an identity that did not match the local key exchange policy, so the local identity (LocalID) that is specified by the optional IDr payload is ignored.

Additional messages that have the same message instance number are issued to identify the affected SA. The

message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

LSIP

The local security endpoint IP address.

RSIP

The remote security endpoint IP address.

LSID

The local security endpoint identity as provided by the remote IKEv2 peer. The LSID is an ID type followed by optional data.

RSID

The remote security endpoint identity as provided by the remote IKEv2 peer. The RSID is an ID type followed by optional data.

The ID type is one of the values defined in RFC 5996 *Internet Key Exchange (IKEv2) Protocol* section 1.4. For example, ID_IPV4_ADDR, ID_FQDN, or ID_IPV6_ADDR

See Appendix A, "Related protocol specifications," on page 783 for information about accessing RFCs.

System action: IKE daemon processing continues; the local identity (LocalID) that is specified by the optional IDr payload is ignored.

Operator response: Add a suitable KeyExchangeRule statement for the classification to the IPSec policy, if necessary. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: policymgr.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1784I Received optional IDr payload but could not find applicable KeyExchangeRule -
  LocalIp : 9.1.1.1 RemoteIp : 9.2.2.2 LocalID : ID_FQDN example.ibm.com
  RemoteID : ID_IPV4_ADDR 9.2.2.2
```

EZD1785I Tentative KeyExchangeRule rule1 replaced with final KeyExchangeRule rule2

Explanation: When an IKE negotiation is started, the KeyExchangePolicy statement is searched to locate a matching KeyExchangeRule statement for the negotiation. When this KeyExchangeRule statement is located, the local and remote security endpoint identities are not known with certainty, so this KeyExchangeRule statement is considered tentative until the local and remote identities are known. Then a new search for a KeyExchangeRule statement is performed to locate the final rule.

The policy on the final KeyExchangeRule statement must be consistent with the policy chosen for the Security Association. For IKEv1, see the information about ISAKMP main mode limitations in z/OS Communications Server: IP Diagnosis Guide for more information about IKEv1. For IKEv2, see the information about key exchange limitations in z/OS Communications Server: IP Diagnosis Guide for more information about IKEv2.

In the message text:

rule

The name of the tentative KeyExchangeRule statement.

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rule2

The name of the final KeyExchangeRule statement.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonDomainOfInterpretation.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1785I Tentative KeyExchangeRule ker_dvipa replaced with final KeyExchangeRule ker_dvipa9
```

EZD1786I Cannot negotiate IKEv1 tunnel for filter rule *rulename* using specific types or codes

Explanation: IKEv1 does not support the negotiation of tunnels for specific ICMP types and codes, ICMPv6 types and codes, or MIPv6 types and codes. The filter rule specified by the *rulename* value uses an IpService definition that specifies either individual types and codes or a range of types and codes, for ICMP, ICMPv6, or MIPv6 traffic. A tunnel negotiation was attempted that used the specified filter rule with a KeyExchangeAction statement that requires IKEv1 to initiate the negotiation. Tunnels that use either individual types and codes or a range of types and codes can be negotiated for IKEv2, but not for IKEv1.

In the message text:

rulename

The name of the filter rule.

System action: The tunnel activation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Examine the policy definition for the rule name and modify it to correct the error. Potential changes include:

- Specify HowToInitiateVersion IKEv2.
- Do not code specific values or ranges of ICMP, ICMPv6, or MIPv6 types and codes.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: config_adapter.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1786I Cannot negotiate IKEv1 tunnel for filter rule TimestampRequestReply using specific types or codes
```

EZD1787I Received unsupported IKEv2 traffic selector specification

Explanation: The Internet Key Exchange (IKE) daemon does not support a traffic selector specification that it received from an IKEv2 peer. The IKE daemon does not support the following types of traffic selectors:

- Traffic selectors that use a distinct set of port values instead of a contiguous range; these traffic selectors are called disjoint traffic selectors. If the peer is acting as an initiator, the IKE daemon attempts to find a pairing of its proposed traffic selectors that is not disjoint. However, if the peer is acting as a responder, the IKE daemon cannot accept a counter-proposal that contains disjoint traffic selectors, so it fails the tunnel activation.
- Traffic selectors that are asymmetrical; for example, traffic selectors that contain ICMP type 13 in one direction, but ICMP type 14 in the other direction. If the peer is acting as an initiator, the IKE daemon attempts to find a pairing of its proposed traffic selectors that is not asymmetrical. If the peer is acting as a responder and its returned traffic selectors are asymmetrical, the IKE daemon fails the tunnel activation.
- Traffic selectors that contain port, type, or code specifications for any protocol other than TCP, UDP, ICMP, ICMPv6, or MIPv6. RFC 5996 *Internet Key Exchange (IKEv2) Protocol* makes provisions for negotiating port, type, and code values for these protocols. If the peer is acting as an initiator, the IKE daemon attempts to find a pairing of its proposed traffic selectors that has recognizable port, type, and code specifications. If the peer is acting as a responder and its returned traffic selectors contain any unrecognized port, type, or code specifications, the IKE daemon fails the tunnel activation. See Appendix A, “Related protocol specifications,” on page 783 for information about accessing RFCs.

To perform further diagnosis, enable the formatted packet trace option in your `IkeSyslogLevel` configuration settings, and retry tunnel activation. Your syslog contains the exact traffic selector values that the peer is proposing.

System action: The tunnel activation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Contact the administrator of the remote IKE peer node to modify their policies so that the resulting traffic selectors are compatible with the restrictions listed above.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: `IKEv2DomainOfInterpretation.cpp`

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog

Example:

EZD1787I Received unsupported IKEv2 traffic selector specification

EZD1788I Received an IKEv2 traffic selector in a response that does not match the local proposal

Explanation: The Internet Key Exchange (IKE) daemon proposed a traffic selector specification to the IKEv2 peer, but received a response from the IKEv2 peer whose traffic selectors do not match the proposal that was sent to the peer.

If you enable the formatted packet trace option in your `IkeSyslogLevel` configuration settings, your syslog contains the exact traffic selector values that the peer is sending for further diagnosis.

System action: The tunnel activation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Contact the administrator of the remote IKE peer node to modify their policies so that the resulting traffic selectors are compatible with the local proposals.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

EZD1789I

Module: IKEv2DomainOfInterpretation.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog

Example:

EZD1788I Received an IKEv2 traffic selector in a response that does not match the local proposal

EZD1789I The remote security endpoint *requested_ep* is not included within the address *rule_ep* taken from *rule_name*

Explanation: During the negotiation of a tunnel-mode Security Association (SA) the IKE daemon determined that the requested IP addresses are not included in the security endpoint that the IKE daemon chose from the policy rule or destination address.

In the message text:

requested_ep

The IP address or IP address range endpoint that the endpoint requested for the tunnel-mode SA. The *requested_ep* value is the value configured for the InitiateToLocation parameter on the IpLocalStartAction statement for the applicable filter rule, or if the InitiateToLocation parameter was not configured, the value is the destination data address for the tunnel activation.

rule_ep

The remote security endpoint IP address or IP address range that is configured on the IpLocalStartAction statement for the applicable filter rule.

rule_name

The name of the IpFilterRule statement that is used for the tunnel activation. The IpFilterRule statement refers to an IpLocalStartAction statement that specifies a RemoteSecurityEndpoint parameter with the indicated *rule_ep* value.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the systems programmer. Problem Determination: Not applicable.

System programmer response: Alter the local policy configuration to specify the following:

- An InitiateToLocation value on the applicable IpLocalStartAction statement; the InitiateToLocation value must be within the range of the RemoteSecurityEndpoint location value.
- A RemoteSecurityEndpoint parameter on the applicable IpLocalStartAction statement; the RemoteSecurityEndpoint parameter must encompass the actual remote security endpoint address.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: policymgr.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1789I The remote security endpoint 10.11.4.5 is not included within the address 10.8.5.5/24 taken from S4-S5_TIKE1311-5A

EZD1790I Error event IKE version Security Association sa_generation for tunnel tunnel_id

Explanation: This message indicates that an error occurred while the Internet Key Exchange (IKE) daemon was rekeying or reauthenticating a Security Association (SA).

Additional messages that have the same message instance number are issued to identify the affected SA. The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

event

The event that encountered the error. Possible *event* values are rekeying or reauthenticating.

version

The version of the IKE protocol for the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA that is created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel or Y for a dynamic tunnel.

System action: The reauthentication or rekeying fails. The existing SA might be expired. IKE daemon processing continues.

Operator response: None.

System programmer response: Consult the syslog output to identify other messages that indicate the cause of the error.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp, IKEv2ChildSA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1790I Error reauthenticating IKE version 2.0 Security Association 1 for tunnel K3

EZD1791I IKE version version Security Association sa_generation for tunnel tunnel_id will not be action

Explanation: This message indicates that an attempt to reauthenticate or rekey a Security Association (SA) will not be made because the SA is not being used.

In the message text:

version

The version of the Internet Key Exchange (IKE) protocol for the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA that is created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

action

The action that is being skipped. Possible *action* values are rekeyed or reauthenticated.

System action: IKE daemon processing continues.

Operator response: None

EZD1792I

System programmer response: None

User response: Not Applicable

Problem determination: None

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1791I IKE version 2.0 Security Association 1 for tunnel K3 will not be reauthenticated
```

EZD1792I IKE version *version* Security Association *phase2_generation* for tunnel *phase2_tunnel_id* rekeyed due to reauthentication of Security Association *phase1_generation* for tunnel *phase1_tunnel_id*

Explanation: This message indicates that a phase 2 Security Association (SA) was rekeyed because its associated phase 1 SA was reauthenticated. SAs use secret keys that should be used only for a limited amount of time and to protect a limited amount of data. Rekeying is the reestablishment of SAs to take the place of ones that expire. When a phase 1 SA is reauthenticated, all of its associated phase 2 SAs are rekeyed.

Additional messages that have the same message instance number are issued to identify the affected SA. The message instance number precedes the message number in the log output and is used to group related messages from the Internet Key Exchange (IKE) daemon.

In the message text:

version

The version of the IKE protocol for the SA that was rekeyed.

phase2_generation

The number used to differentiate SAs for the same tunnel. The first SA that is created for a tunnel is number 1.

phase2_tunnel_id

The tunnel prefix and number used to identify a phase 2 tunnel. The tunnel prefix is Y.

phase1_generation

The number used to differentiate SAs for the same tunnel. The first SA that is created for a tunnel is number 1.

phase1_tunnel_id

The tunnel prefix and number used to identify a phase 1 tunnel. The tunnel prefix is K.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: Network Security Server

Module: CommonIPsecSA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1792I IKE version 2.0 Security Association 2 for tunnel Y8 rekeyed due to reauthentication of security association 2 for tunnel K3
```

EZD1793I Obsolete IKE configuration file parameter *param* on line *linenum* is ignored

Explanation: The specified IKE configuration file parameter is obsolete. The IKE daemon ignores the parameter and any values that are specified with the parameter.

In the message text:

param

The obsolete parameter that was specified.

linenum

The line number on which the obsolete parameter was specified.

System action: The IKE daemon continues processing.

Operator response: Contact the system programmer.

System programmer response: Remove the obsolete parameter from the IKE configuration file.

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

EZD1793I Obsolete IKE configuration file parameter KeyRetries on line 35 is ignored

EZD1794I Local activation of a dynamic tunnel failed for *proto_name* traffic between *local_ip* *local_selector_type* *local_selector* and *remote_ip* *remote_selector_type* *remote_selector*

Explanation: A local activation of a dynamic tunnel for protecting traffic with the characteristics given failed.

Additional diagnostic messages with the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

proto_name

The protocol of the traffic to be protected by the tunnel.

local_ip

The local IP address of the traffic to be protected by the tunnel.

local_selector_type and *remote_selector_type*

The type of upper-layer selectors to be protected by the tunnel. The selector type value N/A implies that a selector type is not applicable.

local_selector

The upper-layer selector of the local traffic to be protected by the tunnel. The selector value N/A implies that a local selector is not applicable.

remote_ip

The remote IP address of the traffic to be protected by the tunnel.

remote_selector

The upper-layer selector of the remote traffic to be protected by the tunnel. The selector value N/A implies that a remote selector is not applicable.

System action: The SA negotiation fails; IKE daemon processing continues.

Operator response: None.

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System programmer response: Review additional diagnostic messages to determine the cause of the failure. After resolving the problem, attempt the tunnel activation again.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: anchor_ureq.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1794I Local activation of a dynamic tunnel failed for UDP(17) traffic between 1.2.0.1 port 2000  
and 1.1.0.1 port 3000  
EZD1794I Local activation of a dynamic tunnel failed for IP(4) traffic between 1.2.0.1 N/A N/A  
and 1.1.0.1 N/A N/A
```

**EZD1795I A matching IpFilterRule with an IpDynVpnAction was not found for protecting *proto_name* traffic
between *local_ip* *local_selector_type* *local_selector* and *remote_ip* *remote_selector_type* *remote_selector***

Explanation: An IKE negotiation failed because a matching IpFilterRule statement could not be found or because the IpFilterRule statement that was found did not have an associated IpDynVpnAction statement in the policy agent configuration file.

When the connectivity rules in the GUI are configured with the IBM Configuration Assistant for z/OS Communications Server, they correspond to the policy agent configuration IpFilterRule statements. The security levels that use dynamic tunnels in the GUI correspond to the IpDynVpnAction statements.

In the message text:

proto_name

The protocol of the traffic to be protected by the tunnel.

local_ip

The local IP address of the traffic to be protected by the tunnel.

local_selector_type and *remote_selector_type*

The type of upper-layer selectors to be protected by the tunnel. The selector type value N/A means that the selector type is not applicable.

local_selector

The upper-layer selector of the local traffic to be protected by the tunnel. The local selector value N/A means that the local selector is not applicable.

remote_ip

The remote IP address of the traffic to be protected by the tunnel.

remote_selector

The upper-layer selector of the remote traffic to be protected by the tunnel. The remote selector value N/A means that the remote selector is not applicable.

System action: The Security Association (SA) negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: If the specified traffic is to be protected by a dynamic SA, then update the configuration. If the remote system is behind a NAT, ensure that the *remote_ip* in the filter rule is the public address of the peer system. If the remote system is behind a gateway behind a NAT, ensure the *remote_ip* in the filter rule is the public address of the gateway.

If you are updating the configuration without the IBM Configuration Assistant for z/OS Communications Server, update the IpFilterPolicy statement to define an IpFilterRule statement with an IpDynVpnAction statement for the traffic pattern identified in the message. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

If you are updating the configuration with the IBM Configuration Assistant for z/OS Communications Server, update the TCP/IP stack connectivity rules so that the specified traffic is protected by a security level that uses a dynamic tunnel. See the online help in the GUI for additional information.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonIPsecSA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to the syslog.

Example:

```
EZD1795I A matching IpFilterRule with an IpDynVpnAction was not found for protecting UDP(17) traffic
between 1.2.0.1 port 2000 and 1.1.0.1 port 3000
```

```
EZD1795I A matching IpFilterRule with an IpDynVpnAction was not found for protecting IP(4) traffic
between 1.2.0.1 N/A N/A and 1.1.0.1 N/A N/A
```

EZD1796I Simultaneous rekeying of IKE version *version* Security Association *sa_generation* for tunnel *tunnel_id* detected

Explanation: An attempt by both security endpoints to simultaneously rekey the same Security Association has been detected.

In the message text:

version

The version of the Internet Key Exchange (IKE) protocol for the SA.

sa_generation

The number used to differentiate SAs for the same tunnel. The first SA that is created for a tunnel is number 1.

tunnel_id

The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

System action: The IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2CreateChildRequest.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1796I Simultaneous rekeying of IKE version 2.0 Security Association 1 for tunnel K3 detected
```

EZD1797I Traffic specification requires NON_FIRST_FRAGMENTS ALSO but IKEv2 peer did not send it

Explanation: When an IP packet that has upper-layer transport selectors (TCP port, UDP port, ICMP type and code, or MIPv6 type) is fragmented, only the first fragment contains the transport selectors. The remaining fragments are known as non-first fragments. There are potential security risks when you filter these non-first fragments because the port, type or code values are unknown. Because of these risks, RFC 5996 *Internet Key Exchange (IKEv2) Protocol*

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requires IKEv2 peers to use the NON_FIRST_FRAGMENTS ALSO notify payload to negotiate support for non-first fragments. This negotiation determines whether non-first fragments are allowed to be carried on the IPSec Security Association (SA). They are allowed if the SA meets the following criteria:

- The SA is using tunnel mode rather than transport mode.
- The SA applies to TCP, UDP, ICMP, ICMPv6, or MIPv6 traffic and has a port, type or code, specification other than ALL.
- The SA endpoints support stateful fragment checking, or the z/OS end of the SA carries only local traffic. Local traffic is filtered before it is fragmented, so it is not a security risk.

z/OS Communications Server does not implement stateful fragment checking, so it does not require the NON_FIRST_FRAGMENTS ALSO notify payload for SAs that are carrying routed traffic. However, z/OS Communications Server does require the NON_FIRST_FRAGMENTS ALSO notify payload for SAs that are carrying local traffic because it sends local non-first fragments over the same SA as the first fragments. If the peer does not include this notify payload, it cannot receive the non-first fragments that the z/OS might send over this SA. z/OS will fail the SA negotiation and generate this message, because the peer is not prepared to receive all possible traffic that z/OS Communications Server might send over the SA.

System action: The SA negotiation fails. The IKE daemon processing continues.

Operator response: None.

System programmer response: Consult the syslog output to identify other messages that indicate which policy rules relate to the error.

To prevent this failure, perform one of the following actions:

- Configure the remote security endpoint to enable stateful fragment checking.
- Configure the SA at both security endpoints to use transport mode rather than tunnel mode.
- Configure the SA at both security endpoints to cover all ports, types, or codes rather than to cover specific ports, types, or codes. To ensure that the SA covers all ports, types, or codes, configure both the IP filter rule and the granularity settings at both security endpoints. The IP filter rule must specify all ports, types, or codes. The on-demand granularity settings for port, type, and code must be set to use the values defined in the IP filter rule rather than the on-demand packet. For z/OS Communications Server, the IP filter rule selectors are configured on the IpService statement and granularity settings are configured on the IpLocalStartAction statement. See the information about the IpService statement and the IpLocalStartAction statement in z/OS Communications Server: IP Configuration Reference.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2TSRequest.cpp, IKEv2TSResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1797I Traffic specification requires NON_FIRST_FRAGMENTS ALSO but IKEv2 peer did not send it
```

EZD1798I *PolicySource* policy requires the SharedKey parameter but none is specified in KeyExchangeRule
KERname

Explanation: The associated KeyExchangeRule statement for this Internet Key Exchange (IKE) Security Association (SA) negotiation did not specify a shared key to be used in the negotiation. Because a pre-shared key is required and none was given, the negotiation failed.

In the message text:

PolicySource

The *PolicySource* value is either local or remote.

KERname

The KeyExchangeRule name configured in the policy.

System action: The IKE SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Either specify a preshared key to be used in this negotiation on the SharedKey parameter in the KeyExchangeRule statement or specify the use of digital signature authentication. If the PolicySource value is local, you can specify a digital signature authentication method on the HowToAuthMe keyword on the KeyExchangeAction statement that is associated with the specified KeyExchangeRule. If PolicySource is remote and digital signature authentication is preferred to specifying a shared key, reconfigure the IKE peer to use digital signature authentication.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESAKEP.cpp, config_adapter.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1798I local policy requires the SharedKey parameter but none is specified in KeyExchangeRule 0~3
```

EZD1799I IKE cannot initiate with local data addresses *ipaddress_range* for a Security Association traversing a NAT

Explanation: The Internet Key Exchange (IKE) daemon tried to activate a phase 2 Security Association (SA) that will traverse a network address translation (NAT) device, but the identity specified for the local data endpoint in the policy for this SA defined a range of local IP addresses that is to be protected by the SA. When traversing a NAT, the IP address of the local data endpoint must be specified as a single host address.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

ipaddress_range

The IP address range that was specified for the local data endpoint.

System action: The phase 2 SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Ensure that only single host addresses are specified as data endpoints when traversing a NAT. Notify the administrator of the remote security endpoint and ask the administrator to ensure that only single IPv4 addresses are specified as data endpoints when traversing a NAT.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: oakley_phaseII.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

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Example:

```
EZD1799I IKE cannot initiate with local data addresses 9.42.130.0/24 for a Security Association  
traversing a NAT  
EZD1799I IKE cannot initiate with local data addresses 9.42.130.0-9.42.130.128 for a Security Association  
traversing a NAT
```

**EZD1800I Remote security endpoint at *remote_ip* port *remote_port* is using a digital signature for authentication
but did not send its certificate in a certificate payload**

Explanation: The authentication method that is identified in the authentication payload that was sent by the remote security endpoint uses a digital signature. The Internet Key Exchange (IKE) daemon cannot process that digital signature because the remote security endpoint did not send a certificate payload that contains the certificate that was used to create the digital signature.

In the message text:

remote_ip
The remote security endpoint IP specification.

remote_port
The port of the remote security endpoint.

System action: The IKE SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that it failed to send a certificate payload.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKEAuthRequest.cpp, IKEv2IKEAuthResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1800I Remote security endpoint at 1.2.3.4 port 500 is using a digital signature for authentication,  
but did not send its certificate in a certificate payload
```

EZD1801I *jobname* STARTING

Explanation: The Communications Server SMTP (CSSMTP) application is starting its initialization.

In the message text:

jobname
The job name of the task that is starting the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and syslog. This message is a good candidate for automation. Automation can alert you to when CSSMTP has started.

Example:

EZD1801I CSSMTP1 STARTING

EZD1802I *jobname* INITIALIZATION COMPLETE FOR *extWrtName*

Explanation: The Communications Server SMTP (CSSMTP) application completed its initialization and is ready to start processing mail for this external writer.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

extWrtName

The external writer name configured on the ExtWrtName statement. See the information about the ExtWrtName statement in z/OS Communications Server: IP Configuration Reference.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP has completed initialization.

Example:

EZD1802I CSSMTP1 INITIALIZATION COMPLETE FOR CSSMTPEW

EZD1803I *jobname* SHUTDOWN IN PROGRESS

Explanation: The Communications Server SMTP (CSSMTP) application is shutting down.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

EZD1804I • EZD1805I

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP is shutting down.

Example:

EZD1803I CSSMTP1 SHUTDOWN IN PROGRESS

EZD1804I *jobname* SHUTDOWN COMPLETE

Explanation: The Communications Server SMTP (CSSMTP) application ended.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The application ends.

Operator response: Restart CSSMTP if desired.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP has completed shutting down.

Example:

EZD1804I CSSMTP1 SHUTDOWN COMPLETE

EZD1805I *jobname* EXITING ABNORMALLY

Explanation: The Communications Server SMTP (CSSMTP) application ended in response to an unexpected problem.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The application ends.

Operator response: Contact the system programmer. If the system programmer indicates that more information is required in the CSSMTP log file, restart CSSMTP with a minimum of LogLevel 79 configured in the configuration file.

System programmer response: Examine the log file to determine the cause of the problem. Take the necessary corrective action and restart CSSMTP. If you need more information to diagnose the errors, restart CSSMTP with a minimum of LogLevel 79. See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn ezamlerr

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP shuts down abnormally.

Example:

EZD1805I CSSMTP1 EXITING ABNORMALLY

EZD1806I *jobname* MODIFY COMMAND UNSUCCESSFUL : *reason*

Explanation: The Communications Server SMTP (CSSMTP) application MODIFY command did not successfully complete.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

reason

The reason that the MODIFY command failed. Possible values are:

CONFIGURATION NOT INITIALIZED

The CSSMTP application was unable to process this MODIFY command because message EZD1824E was issued and the CSSMTP application is waiting for a TCP/IP stack to start.

INSUFFICIENT STORAGE

There is not enough storage to process this modify request.

UNKNOWN VERB

The command verb is not known. For example: MODIFY *procname*,BADVERB

MISSING VERB

A required command verb is missing. For example: MODIFY *procname*,

UNKNOWN KEYWORD

An unknown or unexpected keyword was specified. For example:

- BADKEY is the unknown keyword, because MODIFY DISPLAY requires an additional keyword, but BADKEY is not a valid keyword for DISPLAY. Example: MODIFY *procname* DISPLAY,BADKEY
- BADKEY2 is an unexpected keyword, because MODIFY REFRESH does not have additional keywords, but BADKEY2 is an unexpected keyword. Example: MODIFY *procname*, REFRESH,BADKEY2

MISSING KEYWORD

A required keyword is missing. For example: MODIFY *procname*,DISPLAY,

MISSING VALUE

A required value is missing. For example: MODIFY *procname*,LOGLEVEL,LEVEL=

INCORRECT VALUE

An incorrect value was specified. For example: MODIFY *procname*,LOGLEVEL,LEVEL=9999

PREVIOUS MODIFY COMMAND IN PROGRESS

A previous MODIFY REFRESH or MODIFY REFRESHLIST command has not completed.

COMMAND OUT OF SEQUENCE

The SUSPEND command and RESUME command were not issued in correct order. The only exception to the sequencing restriction is that a MODIFY SUSPEND,IMMEDIATE command can be issued after a MODIFY SUSPEND,DELAY command.

EXTENDED RETRY NOT ACTIVE

The FLUSHRETRY command with the AGE keyword was issued and the extended retry function is not active.

System action: The CSSMTP MODIFY command is ignored.

Operator response: The operator response is based on the *reason* value:

CONFIGURATION NOT INITIALIZED

Verify whether message EZD1824E is still active. Try the command again after you receive message EZD1840I or EZD1841I.

INSUFFICIENT STORAGE

Inform the system programmer of the storage shortage and try the command again after the storage problem has been relieved.

PREVIOUS MODIFY COMMAND IN PROGRESS

Wait until the previous MODIFY REFRESH or MODIFY REFRESHLIST command has completed before issuing the command again. If the problem persists, then contact the system programmer to determine whether this is a domain name server problem.

All other reason values

Verify that the syntax of the MODIFY command is correct and reissue the command. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for the syntax of the command.

If the problem persists, contact the system programmer.

System programmer response: The system programmer response is based on the *reason* value:

INSUFFICIENT STORAGE

See the information about diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems.

PREVIOUS MODIFY COMMAND IN PROGRESS

Examine the log file to determine the cause of the problem. Take the necessary corrective action.

If you need more information to diagnose the errors, restart the CSSMTP application with a minimum of LogLevel 79. See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg ezamlcfm

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: If the command issued is f cssmtp1,loglevel,level=999

EZD1806I CSSMTP1 MODIFY COMMAND UNSUCCESSFUL : INCORRECT VALUE

EZD1807I jobname ERROR IN INITIALIZATION : reason

Explanation: The Communications Server SMTP (CSSMTP) application could not initialize because it detected an error.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

reason

The reason the initialization failed:

CANNOT ACCESS JESSPOOL

The CSSMTP application is not defined for access to SAF JESSPOOL resources.

CANNOT ACCESS SERVAUTH

The CSSMTP application is not defined for access to SAF SERVAUTH resources.

CONFIGURATION FILE ERRORS

The CSSMTP application found an error in the configuration file.

CONFIGURATION FILE NOT AVAILABLE

The CSSMTP application cannot open the configuration file.

CSSMTP JOBNOME ALREADY STARTED

Only one copy of the CSSMTP application can be started with this job name and one copy is already started.

EXTERNAL WRITER NAME *extWrtName* ALREADY IN USE

- Only one copy of the CSSMTP application can be started with this external writer name.
- extWrtName* is the external writer name.

INTERNAL ERRORS

Indicates an internal error in the application.

INVALID LOG FILE TYPE

The log file format PDS or PDSE is not allowed.

JES NOT AVAILABLE

The CSSMTP application cannot use the functions of JES2 or JES3 subsystems.

LOGFILE NOT AVAILABLE

The CSSMTP application cannot open the log file.

NOT STARTED AS STARTED PROCEDURE

The CSSMTP application can be started only as a started procedure.

START OPTION ERRORS

The CSSMTP application found an error in a start options parameter in the started procedure.

System action: The application ends.

Operator response: The operator response is based on the *reason* value:

CSSMTP JOBNOME ALREADY STARTED

Start this CSSMTP application with a different job name. For example, you could use this form of the start command:

```
s cssmtp.newJobName
```

All other *reason* values

Contact the system programmer.

System programmer response: The system programmer response is based on the *reason* value:

CANNOT ACCESS JESSPOOL

Define CSSMTP with ALTER access to the local-node.** JESSPOOL class resource. See the information about optional security for CSSMTP in z/OS Communications Server: IP Configuration Guide for details about defining the JESSPOOL class profile for the CSSMTP application.

CANNOT ACCESS SERVAUTH

Define CSSMTP with READ access to the EZB.CSSMTP.** SERVAUTH class resource. See the information about optional security for CSSMTP in z/OS Communications Server: IP Configuration Guide for details about defining SERVAUTH class profile for the CSSMTP application.

EXTERNAL WRITER NAME *extWrtName* ALREADY IN USE

Start this CSSMTP application with a different external writer name. See the information about the ExtWrtName statement in z/OS Communications Server: IP Configuration Reference for information about configuring the CSSMTP application.

CONFIGURATION FILE NOT AVAILABLE

Ensure that the correct configuration file is configured in the CONFIG DD statement. See the information about the CSSMTP sample started procedure in z/OS Communications Server: IP Configuration Reference for information about configuring CONFIG DD for the CSSMTP application.

JES NOT AVAILABLE

Ensure that the JES subsystem is configured correctly. See the information about configuring and starting CSSMTP in z/OS Communications Server: IP Configuration Guide for information about configuring JES subsystems.

CONFIGURATION FILE ERRORS

Examine the log file for the configuration error and correct it. See the information about the Communications Server SMTP application in z/OS Communications Server: IP Configuration Reference for information about configuring the CSSMTP application.

EZD1808I

START OPTION ERRORS

Examine STDOUT and correct the start options parameter that is incorrect. See the information about starting the CSSMTP application in z/OS Communications Server: IP Configuration Reference for information about the start options for the CSSMTP application.

LOGFILE NOT AVAILABLE

Ensure that the correct log file is configured in the LOGFILE DD statement. See the information about the CSSMTP sample started procedure in z/OS Communications Server: IP Configuration Reference for information about configuring LOGFILE DD for the CSSMTP application.

INVALID LOG FILE TYPE

On the LOGFILE DD statement, define a log file type that is not PDS or PDSE. See the information about the CSSMTP sample started procedure in z/OS Communications Server: IP Configuration Reference for information about configuring LOGFILE DD for the CSSMTP application.

INTERNAL ERRORS

Examine the log file for the internal error and correct the error if possible.

NOT STARTED AS STARTED PROCEDURE

Start the CSSMTP application as a started procedure. See the information about configuring and starting CSSMTP in z/OS Communications Server: IP Configuration Guide for details about starting the CSSMTP application.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you if the CSSMTP application initialization fails.

Example:

EZD1807I CSSMTP1 ERROR IN INITIALIZATION : CONFIGURATION FILE NOT AVAILABLE

EZD1808I *jobname* MODIFY USEREXIT COMMAND COMPLETED : *result*

Explanation: The Communications Server SMTP (CSSMTP) application completed processing the MODIFY USEREXIT command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

result

The result from the MODIFY USEREXIT command. Possible values are:

UPDATED

CSSMTP UserExit was updated based on the modify command level parameter.

NO CHANGES

The value of the level parameter on the CSSMTP MODIFY USEREXIT command is the same as the value currently in use.

System action: The new user exit will be activated when the next JES spool file is selected for processing. CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,userexit,level=VERSION3
EZD1808I CSSMTP1 MODIFY USEREXIT COMMAND COMPLETED : UPDATED
```

EZD1809I *jobname* MODIFY LOGLEVEL COMMAND COMPLETED : *result*

Explanation: The Communications Server SMTP (CSSMTP) application completed processing the MODIFY LOGLEVEL command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

result

The result from the MODIFY LOGLEVEL command. Possible values are:

UPDATED

CSSMTP log level was updated based on the MODIFY command level parameter.

NO CHANGES

The value of the level parameter on CSSMTP MODIFY LOGLEVEL is the same as the value currently in use.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,loglevel,level=7
EZD1809I CSSMTP1 MODIFY LOGLEVEL COMMAND COMPLETED : UPDATED
```

EZD1810I *jobname* MODIFY FLUSHRETRY,TKID=*tkid* COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY FLUSHRETRY command. Completion means that mail messages currently on the long retry queue for this JES task identifier (TKID) have been moved to the active queue. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the FLUSHRETRY command.

In the message text:

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jobname

The job name of the task that started the CSSMTP application.

tkid

The task ID that was used in the MODIFY FLUSHRETRY command. The task ID value 0 means that all JES tasks were used.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamllrt

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,flushretry,tkid=2
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1810I CSSMTP1 MODIFY FLUSHRETRY,TKID=2 COMMAND COMPLETED
```

EZD1811I *jobname* CANNOT WRITE TO LOG FILE

Explanation: The Communications Server SMTP (CSSMTP) application cannot write to the log file configured on the LOGFILE DD in the started procedure. Some common reasons for the failure are that the log file was not large enough or there are system storage problems. This message might be generated when the log level is changed and the error condition still exists. CSSMTP changes the log level dynamically when it starts and stops, so this message can appear multiple times.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application continues processing without logging.

Operator response: Contact the system programmer.

System programmer response: See the information about the CSSMTP sample started procedure in z/OS Communications Server: IP Configuration Reference for information about configuring LOGFILE DD for the CSSMTP application.

If the storage issue or log file problem is resolved, then issue the MODIFY LOGLEVEL command or the MODIFY REFRESH command to try and restart logging.

User response: Not applicable.

Problem determination: Contact the system programmer.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamllog

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP has stopped logging.

Example:

EZD1811I CSSMTP1 CANNOT WRITE TO LOG FILE

EZD1813I *jobname jesjobname / jesjobid ON wrtname* COMPLETED WITH ERRORS. SPOOL FILE DISPOSITION IS HOLD

Explanation: The Communications Server SMTP (CSSMTP) application completed processing a JES spool file for the job. The disposition of the spool file was changed to HOLD. An error report might be generated, based on the REPORT configuration statement in the configuration file.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

jesjobname

The job name of the JES spool file.

jesjobid

The JES job ID of the spool file.

wrtname

The writer name of the JES spool file.

System action: The sysout file is placed in hold status.

Operator response: Contact the system programmer.

System programmer response: The mail administrator should inspect the notification or log for error messages. If you need more information to diagnose the error, issue the MODIFY LOGLEVEL,LEVEL=31 command to change the log level value.

User response: See the system programmer response.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamljes

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1813I CSSMTP USER41P / JOB00115 ON XYZ COMPLETED WITH ERRORS. SPOOL FILE DISPOSITION IS HOLD

EZD1814I *jobname* MODIFY RESUME COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY RESUME command. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the RESUME command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamljes

EZD1815E

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,resume  
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED  
EZD1814I CSSMTP1 MODIFY RESUME COMMAND COMPLETED
```

EZD1815E *jobname* NO ADDRESSES WERE RESOLVED FROM CONFIGURED TARGET SERVERS

Explanation: The Communications Server SMTP (CSSMTP) application detected that no IP addresses were resolved from all TargetName or TargetMx statements in the configuration file.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application will periodically try to resolve addresses again from configured target servers. The application suspends processing until at least one IP address is available. The message will clear when at least one IP address can be resolved.

Operator response: Contact the system programmer.

System programmer response: Determine if the resolver is initialized.

- If the resolver is not initialized, start the resolver.
- If the resolver is initialized, ensure that the names specified on the TargetServer statement are correct.
 - If the specified names are correct, then there might be a problem in the domain name server setup or the resolver setup. See the information about diagnosing name server problems and diagnosing resolver problems in z/OS Communications Server: IP Diagnosis Guide.

After the problem is corrected by fixing the domain name server setup or the resolver setup, then issue the resolver MODIFY REFRESH command to cause the next resolver request to use the updated domain name server setup or resolver setup, and reissue the MODIFY REFRESHLIST command to resolve the target servers again.

- If the specified names are not correct, then correct them and reissue the MODIFY REFRESH command.

If problems persist, then see the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamres

Routing code: 1,8

Descriptor code: 2,7

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP cannot get any IP address for all configured target servers. You can also use the related message EZD1802I *jobname* INITIALIZATION COMPLETE FOR *extWrtName* for automation.

Example:

```
EZD1815E CSSMTP1 NO ADDRESSES WERE RESOLVED FROM CONFIGURED TARGET SERVERS
```

EZD1816I *jobname jesjobname / jesjobid ON wrtname* COMPLETED WITH ERRORS. SPOOL FILE DISPOSITION IS DELETE

Explanation: The Communications Server SMTP (CSSMTP) application completed processing a JES spool file for the job. The disposition of the spool file was changed to DELETE. An error report might be generated, based on the REPORT configuration statement in the configuration file.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

jesjobname

The job name of the JES spool file.

jesjobid

The JES job ID of the spool file.

wrtname

The writer name of the JES spool file.

System action: The sysout spool file is deleted

Operator response: Contact the system programmer.

System programmer response: The mail administrator should inspect the notification or log file for error messages. If you need more information to diagnose the error, issue MODIFY LOGLEVEL,LEVEL=31 to change the log level value.

User response: See the system programmer response.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamljes

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1816I CSSMTP USER41P / JOB00116 ON XYZ COMPLETED WITH ERRORS. SPOOL FILE DISPOSITION IS DELETE

EZD1817I *jobname UNABLE TO CONNECT TO TARGET SERVER ipaddress*

Explanation: The Communications Server SMTP (CSSMTP) application cannot connect to the specified target server IP address.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

ipaddress

The IP address of the target server.

System action: The CSSMTP application attempts to connect to another configured target server IP address. CSSMTP will periodically try to connect to this target server IP address based on the configured TIMEOUT ConnectRetry value.

If the CSSMTP application connects to the target server, then message EZD1821I is issued to display the IP address of the target server.

Operator response: Contact the system programmer.

System programmer response: If the IP address that is displayed in this message is not correct, then issue the MODIFY DISPLAY,IPLIST command to determine whether the IP address was specified in the configuration file or was the result of a host name or MX name resolution. If you change the IP address, host name, or MX name in the

configuration file, then issue a MODIFY REFRESH command to update the configuration settings. If the IP address is incorrect and is the result of a name resolution, then diagnose the resolver or Domain Name System (DNS) problems. If the IP address displayed in this message is correct, then check for network connectivity problems.

Examine the log file to determine the cause of the problem. Take the necessary corrective action based on the log information that indicates the cause of the failure. If you need more information to diagnose the error, issue MODIFY LOGLEVEL,LEVEL=47 to change log level value. Check the application trace log for failures. Send a ping to the target server IP address from the system. If the ping works, check the configured port for this target server and ensure that the remote SMTP server is running and listening on that port.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcon

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to the need to take corrective action when CSSMTP is not able to send any mail to this IP address.

Example:

EZD1817I CSSMTP1 UNABLE TO CONNECT TO TARGET SERVER 9.1.1.1

EZD1818I *jobname* UNABLE TO SEND TO TARGET SERVER *ipaddress*

Explanation: The Communications Server SMTP (CSSMTP) application cannot send mail to the target server IP address. Errors occurred after the connection to the target server was successful but before a successful EHLO or HELO SMTP command response was received.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

ipaddress

The IP address of the target server.

System action: The CSSMTP application attempts to send mail to another target server IP address, if one is available. CSSMTP periodically tries to establish communication with this target server IP address, based on the configuration statement TIMEOUT ConnectRetry value, because the connection must be re-established. If the CSSMTP application connects to the target server, then message EZD1821I is issued to display the IP address of the target server.

Operator response: Contact the system programmer.

System programmer response: If the IP address that is displayed in this message is not correct, then issue the MODIFY DISPLAY,IPLIST command to determine whether the IP address was specified in the configuration file or was the result of a host name or MX name resolution. If you change the IP address, host name, or MX name in the configuration file, then issue a MODIFY REFRESH command to update the configuration settings. If the IP address is incorrect and is the result of a name resolution, then diagnose the resolver or Domain Name System (DNS) problems. If the IP address displayed in this message is correct, then check for network connectivity problems.

Examine the log file to determine the cause of the problem. Take the necessary corrective action. If you need more information to diagnose the error, issue MODIFY LOGLEVEL,LEVEL=47 to change log level value. Check the application trace log for failures. Try pinging the target server IP address from the system. If the ping works, check the configured port for this target server and ensure that the remote SMTP server is running and listening on that port. For example, if the server is running but does not send the protocol greeting after a successful connect() call, the server that is using the port might not be an SMTP server.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications

Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcon

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to the need to take corrective action when CSSMTP is not able to send any mail to this IP address.

Example:

EZZ1818I CSSMTP1 UNABLE TO SEND TO TARGET SERVER 9.1.1.1

EZZ1819I *jobname* UNABLE TO ESTABLISH A TLS CONNECTION TO TARGET SERVER *ipaddress*

Explanation: The Communications Server SMTP (CSSMTP) application was unable to establish a TLS connection to the target server IP address. Possible causes might be that TLS is not supported on the target server, that security certificates need updating, or that the Policy Agent is not started.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

ipaddress

The IP address of the target server.

System action: The CSSMTP application attempts to find another configured target server IP address that supports TLS. CSSMTP periodically tries to establish a TLS connection to this target server IP address based on the configuration statement TIMEOUT ConnectRetry value.

Operator response: Contact the system programmer.

System programmer response: If the IP address displayed in this message does not require security, then change the configuration TARGETSERVER statement SECURE parameter value to NO in the configuration file and issue a MODIFY REFRESH command to update the configuration settings. If the IP address displayed in this message does require security, then check for other problems such as a server capability that needs updating, security certificates that need updating, or a Policy Agent that is not started.

Examine the log file to determine the cause of the problem. Take the necessary corrective action based on the log information that indicates the cause of the failure. If you need more information to diagnose the error, issue MODIFY LOGLEVEL,LEVEL=47 to change log level value. Check the application's trace log for failures.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcon

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to the need to take corrective action when CSSMTP is not able to send any mail to this IP address.

Example:

EZD1820E • EZD1821I

EZD1819I CSSMTP1 UNABLE TO ESTABLISH A TLS CONNECTION TO TARGET SERVER 9.1.1.1

EZD1820E *jobname* NO TARGET SERVER IS CAPABLE OF RECEIVING MAIL AT THIS TIME

Explanation: The Communications Server SMTP (CSSMTP) application detected that there is no configured target server that is capable of receiving messages at this time

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application is unable to get any target server to take mail at this time. CSSMTP periodically tries to communicate with the configured target servers. This message will clear when CSSMTP can communicate with at least one target server IP address.

Operator response: Contact the system programmer.

System programmer response: Check the system console log first for message EZD1824E to determine whether the application can communicate with a TCP/IP stack. If stack communication is not the problem, continue to check the system console log to determine whether message EZD1817I, EZD1818I, or EZD1819I was issued before this message. There might be more than one of these messages, depending on the number of server target IP addresses that are currently being used by the application.

Examine the log file to determine the cause of the problem. Take the necessary corrective action. If you need more information to diagnose the error, issue MODIFY LOGLEVEL,LEVEL=47 to change log level value. Check the application trace log for failures.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlsmt

Routing code: 1,8

Descriptor code: 2,7

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to the need to take corrective action as soon as possible because CSSMTP is not able to send any mail at this time.

Example:

EZD1820E CSSMTP1 NO TARGET SERVER IS CAPABLE OF RECEIVING MAIL AT THIS TIME

EZD1821I *jobname* ABLE TO USE TARGET SERVER *ipaddress*

Explanation: The Communications Server SMTP (CSSMTP) application detected that the target server IP address is available for receiving mail.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

ipaddress

The IP address of the target server.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlsmt

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when a target server is available.

Example:

```
EZD1821I CSSMTP1 ABLE TO USE TARGET SERVER 9.1.1.1
```

EZD1822I *jobname* MODIFY SUSPEND *type* COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY SUSPEND command. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the SUSPEND command and the different *type* values.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

type

The type of SUSPEND command that completed.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamljes

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,suspend,immediate
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1822I CSSMTP1 MODIFY SUSPEND IMMEDIATE COMMAND COMPLETED
```

EZD1823I *jobname* MODIFY FLUSHRETRY,AGE=*age* COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY FLUSHRETRY command. Mail messages that were on the extended retry queue and that were older than the AGE value specified on the command were moved to the active queue. See the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the FLUSHRETRY command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

age

The age value that was specified on the MODIFY FLUSHRETRY command. The age value 0 means that all messages were moved.

EZD1824E

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamler

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,flushretry,age=1  
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED  
EZD1823I CSSMTP1 MODIFY FLUSHRETRY,AGE=1 COMMAND COMPLETED
```

EZD1824E *jobname* WAITING FOR A TCPIP STACK

Explanation: The Communication Server SMTP (CSSMTP) application cannot communicate with a TCP/IP stack. This message might be issued during CSSMTP initialization or during mail processing.

There are four possible causes of this error:

-p *tcpStack*

The start option stack is not available.

_BPXK_SETIBMOPT_TRANSPORT *tcpStack*

The environment variable stack is not available.

No TCP/IP affinity

No stack is available.

EZB.STACKACCESS

Stack security settings prevent communication with a stack.

See the information about starting the CSSMTP application in z/OS Communications Server: IP Configuration Reference for information about stack affinity.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP initialization or mail processing does not complete and CSSMTP periodically tries to communicate with a stack. This message will clear after CSSMTP connects to the TCP/IP stack.

Operator response: Save the log file and contact the system programmer.

System programmer response: Examine the log file to help determine the cause of the problem and which stack needs to be started. Based on the following, take the necessary corrective action:

- If you are using the **-p** start option, then verify that the specified stack is started.
- If you are using the **_BPXK_SETIBMOPT_TRANSPORT** environment variable, then verify that the stack configured on the environment variable is started.
- If you are not using TCP/IP affinity, then verify that a stack is available.
- If you are restricting stack access by using the SERVAUTH class resource EZB.STACKACCESS then verify that the CSSMTP application has authority to access to the resource.

If you need more information during mail processing time to diagnose the warnings, issue MODIFY LOGLEVEL,LEVEL=79 to increase the log level. Check the application trace log for failures when performing the TCP/IP socket() function. The inability to obtain a socket blocks communication between the application and the TCP/IP stack.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 1,8

Descriptor code: 2,7

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP cannot communicate with a stack.

Example:

EZD1824E CSSMTP1 WAITING FOR A TCPIP STACK

EZD1825I *jobname* JES NOT AVAILABLE

Explanation: The Communications Server SMTP (CSSMTP) application is ending because JES2 or JES3 subsystems are no longer available.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application ends.

Operator response: If the JES2 or JES3 subsystem was not stopped, contact the system programmer. If the system programmer indicates that more information is required in the CSSMTP log file, restart CSSMTP with the minimum value LOGLEVEL,LEVEL=95 configured in the main configuration file. If the JES2 or JES3 subsystems were stopped, restart them before restarting CSSMTP.

System programmer response: Examine the log file to determine the cause of the problem. Take the necessary corrective action and restart CSSMTP. If you need more information to diagnose the errors, restart CSSMTP with the minimum value LOGLEVEL,LEVEL=95. If the log shows SAPI rc=0 SSOBRETN=32 SSS2REAS=36 and the JES2 DESTDEF statement specifies NODENAME=REQUIRED, you must define the writer name specified in the ExtWrtName statement to JES2. You can dynamically define it to JES using the command

```
$ADD DESTID(xxxxxxxx),DEST=xxxxxxxx,
```

where *xxxxxxxx* is the *wtrName* value specified in the ExtWrtName statement. See z/OS JES2 Initialization and Tuning Reference for information about the DESTDEF statement. To permanently add the destination, use the JES initialization DEStid statement: DESTID(*xxxxxxxx*) DEST=*xxxxxxxxxx*. See DEStid(*xxxxxxxx*) - Route Code Name in z/OS JES2 Initialization and Tuning Reference for information about the DESTID JES2 statement. See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlmn

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP shuts down abnormally.

Example:

EZD1826I

EZD1825I CSSMTP1 JES NOT AVAILABLE

EZD1826I *jobname* CANNOT WRITE TO z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application cannot write to the configured or default z/OS UNIX file system dead letter directory.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application continues processing without storing dead letters and the DeadLetterAction configuration statement is set to **Delete**.

Operator response: Contact the system programmer.

System programmer response: Possible reasons for this message are:

- The UNIX file system dead letter directory is full or nearly full.
- The UNIX file system dead letter directory is not accessible in write mode.

If you determine that the dead letter directory is full or nearly full, then do one of the following:

- Perform the following steps to free some space in the directory
 1. Issue the MODIFY SUSPEND command to suspend new spool file processing.
 2. Delete all unneeded dead letters.
 3. Issue the MODIFY REFRESH command to enable the application to write dead letters into the configured or default directory again.
 4. Issue the MODIFY RESUME command to resume new spool file processing.
- Perform the following steps to use a larger directory:
 1. Allocate a larger z/OS UNIX file system for the dead letter directory.
 2. Change the DeadLetterDirectory configuration statement to specify the new directory.
 3. Issue a MODIFY REFRESH command to use the larger directory.

If you determine that the UNIX file system dead letter directory is not accessible in write mode, perform the following steps:

1. Do one of the following:
 - Mount the UNIX file system in write mode.
 - Specify a directory to which you have write access in the DeadLetterDirectory configuration statement in the CSSMTP configuration file.
2. Issue a MODIFY REFRESH command to use the new directory.

See the information about the UNDELIVERABLE statement in z/OS Communications Server: IP Configuration Reference for more information about z/OS UNIX file system dead letter directory.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcon

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP has stopped storing dead letters into the z/OS UNIX file system dead letter directory.

Example:

EZD1826I CSSMTP1 CANNOT WRITE TO z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

**EZD1827I *jobname* CANNOT WRITE TO THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY RETURN CODE
errno REASON CODE *errnojr***

Explanation: The Communications Server SMTP (CSSMTP) application cannot write to the configured or default z/OS UNIX file system mail directory associated with the EXTENDEDRETRY statement.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the return codes (errnos) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The CSSMTP application stops.

Operator response: Contact the system programmer.

System programmer response: Check the CSSMTP log for the errno/errnojr associated with the I/O error on the MailDirectory parameter. Look up the return code and reason code values to determine the next action to take. Take corrective action and restart CSSMTP.

If you determine that the z/OS UNIX file system mail directory is not accessible in write mode, perform one of the following steps:

- Mount the z/OS UNIX file system in write mode. Restart the CSSMTP application.
- Specify a new directory on the MailDirectory parameter of the ExternalRetry configuration statement in the CSSMTP configuration file. This directory must be one to which CSSMTP will have write access.

See the ExtendedRetry statement in z/OS Communications Server: IP Configuration Reference for more information about the z/OS UNIX file system mail directory.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlert

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when CSSMTP has a problem storing mails into the z/OS UNIX file system mail directory.

Example:

EZD1827I CSSMTP1 CANNOT WRITE TO THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY RETURN CODE 111
REASON CODE EF086015

EZD1828I *jobname* DISPLAY LOGLEVEL = *loglevel*

Explanation: The message is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY *jobname*,DISPLAY,LOGLEVEL command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

EZD1829I

loglevel

The current log level value that is in effect. This value is specified with the LogLevel configuration statement or with the MODIFY LOGLEVEL,LEVEL command.

The value displayed is the arithmetic sum of the currently active values from the following list.

- 0** None. No messages are logged.
- 1** Error-level messages are logged.
- 2** Warning-level messages are logged.
- 4** Event-level messages are logged.
- 8** Info-level messages are logged.
- 16** Message-level JES (spool) messages are logged. This level traces the CSSMTP commands and command syntax parser replies between the spool and CSSMTP.
- 32** Message-level TCP/IP messages are logged. This level traces the CSSMTP commands and remote SMTP server replies between CSSMTP and the TCP/IP network.
- 64** Debug-level messages are logged. These are internal debug messages intended for development and IBM service use only.

128

Trace-level messages are logged. These are function entry and exit traces that show the path through the code. This level is intended for development and IBM service use only.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,display,loglevel  
EZD1828I CSSMTP1 DISPLAY LOGLEVEL = 7
```

EZD1829I *jobname* CONFIGURATION:

Explanation: This message is a header message that is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY DISPLAY,CONFIG command. This message displays the configuration values. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for a description of the display.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP,D,CONFIG
EZD1829I CSSMTP CONFIGURATION:
```

EZD1830I *jobname* IPLIST:

Explanation: This message is a header message that is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY DISPLAY,IPLIST command. This message is followed by information about the IP addresses for all the target servers. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,IPLIST command display.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP,DISPLAY,IPLIST
EZD1830I CSSMTP IPLIST:
```

EZD1831I *jobname* TARGETS:

Explanation: This message is a header message that is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY DISPLAY,TARGETS command. This message is followed by global and specific information about target servers. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,TARGETS command display.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

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Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP,DISPLAY,TARGETS  
EZD1831I CSSMTP TARGETS:
```

EZD1832I *jobname* SPOOLSTATUS:

Explanation: This message is a header message that is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY DISPLAY,SPOOLSTATUS or MODIFY DISPLAY,SPOOLSTATUS,SUMMARY command. This message is followed by the global and specific status of the current or previous JES spool information. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,SPOOLSTATUS and MODIFY DISPLAY,SPOOLSTATUS,SUMMARY command display.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP1,DISPLAY,SPOOLSTATUS,SUMMARY  
EZD1832I CSSMTP1 SPOOLSTATUS:
```

EZD1833I *jobname* SPOOLSTATUS:

Explanation: This message is a header message that is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY DISPLAY,SPOOLSTATUS,DETAIL command. This message is followed by the global and specific status of the current or previous JES spool information. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,SPOOLSTATUS,DETAIL command display.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP1,DISPLAY,SPOOLSTATUS,DETAIL
EZD1833I CSSMTP1 SPOOLSTATUS:
```

EZD1834I *jobname* MODIFY COMMAND ACCEPTED

Explanation: This message is issued in response to a Communications Server SMTP (CSSMTP) application MODIFY command. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for information about the MODIFY command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfm

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
F CSSMTP1,RESUME
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1814I CSSMTP1 MODIFY RESUME COMMAND COMPLETED
```

EZD1835I *jobname* CHKPOINT DD NOT FOUND. CHECKPOINT FUNCTION NOT AVAILABLE

Explanation: The CHKPOINT data definition statement was missing or the data set name was NULLFILE in the Communications Server SMTP (CSSMTP) started procedure.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application continues without checkpoint functions.

Operator response: Contact the system programmer.

System programmer response: If you want the checkpoint functions, then define the checkpoint data set and update the CSSMTP started procedure. See the information about the CSSMTP sample started procedure in z/OS

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Communications Server: IP Configuration Reference for information about configuring CHKPOINT DD for the CSSMTP application.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlckp

Routing code: 10

Descriptor code: 12

Automation: Not applicable

Example:

```
EZD1835I CSSMTP CHKPOINT DD NOT FOUND. CHECKPOINT FUNCTION NOT AVAILABLE
```

EZD1836I *jobName* CHECKPOINT FAILED. REASON CODE = *reasonCode*

Explanation: There was a failure while the Communications Server SMTP (CSSMTP) application checkpoint function was initializing.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

reasonCode

A code describing the error. Possible values are:

12 Locks could not be initialized.

14 Storage was not available.

30 The checkpoint file was not available.

31 The VSAM linear data set could not be connected to the application.

System action: The application ends.

Operator response: Contact the system programmer.

System programmer response: Use the log to determine the exact failure. Ensure that the LogLevel includes ERROR.

User response: Not applicable.

Problem determination: Check the console log for additional messages, for example message IEC161I. Check the log for Checkpoint Open messages.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlckp

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1836I CSSMTP CHECKPOINT FAILED. REASON CODE = 31
```

EZD1837I *jobname* CONFIGURATION UNCHANGED

Explanation: The Communications Server SMTP (CSSMTP) application processed the configuration file as the result of a MODIFY REFRESH command. The configuration file definitions match the existing configuration.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refresh
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1837I CSSMTP1 CONFIGURATION UNCHANGED
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

EZD1838I *jobname* CONFIGURATION UNCHANGED WITH WARNINGS

Explanation: The Communications Server SMTP (CSSMTP) application processed the configuration file as the result of a MODIFY REFRESH command. Warnings were issued while the configuration file was being processed. The CSSMTP configuration is unchanged.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the log file and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the WARNING messages in the log. Take the necessary corrective action. If you need more information to diagnose the warnings, issue MODIFY LOGLEVEL,LEVEL=79 to increase the log level. Issue the MODIFY REFRESH command.

See the information about the Communications Server SMTP application in z/OS Communications Server: IP Configuration Reference for information about configuring CSSMTP.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refresh
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1838I CSSMTP1 CONFIGURATION UNCHANGED WITH WARNINGS
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

**EZD1839I *jobname* CONFIGURATION NOT UPDATED BECAUSE ERRORS WERE FOUND IN
CONFIGURATION FILE**

Explanation: The Communications Server SMTP (CSSMTP) application processed the configuration file as the result of a MODIFY REFRESH command. The existing configuration was not updated, because errors were issued while the configuration file was being processed.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the log file and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the ERROR messages in the log. Take the necessary corrective action. If you need more information to diagnose the warnings, issue MODIFY LOGLEVEL,LEVEL=79 to change the log level value. Issue the MODIFY REFRESH command.

See the information about the Communications Server SMTP application in z/OS Communications Server: IP Configuration Reference for information about configuring CSSMTP.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f_cssmtp1,refresh
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1839I CSSMTP1 CONFIGURATION NOT UPDATED BECAUSE ERRORS WERE FOUND IN CONFIGURATION FILE
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

EZD1840I *jobname* UPDATED CONFIGURATION

Explanation: The Communications Server SMTP (CSSMTP) application processed the configuration file during initialization of the application or as a result of a MODIFY REFRESH command. The existing configuration was updated.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continued.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refresh
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1840I CSSMTP1 UPDATED CONFIGURATION
EZD1846I CSSMTP1 UPDATED TARGET SERVERS
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

EZD1841I *jobname* UPDATED CONFIGURATION WITH WARNINGS

Explanation: The Communications Server SMTP (CSSMTP) application processed the configuration file during initialization of the application or as a result of a MODIFY REFRESH command. The existing configuration was updated, but warnings were issued while the configuration file was being processed.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the log file and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the WARNING messages in the log. Take the necessary corrective action. If you need more information to diagnose the warnings, issue MODIFY LOGLEVEL,LEVEL=79 to change the log level value. Issue MODIFY REFRESH command.

See the information about the Communications Server SMTP application in z/OS Communications Server: IP Configuration Reference for information about configuring CSSMTP.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refresh
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1841I CSSMTP1 UPDATED CONFIGURATION WITH WARNINGS
EZD1846I CSSMTP1 UPDATED TARGET SERVERS
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

EZD1842I *jobname* MODIFY REFRESHLIST COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY REFRESHLIST command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

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Module: ezamlres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f_cssmtp1,refreshiplist  
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED  
EZD1846I CSSMTP1 UPDATED TARGET SERVERS  
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1843I jobname TARGET SERVERS UNCHANGED

Explanation: The Communications Server SMTP (CSSMTP) application processed the TargetServer statements in the configuration file as a result of the MODIFY REFRESH command or MODIFY REFRESHIPLIST command. No updated IP addresses were resolved from the TargetServer configuration statements. The current IP addresses will continue to be used.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f_cssmtp1,refreshiplist  
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED  
EZD1843I CSSMTP1 TARGET SERVERS UNCHANGED  
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1844I jobname TARGET SERVERS UNCHANGED WITH WARNINGS

Explanation: The Communications Server SMTP (CSSMTP) application processed the TargetServer statements in the configuration file as a result of the MODIFY REFRESH command or MODIFY REFRESHIPLIST command. No updated IP addresses were resolved from the TargetServer statements. The current IP addresses will continue to be used. Warnings were issued as a result of processing the TargetServer statements.

The target name on a TargetServer statement might have resulted in one of the following:

- A target name that could not be resolved to any IP address
- A target name that was resolved to more than 4 IP addresses

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the system log for problem determination and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the WARNING messages in the log. These warnings might not cause the CSSMTP application to be unable to deliver mail, but they might indicate problems.

Ensure that the names specified on the TargetServer statement are correct.

- If the specified names are correct, then there might be a problem in the domain name server setup or the resolver setup. See the information about diagnosing name server problems and diagnosing resolver problems in z/OS Communications Server: IP Diagnosis Guide for information about domain name server or resolver problems. After you correct the problem by fixing the domain name server setup or the resolver setup, then issue the resolver MODIFY REFRESH command to cause the next resolver request to use the updated domain name server setup or the resolver setup, and reissue the MODIFY REFRESHIPLIST command to resolve the target servers again.
- If the specified names are not correct, then correct them and reissue the MODIFY REFRESH command.

If problems persist, then see the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refreshiplist
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1844I CSSMTP1 TARGET SERVERS UNCHANGED WITH WARNINGS
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1845I *jobname* TARGET SERVERS NOT UPDATED BECAUSE OF RESOLVER ERRORS

Explanation: The Communications Server SMTP (CSSMTP) application processed the TargetServer statements in the configuration file as a result of the MODIFY REFRESH command or MODIFY REFRESHIPLIST command. No IP addresses were resolved from the TargetServer statements. The current IP addresses will continue to be used.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the system log for problem determination and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the ERROR messages in the log. These errors might not cause the CSSMTP application to be unable to deliver mail, but they might indicate problems.

Determine whether the resolver is initialized.

- If the resolver is not initialized, start the resolver.
- If the resolver is initialized, ensure that the names specified on the TargetServer statement are correct.
 - If the specified names are correct, then there might be a problem in the domain name server setup or the resolver setup. See the information about diagnosing name server problems and diagnosing resolver problems in z/OS Communications Server: IP Diagnosis Guide for information about domain name server or resolver problems. After you correct the problem by fixing the domain name server setup or the resolver setup, then issue the resolver MODIFY REFRESH command to cause the next resolver request to use the updated domain name server setup or resolver setup, and reissue the MODIFY REFRESHIPLIST command to resolve the target servers again.

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- If the specified names are not correct, then correct them and reissue the MODIFY REFRESH command.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refreshiplist
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1845I CSSMTP1 TARGET SERVERS NOT UPDATED BECAUSE OF RESOLVER ERRORS
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1846I *jobname* UPDATED TARGET SERVERS

Explanation: The Communications Server SMTP (CSSMTP) application processed the TargetServer statements in the configuration file during initialization of the application or as a result of the MODIFY REFRESH command or MODIFY REFRESHIPLIST command. IP addresses and their attributes were updated as a result of the TargetServer statements.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refreshiplist
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1846I CSSMTP1 UPDATED TARGET SERVERS
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1847I *jobname* UPDATED TARGET SERVERS WITH WARNINGS

Explanation: The Communications Server SMTP (CSSMTP) application processed the TargetServer statements during initialization of the application or as a result of the MODIFY REFRESH command or MODIFY REFRESHIPLIST command. IP addresses and their attributes were updated as a result of the TargetServer statements. Warnings were issued as a result of processing TargetServer statements.

The target name on a TargetServer statement might have resulted in one of the following:

- A target name that could not be resolved to any IP address.
- A target name that was resolved to more than 4 IP addresses.
- Configured or resolved IP addresses that exceeded the maximum of 4.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: Save the system log for problem determination and contact the system programmer.

System programmer response: Examine the log file to determine the cause of the WARNING messages in the log. These warnings might not cause the CSSMTP application to be unable to deliver mails, but they might indicate problems.

Ensure that the names specified on the TargetServer statement are correct.

- If the specified names are correct, then there might be a problem in the domain name server setup or the resolver setup. See the information about diagnosing name server problems and diagnosing resolver problems in z/OS Communications Server: IP Diagnosis Guide for information about domain name server or resolver problems. After you correct the problem by fixing the domain name server setup or the resolver setup, then issue the resolver MODIFY REFRESH command to cause the next resolver request to use the updated domain name server setup or resolver setup, and reissue the MODIFY REFRESHIPLIST command to resolve the target servers again.
- If the specified names are not correct, then correct them and reissue the MODIFY REFRESH command.

See the information about gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide to determine what documentation you should obtain before contacting IBM Service.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlres

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refreshiplist
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED
EZD1847I CSSMTP1 UPDATED TARGET SERVERS WITH WARNINGS
EZD1842I CSSMTP1 MODIFY REFRESHIPLIST COMMAND COMPLETED
```

EZD1848I jobname MODIFY REFRESH COMMAND COMPLETED

Explanation: The Communications Server SMTP (CSSMTP) application processed and completed the MODIFY REFRESH command.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: CSSMTP processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

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Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlres ezamlcfg

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
f cssmtp1,refresh  
EZD1834I CSSMTP1 MODIFY COMMAND ACCEPTED  
EZD1840I CSSMTP1 CONFIGURATION UPDATED  
EZD1846I CSSMTP1 UPDATED TARGET SERVERS  
EZD1848I CSSMTP1 MODIFY REFRESH COMMAND COMPLETED
```

EZD1849I *jobname jesjobname / jesjobid ON wrtname RESTART FAILED*

Explanation: The Communications Server SMTP (CSSMTP) application attempted to restart the named spool file as a result of a warm start. CSSMTP was previously running with checkpointing enabled. The spool file was unavailable.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

jesjobname

The job name of the JES spool file.

jesjobid

The JES job ID of the spool file.

wrtname

The writer name of the JES spool file.

System action: Processing continues without the spool file.

Operator response: Contact the system programmer

System programmer response: Determine the status of the spool file. The spool file must have the same writer name or destination that it had when the spool file was first processed by the CSSMTP application.

User response: Not applicable.

Problem determination: Use the System Display and Search Facility (SDSF) to determine the status of the spool file.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlckp

Routing code: 10

Descriptor code: 12

Automation: Not applicable

Example:

```
EZD1849I CSSMTP USER41P / JOB00115 ON XYZ RESTART FAILED
```

EZD1850I *jobname jesjobname / jesjobid ON wrtname RESTARTED*

Explanation: The Communications Server SMTP (CSSMTP) application restarted the named spool data set. A spool file can be restarted when the processing of the spool file was not completed by the previous instance of the CSSMTP application.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

jesjobname

The job name of the JES spool file.

jesjobid

The JES job ID of the spool file.

wrtnname

The writer name of the JES spool file.

System action: Processing for the spool data set continues.

Operator response: Not applicable

System programmer response: Not applicable

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlckp

Routing code: 10

Descriptor code: 12

Automation: Not applicable

Example:

EZD1850I CSSMTP USER41P / JOB00115 ON XYZ RESTARTED

EZD1851I *jobname jesjobname / jesjob id ON wrtnname INPUT ERROR. errnoText*

Explanation: The Communications Server SMTP (CSSMTP) application has encountered an error while it was reading the JES spool file.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

jesjobname

The job name of the JES spool file.

jesjobid

The JES job ID of the spool file.

wrtnname

The writer name of the JES spool file.

errnoText

The error message from the file system that describes the error.

System action: Reading of the spool file is discontinued.

Operator response: Notify the system programmer.

System programmer response: Determine the cause of the input error.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamljes

Routing code: 10

Descriptor code: 12

Automation: Not applicable

EZD1852I • EZD1856I

Example:

EZD1851I CSSMTP USER1 / TSU00050 on CSSMTP INPUT ERROR.
EDC8122I No buffer space available. (errno2=0x0000006B)

EZD1852I *jobname* NO SPACE IN THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application cannot write to the configured or default z/OS UNIX file system mail directory associated with the ExtendedRetry statement because the directory is full or nearly full.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: The CSSMTP application stops.

Operator response: Contact the system programmer.

System programmer response: The extended retry function of the Communication Server SMTP (CSSMTP) application requires a UNIX file system mail directory to work correctly. Because the z/OS UNIX file system mail directory is full or nearly full, free some space in the directory or allocate a larger one.

Do one of the following tasks:

- Perform the following steps to free some space in the directory:
 1. Delete files in the z/OS UNIX file system that are not associated with the mail directory. If you need to delete mail files in the mail directory, you must delete both the .cf files and the .df files that are associated with the mail message. The mail associated with these files is lost.
 2. Restart the CSSMTP application.
- Perform the following steps to use a larger directory:
 1. Allocate a larger z/OS UNIX file system for the new mail directory.
 2. Copy the files from the old mail directory to the new mail directory.
 3. Change the MailDirectory parameter in the ExternalRetry configuration statement to specify the new directory.
 4. Restart the CSSMTP application.

See the ExtendedRetry statement in z/OS Communications Server: IP Configuration Reference for more information about the z/OS UNIX file system mail directory.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlert

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you when CSSMTP has a problem storing mails into the z/OS UNIX file system mail directory.

Example:

EZD1852I CSSMTP1 NO SPACE IN THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY

EZD1856I *jobname* JES TASK SHORTAGE DETECTED

Explanation: The Communications Server SMTP (CSSMTP) application detected that over 75% of DEST JES tasks or over 75% of WRITER JES tasks are waiting for long retry processing to complete for one or more mail messages in a JES spool file.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine whether you need to issue the MODIFY FLUSHRETRY or the MODIFY SUSPEND command.

1. Issue the MODIFY DISPLAY,SPOOLSTATUS,SUMMARY command to determine the number of mail messages that are in the pending or long retry state for each JES task. From the summary report, obtain the TKID value that has pending or long retry mail messages, then issue the MODIFY D,SPoolstatus,Detail,TKID=*tkid* command to display detail information for the specific JES task. See the information about the CSSMTP MODIFY command information in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,SPOOLSTATUS, command display.
2. Do one of the following:
 - If there are few mail messages in long retry state for a large spool file, issue the MODIFY FLUSHRETRY command to force those long retry mail messages to be tried again immediately. If that retry fails, mail messages will become undeliverable mail. The JES task will then be freed to process other JES spool files.
 - If there is a large number of mail messages in long retry state, then there might be a problem with the mail servers. Issue the MODIFY SUSPEND command to suspend new JES spool file processing until the problem is resolved. If message EZD1817I, EZD1818I, or EZD1819I is in the log, they might help to determine the problem. See EZD1817I, EZD1818I, or EZD1819I for more detail.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when JES tasks become unavailable to process the JES spool file.

Example:

EZD1856I CSSMTP1 JES TASK SHORTAGE DETECTED

EZD1857I *jobname* JES TASK SHORTAGE RELIEVED

Explanation: The Communications Server SMTP (CSSMTP) application detected that less than 50% of DEST JES tasks and less than 50% of WRITER JES tasks are waiting for long retry processing to complete for one or more mail messages in a JES spool file. The previous JES tasks shortage is relieved.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine whether you need to issue the MODIFY RESUME command.

1. Issue the MODIFY DISPLAY,SPOOLSTATUS,SUMMARY command to determine the state of the JES tasks. See the information about the CSSMTP MODIFY command in z/OS Communications Server: IP System Administrator's Commands for an example of the MODIFY DISPLAY,SPOOLSTATUS command display.
2. If the state is SUPND, this indicates that a MODIFY SUSPEND command was issued to suspend the JES tasks. Issue a MODIFY RESUME command to resume the processing for new JES spool files.

User response: Not applicable.

EZD1858I

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can alert you to when JES tasks are available to process new JES spool files.

Example:

EZD1857I CSSMTP1 JES TASK SHORTAGE RELIEVED

EZD1858I *jobname* STORAGE SHORTAGE DETECTED IN THE *addrJobName* ADDRESS SPACE

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the CSSMTP application address space exceeds 75%.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

addrJobName

The job name of the address space. This name matches the job name of the started CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Perform the following steps to determine the problem:

1. Issue the MODIFY D,SPOOLSTATUS,SUMMARY command to determine the number of mail messages that are in the pending or long retry state for each JES task. From the summary report, obtain the TKID value that has pending or long retry mail messages, then issue the MODIFY D,SPOOLSTATUS,DETAIL,TKID=*tkid* command to display detail information for the specific JES task.
2. Do one of the following:
 - If there are few mail messages in long retry for a large spool file, you can issue the MODIFY FLUSHRETRY command to force those long retry mail messages to be tried again immediately. If that retry fails, mail messages will become undeliverable mail. The JES task will be freed to process other JES spool files and the large spool file will also be freed.
 - If there is a large number of mail messages in long retry, then there might be a problem with the mail servers. You can issue the MODIFY SUSPEND command to suspend new JES spool file processing until the problem is resolved. If messages EZD1817I, EZD1818I or EZD1819I are in the log, they might help you to determine the problem. See EZD1817I, EZD1818I, or EZD1819I for more detail.
 - If there are several large spool files in progress, then you can issue the MODIFY SUSPEND command to suspend new JES spool file processing until the storage problem is relieved.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can enable you to automatically monitor storage use in the CSSMTP application address space.

Example:

EZD1858I CSSMTP1 STORAGE SHORTAGE DETECTED IN THE CSSMTP1 ADDRESS SPACE

EZD1859I *jobname* STORAGE SHORTAGE RELIEVED IN THE *addrJobname* ADDRESS SPACE

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the CSSMTP application address space has dropped to less than 50%. The previous storage shortage is relieved.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

addrJobname

The job name of the address space. This name matches the job name of the started CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine whether you need to issue the MODIFY RESUME command.

1. Issue the MODIFY D,SPOOLSTATUS,SUMMARY command to see the state of the JES tasks.
2. If the state is SUPND, this indicates that a MODIFY SUSPEND command was issued to suspend the JES tasks.
Issue a MODIFY RESUME command to resume the processing for new JES spool files.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezankhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can enable you to automatically monitor storage use in the CSSMTP application address space.

Example:

EZD1859I CSSMTP1 STORAGE SHORTAGE RELIEVED IN THE CSSMTP1 ADDRESS SPACE

EZD1860I *jobname* STORAGE SHORTAGE DETECTED IN THE z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the z/OS UNIX file system dead letter directory exceeds 75%.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: A possible cause for this error is that the UNIX file system that contains the dead letter directory is full or nearly full. If this is the cause of the error, perform one of the following:

- Determine what can be deleted in the file system and delete it.
- Change the DeadLetterDirectory configuration statement to be a directory on a different file system and issue a MODIFY REFRESH command to use the new directory.

If the problem persists, then either issue a MODIFY SUSPEND command or change the DeadLetterAction configuration statement to DELETE.

Determine whether you need to issue the MODIFY SUSPEND command.

EZD1861I

1. Issue the MODIFY D,SPOOLSTATUS,SUMMARY command to determine the number of mail messages that are in the pending or long retry state for each JES task. From the summary report, obtain the TKID value that has pending or long retry mail messages, then issue the MODIFY D,SPOOLSTATUS,DETAIL,TKID=*tkid* command to display detail information for the specific JES task.
2. If there is a large number of mail messages in long retry, then there might be a problem with the mail servers. Issue the MODIFY SUSPEND command to suspend new JES spool file processing until the problem is resolved. If messages EZD1817I, EZD1818I or EZD1819I are in the log, they might help in determining the problem. See EZD1817I, EZD1818I, or EZD1819I for more information.
3. Delete all unneeded dead letters to free some space in the z/OS UNIX file system dead letter directory.

See the information about the UNDELIVERABLE statement in z/OS Communications Server: IP Configuration Reference for more information about z/OS UNIX file system dead letter directory.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can allow you to monitor storage use in the z/OS UNIX file system dead letter directory.

Example:

EZD1860I CSSMTP1 STORAGE SHORTAGE DETECTED IN THE z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

EZD1861I *jobname* STORAGE SHORTAGE RELIEVED IN THE z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the z/OS UNIX file system dead letter directory has dropped to less than 50%. The previous storage shortage is relieved.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: Issue the MODIFY D,SPOOLSTATUS,SUMMARY command to display the state of the JES task. If the JES task state is SUPND, it indicates that a MODIFY SUSPEND command was issued to suspend the JES task. Issue a MODIFY RESUME command to resume processing the new JES spool files.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can allow you to monitor storage use in the z/OS UNIX file system dead letter directory.

Example:

EZD1861I CSSMTP1 STORAGE SHORTAGE RELIEVED IN THE Z/OS UNIX FILE SYSTEM DEAD LETTER DIRECTORY

EZD1862I *jobname* STORAGE SHORTAGE DETECTED IN THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the z/OS UNIX file system mail directory associated with the ExtendedRetry statement exceeds 75%.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

System action: Processing continues.

Operator response: Contact the system programmer.

System programmer response: This error indicates that the UNIX file system that contains the mail directory is nearly full. If the mail directory reaches this condition, the CSSMTP application will stop. To prevent CSSMTP from stopping, perform one of the following actions:

- Delete any files in the file system that you no longer need. Do not delete any files from the mail directory.
- If target servers are available and receiving mail, use the MODIFY FLUSHRETRY,AGE=*days* operator command so that older mail messages can be processed from the mail directory.

If the problem persists, you can perform the following steps to stop the CSSMTP application and move the mail directory to a different file system with more space.

1. Use the mkdir command to define the new directory.
2. Copy the existing files from the old directory to the new directory.
3. Update the MailDirectory parameter on the ExtendedRetry configuration statement to specify the new directory.
4. Restart the CSSMTP application.

If the storage shortage for the z/OS Unix file system that contains the mail directory is relieved, message EZD1863I is displayed.

See ExtendedRetry statement in z/OS Communications Server: IP Configuration Reference for more information about the z/OS UNIX file system mail directory.

User response: Not applicable.

Problem determination: If you need to determine whether the target servers are having problems receiving the mail, see gathering diagnostic information about CSSMTP problems in z/OS Communications Server: IP Diagnosis Guide for setting up diagnostic traces.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can allow you to monitor storage use in the z/OS UNIX file system mail directory.

Example:

EZD1862I CSSMTP1 STORAGE SHORTAGE DETECTED IN THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY

EZD1863I *jobname* STORAGE SHORTAGE RELIEVED IN THE z/OS UNIX FILE SYSTEM MAIL DIRECTORY

Explanation: The Communications Server SMTP (CSSMTP) application detected that storage use in the z/OS UNIX file system mail directory has dropped to less than 50%. The storage shortage indicated by the preceding message EZD1862I is relieved.

In the message text:

jobname

The job name of the task that started the CSSMTP application.

EZD1901I

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: CSSMTP

Module: ezamlhck

Routing code: 10

Descriptor code: 12

Automation: This message is written to the system console and log file for CSSMTP. This message is a good candidate for automation. Automation can allow you to monitor storage use in the z/OS UNIX file system mail directory.

Example:

```
EZD1863I CSSMTP1 STORAGE SHORTAGE RELIEVED IN THE Z/OS UNIX FILE SYSTEM MAIL DIRECTORY
```

EZD1901I Remote security endpoint at *remote_ip* port *remote_port* is using an unsupported authentication method *auth_method_string auth_method*

Explanation: The authentication method that is identified in the authentication payload that was sent by the remote security endpoint is not supported. The Internet Key Exchange (IKE) daemon cannot authenticate the remote security endpoint.

In the message text:

remote_ip

The remote security endpoint IP specification.

remote_port

The remote port of the IKE daemon peer.

auth_method_string

The string that identifies the authentication method being used by the peer.

auth_method

The decimal value that represents the authentication method that is used by the peer.

System action: The IKE SA negotiation fails; IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Notify the administrator of the remote security endpoint that it is using an unsupported authentication method.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKEAuthRequest.cpp, IKEv2IKEAuthResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1901I Remote security endpoint at 1.2.3.4 port 500 is using an unsupported authentication
method DSS_Digital_Signature 3
```

EZD1902I Delayed rekey attempt for IKE tunnel *tunnel_id*; proceeding with incomplete exchanges: *half_open_count* half-open, *half_closed_count* half-closed, *rekey_requested_count* rekeying

Explanation: The Internet Key Exchange (IKE) daemon delayed a rekey attempt for the specified IKE tunnel to allow exchanges for one or more of its child Security Associations (SAs) to complete. The limit for the length of the delay was reached, so the rekey attempt has been initiated.

In the message text:

tunnel_id

The tunnel prefix and number that were used to identify the tunnel.

half_open_count

The count of child SAs that are in HALF_OPEN state at the time that the IKE SA rekey attempt was initiated.

half_closed_count

The count of child SAs that are in HALF_CLOSED state at the time that the IKE SA rekey attempt was initiated.

rekey_requested_count

The count of child SAs that are in the process of being rekeyed at the time that the IKE SA rekey attempt was initiated.

System action: IKE daemon processing continues

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2IKESA.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog

Example:

EZD1902I Delayed rekey attempt for IKE tunnel K21; proceeding with incomplete exchanges: 0 half-open,
1 half-closed, 0 rekeying

EZD1903I A *request_type* request message sent to the NSS server with correlator ID *corr_id* timed out

Explanation: The Internet Key Exchange (IKE) daemon did not receive a timely response from the network security services (NSS) server for the corresponding request.

In the message text:

request_type

The type of request to the NSS server that timed out.

corr_id

The 16-byte message correlator contained in the request message.

System action: The IKE SA negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Verify that the NSS server is operational, and that the network that connects it to the IKE daemon is not congested.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2AuthRequest.cpp, IKEv2AuthResponse.cpp, and phase1.cpp

EZD1904E • EZD1905I

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1903I A NSS_CreateSignatureReqToSrv request message sent to the NSS server with correlator  
ID 00000000000000006000000000000000 timed out
```

EZD1904E IKED NSS client API version *clientAPIversion* does not match NSS server API version *serverAPIversion* for stack *stackname*

Explanation: The Internet Key Exchange daemon (IKED) connected to a Network Security Services (NSS) server that was supporting a lower level of the NSS API. Certificate services such as Certificate Revocation List (CRL) checking, Certificate Authority (CA) Hierarchy validation, and HTTP certificate retrieval are not available for this stack. The lack of this support limits the kinds of tunnels that the IKE daemon can negotiate for the stack. The IKE daemon is able to negotiate IKEv1 and IKEv2 tunnels using preshared key authentication for the stack. The IKE daemon is able to negotiate IKEv1 tunnels with digital signature authentication but without support for CRL checking or CA Hierarchy validation for the stack. The IKE daemon is unable to negotiate IKEv2 tunnels with digital signature authentication for the stack.

In the message text:

clientAPIversion

The version of the NSS client API supported by the IKE daemon.

serverAPIversion

The version of the NSS server API supported by the NSS server.

stackname

The name of the stack that connected to the NSS server supporting a lower level of the NSS API.

System action: IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Connect the IKE daemon NSS client to an NSS server that is running on a z/OS Communications Server V1R12 or greater system. To identify the NSS server that the IKE daemon is currently connected to, inspect the system log for EZD1136I.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 3

Descriptor code: 3

Automation: This message goes to the console and to syslog.

Example:

```
EZD1904E IKED NSS client API version 4 does not match NSS server API version 1 for stack TCPCS
```

EZD1905I IKE version *version* tunnel activation for *stackname* using *KeyExchangeRule* *kernname* requires the NSS certificate service but the service is not available - return code = *retcode*

Explanation: The Internet Key Exchange (IKE) daemon is unable to activate an IKE tunnel because the required NSS certificate service is not available.

In the message text:

version

The version of the IKE protocol being used to activate the tunnel.

stackname

The name of the TCP/IP stack for which the IKE tunnel is being activated.

kernelname

The name of the KeyExchangeRule being used for this IKE tunnel activation attempt.

retcode

The reason why the required certificate service is unavailable. Possible values are:

- 1 The stack is not configured as an NSS client.
- 2 The stack is configured as an NSS client but is not configured for the certificate service.
- 3 The stack is connected to an NSS server but the stack is not authorized to use the certificate service.
- 4 The stack is connected to an NSS server that does not support advanced PKI certificate services.

The NSS certificate service is required for all IKEv2 tunnel activation requests that use an authentication method other than PresharedKey. For example, if the KeyExchangeAction statement for the specified KeyExchangeRule has HowToInitiate IKEv2 and HowToAuthMe RSASignature, the NSS certificate service is required to activate the IKE tunnel.

System action: This tunnel activation attempt fails. IKE daemon processing continues.

Operator response: None.

System programmer response: The appropriate corrective action depends on the *retcode* value in the message:

- 1 Configure the stack as an NSS client that requests NSS certificate services.
- 2 Configure the stack as an NSS client that requests NSS certificate services.
- 3 Notify the system programmer of the NSS server to provide authorization to the stack for network security certificate services.
- 4 Change the configuration of the IKE daemon to connect to an NSS server that does support advanced PKI certificate services; for example, an NSS server on a z/OS V1R12 system.

See the information about IP security in z/OS Communications Server: IP Configuration Guide for information about network security certificate services.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: anchor_ureq.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1905I IKE version 2.0 tunnel activation for TCPCS2 using KeyExchangeRule IKEV2-SA1-TCP requires the NSS certificate service but the service is not available - return code = -1

EZD1906I FIPS140 support is not enabled for the IKE daemon

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is not enabled for the IKE daemon. Cryptographic operations might be performed by cryptographic modules that do not follow the Level 1 security requirements of Federal Information Processing Standard (FIPS) publication 140-2.

System action: IKE daemon processing continues.

Operator response: None

System programmer response: If FIPS 140 support is required for the IKE daemon, then configure **FIPS140 Yes** on the IkeConfig statement in the IKED configuration file; otherwise, no action is needed.

EZD1907I • EZD1908I

User response: Not applicable.

Problem determination: None

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1906I FIPS140 support is not enabled for the IKE daemon

EZD1907I FIPS140 support is enabled for the IKE daemon

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is enabled for the IKE daemon. All cryptographic operations are performed by cryptographic modules that are designed to follow the Level 1 security requirements of Federal Information Processing Standard (FIPS) publication 140-2.

System action: IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1907I FIPS140 support is enabled for the IKE daemon

EZD1908I Tunnel activation for *stackname* using KeyExchangeRule *kernname* failed because the identity type is not compatible with the authentication method

Explanation: An attempt to initiate Internet Key Exchange version 2 (IKEv2) tunnel activation for a stack failed because the LocalSecurityEndpoint statement that is defined for the KeyExchangeRule statement has Identity type KeyId, but the KeyExchangeAction statement specifies a local authentication method on the HowToAuthMe parameter that is not pre-shared key. Identity type KeyId can be used only in conjunction with PresharedKey authentication.

In the message text:

stackname

The name of the stack for which the IKE tunnel is being activated

kernname

The name of the KeyExchangeRule for this IKE tunnel activation attempt.

System action: This tunnel activation attempt fails. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Find the named KeyExchangeRule in the IPSec policy definitions and change the HowToAuthMe value to PresharedKey, or change the LocalSecurityEndpoint Identity to a type that is compatible with the authentication method specified on HowToAuthMe value (for example, Fqdn).

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: anchor_ureq.cpp

Routing code: 7

Descriptor code: 11

Automation: The message is output to syslog

Example:

```
EZD1908I Tunnel activation for TCPCS2 using KeyExchangeRule IKEv2-SA1-TCP failed because the identity type
is not compatible with the authentication method
```

EZD1909I IP validation failed: the remote identity *peer_id* does not match remote IP address *peer_ip_addr*

Explanation: Local policy required that the IP type identity of the internet key exchange (IKE) peer be validated by comparing it to the IP address of the IKE peer. The IP validation failed because the remote identity received from the IKE peer does not match the IP address of the IKE peer.

Additional diagnostic messages with the same message instance number will be issued to identify the impacted Security Association (SA). The message instance number precedes the message number in the log output and is used to group related messages from the IKE daemon.

In the message text:

peer_id

The identity of the IKE peer.

peer_ip_addr

The IP address of the IKE peer.

System action: The SA negotiation fails. IKE daemon processing continues.

Operator response: Contact the system programmer

System programmer response: Locate the KeyExchangeRule statement in the IP Security (IPSec) policy definitions associated with the impacted SA. Set the BypassIPValidation parameter to yes in the associated KeyExchangeAction statement to avoid the IP validation check or change the associated RemoteSecurityEndpoint Identity parameter to include the remote peer IP address. The IP validation check can be overridden globally by using the ByPassIPValidation parameter on the KeyExchangePolicy statement in the IPSec policy. The BypassIPValidation parameter should be set to yes if the RemoteSecurityEndpoint peer is behind a network address translation (NAT) device.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonDomainOfInterpretation.cpp

Routing code: *

Descriptor code: *

Automation: The message is output to syslog

Example:

```
EZD1909I IP validation failed: the remote identity 10.83.2.4 does not match remote IP
address 10.84.2.4
```

```
EZD1909I IP validation failed: the remote identity 2001:db8:10::83:2:2 does not match
remote IP address 2001:db8:10::84:2:2
```

EZD1910I FIPS140 support is enabled for the IKE daemon and no valid KeyExchangeOffers were found in KeyExchangeAction (KEAname)

Explanation: This message is issued when the IKE daemon is enabled to support the Level 1 security requirements of Federal Information Processing Standard publication 140-2 (FIPS 140), and one or more KeyExchangeOffer objects were omitted from the specified KeyExchangeAction object. If the IKE daemon is enabled for FIPS 140, the daemon omits KeyExchangeOffer objects that use the DES, MD5, or AES_XCBC cryptographic algorithms, or Diffie-Hellman groups 1, 2, or 5 from any proposal it builds.

In the message text:

KEAname

The KeyExchangeAction name that is configured in the policy.

System action: The SA negotiation fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If you want the IKE daemon to be enabled to support FIPS 140, ensure that at least one KeyExchangeOffer object exists in the specified KeyExchangeAction object that does not contain any of the following:

- HowToEncrypt DES
- HowToAuthMsgs MD5
- HowToVerifyMsgs HMAC_MD5_96
- HowToVerifyMsgs AES128_XCBC_96
- PseudoRandomFunction HMAC_MD5
- PseudoRandomFunction AES128_XCBC
- DHGroup Group1, Group2, Group5

If you do not want to continue to have the IKE daemon enabled to support FIPS 140, then configure FIPS140 No on the IkeConfig statement in the IKED configuration file and restart the IKE daemon.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: config_adapter.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1910I FIPS140 support is enabled for the IKE daemon and no valid KeyExchangeOffers were found in KeyExchangeAction (TCS4_Vipa81-TCS7_Vipa81)

EZD1911I FIPS140 support is enabled for the IKE daemon and no valid IpDataOffers were found in IpDynVpnAction (IDVAname)

Explanation: This message is issued when the IKE daemon is enabled to support the Level 1 security requirements of Federal Information Processing Standard publication 140-2 (FIPS 140), and one or more IpDataOffer objects were omitted from the specified IpDynVpnAction object. If the IKE daemon is enabled for FIPS 140, the daemon omits IpDataOffer objects that use the DES, MD5, or AES_XCBC cryptographic algorithms, or Pfs with Diffie-Hellman groups 1, 2, or 5 from any proposal it builds.

In the message text:

IDVAname

The IpDynVpnAction name that is configured in the policy.

System action: The SA negotiation fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If you want the IKE daemon to be enabled to support FIPS 140, ensure that at least one IpDataOffer object exists in the specified IpDynVpnAction object that does not contain any of the following:

- HowToEncrypt DES
- HowToAuth Hmac_MD5
- HowToAuth AES128_XCBC_96
- Pfs Group1, Group2, or Group5 (specified in the IpDataOffer's associated IpDynVpnAction)
- InitiateWithPfs Group1, Group2, Group5 (specified in the IpDataOffer's associated IpDynVpnAction)
- AcceptablePfs Group1, Group2, Group5 (specified in the IpDataOffer's associated IpDynVpnAction)

If you do not want the IKE daemon to be enabled to support FIPS 140, then configure FIPS140 No on the IkeConfig statement in the IKED configuration file and restart the IKE daemon.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: policy.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1911I FIPS140 support is enabled for the IKE daemon and no valid IpDataOffers were found in
IpDynVpnAction ( TCS4_Vipa81-TCS7_Vipa81 )
```

**EZD1912I No SharedKey was specified in KeyExchangeRule (KERname) and KeyExchangeOffers in
KeyExchangeAction (KEAname) require PresharedKey authentication**

Explanation: One or more of the KeyExchangeOffer objects that are available for use by the specified KeyExchangeRule object was configured to use PresharedKey to authenticate peers, but the KeyExchangeRule object did not specify a SharedKey to be used.

In the message text:

KERname

The KeyExchangeRule name that is configured in the policy.

KEAname

The KeyExchangeAction name that is configured in the policy.

System action: The SA negotiation fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If you want to use a pre-shared key to authenticate peers during this SA negotiation, specify a pre-shared key on the SharedKey parameter in the associated KeyExchangeRule object. Otherwise, you can use a digital signature to authenticate peers by specifying a digital signature authentication method on the HowToAuthPeers parameter in one or more of the KeyExchangeOffer objects associated with this KeyExchangeRule object. See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

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Module: config_adapter.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1912I No SharedKey was specified in KeyExchangeRule (KER:TCS4_Vipa81-TCS7_Vipa81) and
KeyExchangeOffers in KeyExchangeAction (KEA:TCS4_Vipa81-TCS7_Vipa81) require
PreshardedKey authentication

EZD1913I ICSF callable service routine failed RC: *return_code* RSN: *reason_code*

Explanation: An Integrated Cryptographic Service Facility (ICSF) callable service that is required by the IKE daemon has failed.

In the message text:

routine

The ICSF callable service.

return_code

The failure code returned by ICSF.

reason_code

The failure reason code returned by ICSF.

System action: The IKE function that called the ICSF callable service fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: Examine the syslog for subsequent failures to determine the consequences. See the information about the ICSF and TSS Return and Reason Codes in z/OS Cryptographic Services ICSF Application Programmer's Guide to determine the reason for the failure and possible corrective actions.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: dh_ecp_module.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: Not applicable.

Example:

EZD1913I ICSF callable service CSFPGKP failed RC: 0000000C RSN: 00000000

Return Code (C) with Reason Code (0) indicates that ICSF is not available.

EZD1914I Remote security endpoint at *remote_ip* port *remote_port* sent a signing certificate with encoding *encoding* that is not allowed

Explanation: An IKE version 2.0 Security Association (SA) activation attempt failed because the remote security endpoint sent a signing certificate that contained encoding that is not allowed by locally defined IPSec policy. The signing certificate appears in the first certificate payload.

In the message text:

remote_ip

The remote security endpoint IP specification.

remote_port

The port of the remote security endpoint.

encoding

The encoding of the received signing certificate payload.

System action: The IKE SA negotiation fails; IKE daemon processing continues.

Operator response: None.

System programmer response: Notify the administrator of the remote security endpoint that it must not send certificate payloads that contain the disallowed encoding. Alternatively, the administrator of the z/OS security endpoint can change local IPSec policy to allow such certificate payload encodings.

See the information about Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for information about the CertificateURLLookupPreference keyword of the KeyExchangePolicy or KeyExchangeAction statement.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2AuthRequest.cpp, IKEv2AuthResponse.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1914I Remote security endpoint at 1.2.3.4 port 500 sent a signing certificate with encoding 12
that is not allowed

EZD1915I Rekey attempt for IKE tunnel *tunnel_id* rejected because of incomplete exchanges: *half_open_count half-open, half_closed_count half-closed, rekey_requested_count rekeying*

Explanation: The IKE daemon received a rekey request for the specified IKE tunnel from the IKE peer. The request is rejected to allow incomplete exchanges for one or more of the IKE tunnel's child Security Associations (SAs) to complete before replacing the IKE SA with a new IKE SA.

IKE rejects the rekey request by sending a NO_PROPOSAL_CHOSEN notification to the peer.

In the message text:

tunnel_id

The tunnel prefix and number used to identify the tunnel.

half_open_count

The count of child SAs that are in HALF_OPEN state.

half_closed_count

The count of child SAs that are in HALF_CLOSED state.

ekey_requested_count

The count of child SAs that are in the process of being rekeyed.

System action: The IKE tunnel rekey request fails. IKE daemon processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: IKEv2CreateChildRequest.cpp

Routing code: *

Descriptor code: *

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Automation: Not applicable.

Example:

```
EZD1915I Rekey attempt for IKE tunnel K21 rejected because of incomplete exchanges: 1 half-open,  
0 half-closed, 0 rekeying
```

**EZD1916I NSS server cryptographic services are disabled for stack *tcpname* - FIPS140 support is enabled for the
IKE daemon but is not enabled for the NSS server**

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is enabled for the IKE daemon, but it is not enabled for the network security services (NSS) server. The NSS server is not permitted to provide cryptographic services to the IKE daemon for the stack.

In the message text:

tcpname

The name of the affected TCP/IP stack.

System action: IKED will not enable cryptographic services through the NSS server for the named stack. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: When the IKE daemon is enabled for FIPS 140 support, stacks that are configured to use the NSS server for cryptographic services require that the NSS server also be enabled for FIPS 140 support.

The stack configuration, the IP security policy for the stack, the IKE daemon configuration, and the NSS server configuration must all be consistent. To understand the implications and requirements for enabling FIPS 140 support in your environment, see the information about FIPS 140 and IP security in z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

```
EZD1916I NSS server cryptographic services are disabled for stack TCPCS - FIPS140 support is enabled  
for the IKE daemon but is not enabled for the NSS server.
```

EZD1917I IKE status for stack *tcpname* is FIPS140 enabled but IKED is not FIPS140 enabled

Explanation: The Federal Information Processing Standard 140 (FIPS 140) function is enabled for the named TCP/IP stack, but it is not enabled for the IKE daemon. The Internet Key Exchange (IKE) daemon is not permitted to provide cryptographic services to the stack.

In the message text:

tcpname

The name of the affected TCP/IP stack.

System action: The IKE daemon will not perform Security Association (SA) negotiation or any other cryptographic services for the specified stack. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Stacks that are enabled for FIPS 140 support require that the IKE daemon also be enabled for FIPS 140 support.

The stack configuration, the IP security policy for the stack, the IKE daemon configuration, and the NSS server configuration must all be consistent. To understand the implications and requirements for enabling FIPS 140 support

in your environment, see the information about FIPS 140 and IP security in z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is output to syslog.

Example:

EZD1917I IKE status for stack TCPCS is FIPS140 enabled but IKED is not FIPS140 enabled.

EZD1918I A cryptographic key in use is too short for the chosen Auth or PRF algorithm when FIPS140 is enabled: key length *keylen* bytes, minimum required *minlen* bytes

Explanation: When Federal Information Processing Standard publication 140 (FIPS 140) support is enabled for the IKE daemon, all of the cryptographic keys that are used by the chosen authentication (Auth) or pseudo random function (PRF) algorithm must be at least half the length of the PRF digest size. These cryptographic keys can be the configured pre-shared key that is used for IKE authentication, or, if you are using Internet Key Exchange version 2 (IKEv2), they can be the keys that are used by the IKE daemon to internally generate keying material for a prior IKE SA.

In the message text:

keylen

The length of the key.

minlen

The minimum key length that is required for the chosen Auth or PRF algorithm.

System action: IKED phase 1 tunnel negotiation fails. IKE daemon processing continues.

Operator response: Contact the system programmer.

System programmer response: Examine the surrounding IKED messages in the syslogd log file to determine which tunnel is affected. The following criteria apply when FIPS 140 support is enabled for the IKE daemon:

- If a pre-shared key is configured, it must be at least half as long as the key used by the configured Auth and PRF algorithms. If the pre-shared key is not that length, the IKED phase 1 tunnel negotiation fails, and message EZD1918I is issued. To prevent the negotiation from failing, modify the tunnel policy to configure a longer pre-shared key, or modify the tunnel policy to use an Auth or PRF algorithm with a shorter key. Policy changes must be coordinated across all endpoints that are involved in the tunnel negotiation.
- You should not modify the policy for an active IKEv2 tunnel to specify a PRF algorithm that uses a key that is more than twice the length of the originally specified PRF algorithm. You need to deactivate the IKE tunnel before you make such a modification; otherwise, a refresh of the active tunnel might fail and message EZD1918I will be issued. For example, if you switch from the HMAC_SHA1 algorithm to the HMAC_SHA2_256 algorithm, message EZD1918I will be issued during the tunnel refresh, but if you switch from the HMAC_SHA2_256 algorithm to the HMAC_SHA1 algorithm, the message will not be issued.

See FIPS 140 and IP security in z/OS Communications Server: IP Configuration Guide for information about FIPS 140 support in your environment.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: icsf_hmac.cpp, IKEv2IKESAKEP.cpp

Routing code: Not applicable.

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Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1918I A cryptographic key in use is too short for the chosen Auth or PRF algorithm when FIPS140 is enabled: key length 12 bytes, minimum required 16 bytes

**EZD1919I FIPS140 support is enabled for the IKE daemon but it has read access to CRYPTOZ resource
FIPSEXEMPT.SYSTOK-SESSION-ONLY**

Explanation: When the IKE daemon is configured for Federal Information Processing Standard 140 (FIPS 140) mode, the IKE daemon must have no access privileges (NONE) to the SAF resource FIPSEXEMPT.SYSTOK-SESSION-ONLY in the CRYPTOZ class.

See the FIPS140 parameter in z/OS Communications Server: IP Configuration Reference for information about configuring FIPS 140.

System action: The IKE daemon ends.

Operator response: Contact the system programmer.

System programmer response: Remove IKE daemon access to the SAF resource, or disable FIPS 140 mode for the IKE daemon. See the FIPS140 parameter in z/OS Communications Server: IP Configuration Reference for about configuring FIPS 140.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 11

Descriptor code: 7

Automation: This message is written to the MVS console and to syslog. This message is a good candidate for automation.

Example: Not applicable.

**EZD1920I Attempting an on-demand activation for IKE outbound UDP traffic from *source_ipaddr* port
source_port to *dest_ipaddr* port *dest_port* using anchor filter *filtername***

Explanation: The Internet Key Exchange (IKE) daemon is attempting to negotiate an on-demand IPsec Security Association to protect outbound traffic on UDP ports 500 or 4500. The IKE daemon might use either port 500 or port 4500 when it is negotiating Security Associations.

This is not an error condition, but it is a possible indication of a misconfiguration. Usually, IKE daemon UDP traffic is allowed without IPsec protection. If the IKE daemon must negotiate a Security Association to protect its own messages, then it is likely that the negotiation will fail. If the negotiation fails, the IKE daemon issues subsequent syslog messages to indicate that the Security Association negotiation failed.

See the steps for configuring IP security policy in z/OS Communications Server: IP Configuration Guide for information.

In the message text:

source_ipaddr

The source IP address.

source_port

The source port.

dest_ipaddr

The destination IP address.

dest_port

The destination port.

filtername

The name of matching anchor filter rule.

System action: The IKE daemon continues processing.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: anchor_ureq.cpp

Routing code: *

Descriptor code: *

Automation: Not applicable.

Example:

```
EZD1920I Attempting an on-demand activation for IKE outbound UDP traffic from 8.1.1.1
port 500 to 9.2.2.2 port 500 using anchor filter tunnel_1
```

EZD1921I Certificate (*label*) contains a key that is too short for FIPS 140 mode

Explanation: The Internet Key Exchange (IKE) daemon is configured to run in a mode that supports Federal Information Processing Standard 140 (FIPS 140). The IKE daemon detected that a certificate with the specified label contains an RSA key that is not allowed by FIPS 140. The certificate will not be available for IKE RSA mode authentication.

See the information about FIPS 140 and IP security in z/OS Communications Server: IP Configuration Guide.

In the message text:

label

The label of the certificate.

System action: IKE processing continues.

Operator response: None.

System programmer response: If FIPS 140 support is required and the certificate is required for the RSA mode authentication, re-key the certificate with an RSA key that has a key size of 1024 bits or greater. If FIPS 140 support is not required for the IKE daemon, stop the daemon, configure FIPS140 No in the IKE configuration file, and restart the daemon.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: certcache.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1921I Certificate ( Certificate512 ) contains a key that is too short for FIPS 140 mode
```

EZD1922I IKE STATUS FOR STACK *stackname* IS ACTIVE WITHOUT PORTS

Explanation: The IKE daemon detected that the specified stack is active, but it was not able to complete initialization of ports 500 and 4500. The IKE daemon cannot establish security associations for the specified stack, because port initialization did not succeed.

In the message text:

stackname

The name of the stack that is active without ports.

System action: The IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: Examine the syslogd output file for errors preceding message EZD1922I. The most likely cause is failing to bind UDP port 500 or UDP port 4500, because the port is in use by another application or reserved for another application. If so, check the PORT statement in the TCPIP profile for the specified stack. Ensure that UDP port 500 and UDP port 4500 are reserved for the IKE daemon. If some other internal errors occur, contact the IBM support center.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: stackobj.cpp

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1922I IKE STATUS FOR STACK TCPCS IS ACTIVE WITHOUT PORTS

EZD1923I A create signature request to the NSS server failed; no matching certificate was found for local security endpoint identity *local_id* and authentication method *auth_method*

Explanation: The IKE daemon made a network security certificate services request to create a digital signature. A certificate matching the local security endpoint identity and authentication method was not found on the network security services (NSS) server.

In the message text:

local_id

The local security endpoint identity.

auth_method

The authentication method.

System action: The request fails; the IKE daemon continues.

Operator response: Contact the system programmer.

System programmer response: If you want to use network security certificate services with the specified local security endpoint identity, add a matching certificate to the key ring of the NSS server. See the Steps for configuring the NSS server in z/OS Communications Server: IP Configuration Guide for more information.

User response: Not applicable.

Problem determination: Not Applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: CommonIKESA.cpp

Routing code: 10

Descriptor code: 12

Automation: This message is output to syslog.

Example:

EZD1923I A create signature request to the NSS server failed; no matching certificate was found for local security endpoint identity 1.2.3.4 and authentication method RsaSignature

EZD1924I IKE detected a NAT while initiating a new tunnel mode IKEv2 dynamic tunnel with a non-z/OS peer

Explanation: The Internet Key Exchange (IKE) daemon is initiating a tunnel-mode Security Association (SA) for a new IKEv2 dynamic tunnel with a non-z/OS peer. The SA traverses a Network Address Translation (NAT) device. There might be problems with interoperability with the non-z/OS peer for a tunnel-mode SA. z/OS is providing NAT traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

System action: The SA negotiation continues.

Operator response: If the SA negotiation fails or if data cannot be successfully sent over the SA, contact the system programmer.

System programmer response: Determine whether there is an interoperability concern that caused the SA negotiation or data flow to fail. See the IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

If this is a host-to-host tunnel, a possible solution is to use a transport-mode IpDynVpnAction object instead of a tunnel-mode IpDynVpnAction object. See the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonIPsecSA.cpp

Routing code: 2

Descriptor code: 5

Automation: Not Applicable.

Example:

EZD1924I IKE detected a NAT while initiating a new tunnel mode IKEv2 dynamic tunnel with a non-z/OS peer

EZD1925I IKE detected a NAT while initiating a new transport mode IKEv2 dynamic tunnel with a non-z/OS peer

Explanation: The Internet Key Exchange (IKE) daemon is initiating a transport-mode Security Association (SA) for a new IKEv2 dynamic tunnel with a non-z/OS peer. The SA traverses a Network Address Translation (NAT) device. There might be problems with interoperability with the non-z/OS peer for a transport-mode SA. z/OS is providing NAT traversal support for a defined group of configurations where z/OS is running the IKE daemon. See the IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations.

System action: The SA negotiation continues.

Operator response: If the SA negotiation fails or if data cannot be successfully sent over the SA, contact the system programmer.

System programmer response: Determine whether there is an interoperability concern that caused the SA negotiation or data flow to fail. See the IP security in z/OS Communications Server: IP Configuration Guide for a description of the supported configurations and interoperability considerations. Confirm that the non-z/OS peer supports transport-mode with NAT traversal as defined in RFC 5996 section 2.23.1.

A possible solution is to use a tunnel-mode IpDynVpnAction object instead of a transport-mode IpDynVpnAction

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object. See the Policy Agent and policy applications in z/OS Communications Server: IP Configuration Reference for more information about configuring policy.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: CommonIPsecSA.cpp

Routing code: 2

Descriptor code: 5

Automation: Not applicable.

Example:

EZD1925I IKE detected a NAT while initiating a new transport mode IKEv2 dynamic tunnel with a non-z/OS peer

EZD1926I CONTROL CONNECTION TO DESTINATION IP ADDRESS *ip_addr* ESTABLISHED

Explanation: The control connection to the non-z/OS target was established. The non-z/OS target is available for distributed connections.

In the message text:

ip_addr

The IP address of a distributed non-z/OS target.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFSUB

Routing code: 2,8

Descriptor code: 12

Automation: This message is written to the system console. This message is a good candidate for automation. Automation can allow you to monitor the status of sysplex distributor control connections to non-z/OS targets.

Example:

EZD1926I CONTROL CONNECTION TO DESTINATION IP ADDRESS 9.42.105.53 ESTABLISHED

EZD1927I CONTROL CONNECTION TO DESTINATION IP Address *ip_addr* IS CLOSED

Explanation: The control connection to the non-z/OS target closed because it is no longer a target for any distributed connections.

In the message text:

ip_addr

The IP address of a distributed non-z/OS target.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFSUB

Routing code: 2,8

Descriptor code: 12

Automation: This message is written to the system console. This message is a good candidate for automation. Automation can allow you to monitor the status of sysplex distributor control connections to non-z/OS targets.

Example:

```
EZD1927I CONTROL CONNECTION TO DESTINATION IP ADDRESS 9.42.105.53 IS CLOSED
```

EZD1928I *tcpstackname* WILL NOT JOIN THE SYSPLEX - GLOBALCONFIG SYSPLEXMONITOR NOJOIN IS CONFIGURED

Explanation: The TCP/IP stack will not join the sysplex group and will not process sysplex definitions within the profile (VIPADYNAMIC and IPCONFIG/IPCONFIG6 DYNAMICXCF statements).

In the message text:

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: If you want the TCP/IP stack to immediately join the sysplex group, issue the VARY TCPIP,SYSPLEX,JOININGROUP command. See the information about the VARY TCPIP,SYSPLEX command in z/OS Communications Server: IP System Administrator's Commands for information about the command and the JOININGROUP parameter.

System programmer response: If you want the stack to join the sysplex group when the stack is started, stop the stack, remove NOJOIN from the GLOBALCONFIG statement in the TCP/IP profile and restart the stack.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDLM

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1928E TCPCS WILL NOT JOIN THE SYSPLEX - GLOBALCONFIG SYSPLEXMONITOR NOJOIN IS CONFIGURED
```

EZD1929I *tcpstackname* SECURITY DOMAIN NAME NOT DEFINED

Explanation: A SIOCSPARTNERINFO or SIOCGPARTNERINFO ioctl was issued for the TCP/IP stack and failed because a security domain name for the EZBDOMAIN profile was not defined in the SERVAUTH class.

In the message text:

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

Operator response: Not applicable.

System programmer response: To retrieve your partner security credentials within the sysplex or subplex over a trusted TCP/IP connection, set up a security domain name. See the information about steps for retrieving partner security credentials in z/OS Communications Server: IP Programmer's Guide and Reference.

User response: Not applicable.

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Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: ezbtcfio

Routing code: 2

Descriptor code: 12

Automation: Not applicable.

Example:

EZD1929I TCPCS SECURITY DOMAIN NAME NOT DEFINED

**EZD1930I HOT STANDBY SERVER FOR *destipaddr* PORT *portnum* AT *tcpstackname* ON *mvsname* IS INACTIVE
- *reason***

Explanation: The Sysplex Distributor server is switching from the active server because of the reason specified.

In the message text:

destipaddr
The distributed DVIPA.

portnum
The distributed port.

tcpstackname
The name of the TCP/IP stack.

mvsname
The name of the MVS system where the TCP/IP job is running.

reason
The cause of the switch. Possible values are:

THE TARGET SERVER IS NOT READY

The target server has a ready count of 0.

THE PATH TO THE TARGET SERVER IS INACTIVE

The datapath to the XCF target is inactive.

AUTOSWITCHBACK TO THE PREFERRED SERVER OCCURRED

The preferred server was previously either not ready, or the datapath was inactive and the sysplex distribution was switched to a backup server. The preferred server is now ready, or the datapath is active, so the sysplex distribution has switched back to the preferred server.

THE TSR IS 0%

The Target Server Responsiveness of the server is 0%.

THE ABNORMAL TERMINATION LIMIT OF 1000 HAS BEEN REACHED

The target server reported that out of 1000 transactions, all of them terminated abnormally.

THE SERVER HEALTH IS 0%

The target server reported a health of 0%.

System action: TCP/IP continues.

Operator response: Not applicable.

System programmer response: Fix the problem after analyzing the message. If the server is not ready, verify that the target server is in LISTEN state. If you cannot fix the problem, then contact your IBM support center with the TCP/IP profile, system log and a dump.

User response: Not applicable.

Problem determination: Not applicable

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBXFWLM

Routing code: 10

Descriptor code: 12

Automation: No

Example:

```
EZD1930I HOT STANDBY SERVER FOR 10.61.0.1 PORT 6000 AT TCPCS ON VIC018 IS INACTIVE -
THE TARGET SERVER IS NOT READY
```

EZD1941I DCAS DEBUG LEVEL SET TO *debug_level*

Explanation: This message displays the active DCAS server debug level. This message is issued when a MODIFY command is issued to the DCAS server to change the debug level.

In the message text:

debug_level

The current debug level. See the information about the MODIFY command--DCAS in z/OS Communications Server: IP System Administrator's Commands for more information.

System action: DCAS continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: DCASSTOP

Routing code: *

Descriptor code: *

Automation: This message goes to the console as a response to a MODIFY command.

Example:

```
EZD1941I DCAS DEBUG LEVEL SET TO 3
```

EZD1942I UNSUPPORTED DCAS MODIFY COMMAND

Explanation: A MODIFY command was issued to DCAS, but DCAS did not recognize the parameter that was entered on the MODIFY command.

System action: The request is ignored.

Operator response: Correct the MODIFY command and reissue the command. See the information about the MODIFY command--DCAS in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: DCASSTOP

Routing code: *

Descriptor code: *

Automation: This message goes to the console as a response to a MODIFY command.

Example:

EZD1943I • EZD1944I

EZD1942I UNSPPORTED DCAS MODIFY COMMAND

EZD1943I UNSPPORTED DCAS DEBUG LEVEL *debug_level*

Explanation: A MODIFY command was issued to DCAS to change the debug level. The debug level provided is unsupported.

In the message text:

debug_level

The debug level that is not supported.

System action: DCAS continues.

Operator response: Specify a supported debug level and reissue the MODIFY command. See the information about the MODIFY command--DCAS in z/OS Communications Server: IP System Administrator's Commands for more information.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: DCASSTOP

Routing code: *

Descriptor code: *

Automation: This message goes to the console as a response to a MODIFY command.

Example:

EZD1943IUNSUPPORTED DCAS DEBUG LEVEL 9

EZD1944I Unable to open message catalog *cat* : *errno* *errno* (*description*) *errnojr* *errnojr* - Default messages will be used

Explanation: An attempt was made to open the **certbundle** command message catalog in the message catalog directory, but the catalog could not be opened for the specified reason. The default location for the message catalog is set by the NLSPATH environment variable.

In the message text:

cat

The name of the catalog that the **certbundle** command attempted to open.

errno

The z/OS UNIX System Services return code. These return codes are listed and described in the return codes (errnos) information in z/OS UNIX System Services Messages and Codes.

description

Describes the meaning of the *errno* value.

errnojr

The hexadecimal z/OS UNIX System Services reason code. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojrs) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: The **certbundle** command processing continues. Default messages will be used.

Operator response: If the default messages are acceptable, no action is necessary. Otherwise, contact the system programmer to correct the indicated error.

System programmer response: If you want to use the certbundle message catalog, correct the indicated error. If the default messages are acceptable, no action is necessary.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1944I Unable to open message catalog certbundlemsg.cat : errno 113 ( EDC5113I Bad file descriptor. )
errnojr 0xC90F0003 - Default messages will be used
```

EZD1945I Unknown option *opt*

Explanation: The **certbundle** command detected an unknown option while parsing the command line.

In the message text:

opt

The option that is unknown.

System action: The **certbundle** command processing ends.

Operator response: See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1945I Unknown option -h
```

EZD1946I Option *opt* is missing required data

Explanation: The specified **certbundle** command option requires a value, but no value was specified on the command.

In the message text:

opt

The option that is missing data.

System action: The **certbundle** command processing ends.

Operator response: Correct and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

EZD1947I • EZD1948I

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1946I Option -i is missing required data

EZD1947I Unexpected characters found on line *line_number* - *characters*

Explanation: The **certbundle** command encountered unexpected characters while parsing the options file.

In the message text:

line_number

The line number in the options file on which the unexpected characters were found.

characters

The unexpected characters that were found in the options file

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1947I Unexpected characters found on line 5 - Comment

EZD1948I Could not open *file_type* (*file_name*) - *description*

Explanation: The **certbundle** command was unable to open the specified file.

In the message text:

file_type

The type of file that the command failed to open. Some options are the CertBundleOptions, CRLFile, or BundleFile.

file_name

The name of the file that the command failed to open.

description

A description of the system error encountered by the command.

System action: The **certbundle** command processing ends.

Operator response: Ensure that the file name exists at the specified location and that the **certbundle** command has permission to read the file.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1948I Could not open CertBundleOptions ( /tmp/options_file ) - EDC5113I Bad file descriptor.
```

EZD1949I CertBundleOptions statement beginning on line *line_number* references a self-signed certificate (*label*)

Explanation: The **certbundle** command parsed a CertBundleOptions statement that references a self-signed certificate. Self-signed certificates do not need to be placed in a certificate bundle.

In the message text:

line_number

The line number in the options file where the CertBundleOptions statement begins.

label

The certificate label of the self-signed certificate that was referenced.

System action: The self-signed certificate will be included in the bundle and **certbundle** command processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine if the self-signed certificate is required in the certificate bundle. If it is not required, remove the CertificateLabel or CertificateChain parameter that references the self-signed certificate and reissue the command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1949I CertBundleOptions statement beginning on line 2 references a self-signed
certificate ( FVT Root1 CA )
```

EZD1950I Primary option not specified

Explanation: The **certbundle** command requires a primary option but none was provided.

System action: The **certbundle** command processing ends.

Operator response: Correct and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

System programmer response: None.

User response: Not applicable.

EZD1951I • EZD1952I

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1950I Primary option not specified

EZD1951I *file_type* file not specified

Explanation: A required input file was not specified.

In the message text:

file_type

The type of required input file.

System action: The **certbundle** command processing ends.

Operator response: Correct and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1951I CertBundleOptions file not specified

EZD1952I *keyword* on line *line_number* is not a recognized parameter or statement

Explanation: The **certbundle** command encountered an unrecognized parameter or statement while parsing the options file.

In the message text:

keyword

The unrecognized parameter or statement.

line_number

The line number in the options file that contains the unrecognized keyword.

System action: The **certbundle** command processing ends.

Operator response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1952I CertLabel on line 22 is not a recognized parameter or statement

EZD1953I Incorrect *opt* option value *value* is ignored

Explanation: An incorrect option value was specified and ignored.

In the message text:

opt

The **certbundle** command option that was specified.

value

The value that was specified for the **certbundle** command option.

System action: The **certbundle** command continues, using any specified valid values or any default values.

Operator response: Specify an option value that is in the accepted value range and issue the **certbundle** command again. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the **certbundle** command syntax and options.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1953I Incorrect -d option value 4 is ignored

EZD1954I CertBundleOptions statement beginning on line *line_number* will not include self-signed certificate (*label*) in the bundle

Explanation: The **certbundle** command parsed a CertBundleOptions statement that referenced a self-signed certificate. This self-signed certificate was found while parsing the certificate hierarchy specified by the CertificateChain parameter. Certificates that are not self-signed will be included in the bundle, but the self-signed certificate will not be included in the bundle.

In the message text:

line_number

The line number in the options file where the CertBundleOptions statement begins.

label

The certificate label of the self-signed certificate that was referenced.

System action: The **certbundle** command processing continues.

Operator response: None.

System programmer response: None.

EZD1955I • EZD1956I

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1954I Warning - CertBundleOptions statement beginning on line 2 will not include self-signed certificate ( FVT Root1 CA ) in the bundle
```

EZD1955I CertBundleOptions statement beginning on line *line_number* is missing keyword parameter

Explanation: The **certbundle** command found that a parameter was missing from a CertBundleOptions statement in the options file.

In the message text:

line_number

The line number in the options file where the CertBundleOptions statement begins.

keyword

The missing parameter.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1955I CertBundleOptions statement beginning on line 2 is missing BundleFile parameter
```

EZD1956I An expected value is missing on line *line_number*

Explanation: The **certbundle** command encountered a missing value for a parameter specified in the options file.

In the message text:

line_number

The line number in the options file where the parameter that is missing a value was found.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1956I Expected value missing on line 15

EZD1957I type brace (brace) expected, but not found

Explanation: The **certbundle** command encountered an error while parsing the options file. A brace was expected but not found.

In the message text:

type

The type of brace that was expected. Opening braces ({}) and closing braces (}) are expected throughout the options file.

brace

The literal character that was expected within the options file.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example: EZD1957I Closing brace (}) expected, but not found

EZD1958I type brace (brace) found, but not expected

Explanation: The **certbundle** command encountered an error while parsing the options file. A brace was found, but not expected.

In the message text:

type

The type of brace that was found. Opening braces ({}) and closing braces (}) may be found throughout the options file.

brace

The literal character that was found within the options file.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

EZD1961I • EZD1962I

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1958I Closing brace () found, but not expected

EZD1961I *file_type (file)* created successfully

Explanation: The **certbundle** command successfully created an output file.

In the message text:

file_type

The type of output file that was created. The most common type of output file is a bundle file.

file

The absolute path name of the output file that was created.

System action: The **certbundle** command processing continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1961I BundleFile (/u/user1/Bundles/SalesDeptBundle.der) created successfully

EZD1962I Failed to open KeyRing *keyring - description*

Explanation: The **certbundle** command failed to open a KeyRing that was specified in the options file.

In the message text:

keyring

The name of the keyring that the **certbundle** command failed to open.

description

The GSK description of the error that is preventing the command from opening the keyring.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the keyring exists and that the user ID under which the **certbundle**

command is running has the appropriate SAF permission to open the keyring. Then reissue the command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1962I Failed to open KeyRing NSSD/NoAccess - Access denied
```

EZD1963I Certificate with label (*label*) not found

Explanation: The **certbundle** command was unable to locate the certificate with the specified label on the keyring.

In the message text:

label

The label of the certificate that was not found on the keyring.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the certificate with the specified label exists on the keyring and reissue the command. The keyring is specified in the options file.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1963I Certificate with label ( SomeCertLabel ) not found
```

EZD1964I Error creating bundle file (*file_name*) - *description*

Explanation: The **certbundle** command encountered an error while it was creating the bundle file.

In the message text:

file_name

The name of the bundle file that the **certbundle** command failed to create.

description

A description of the system error that caused the failure.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Ensure that the path name of the bundle file is specified correctly, that the path exists, that the file system is mounted in read/write mode, and that the user ID under which the command is running has permission to write to the file system. Then reissue the command.

User response: Not applicable.

EZD1965I • EZD1966I

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1964I Error creating BundleFile (/usr/lpp/BundleFile) (EDC5141I Read-only file system.)

EZD1965I CertBundleOptions statement beginning on line *line_number* does not support both CertificateLabel and CertificateChain parameters

Explanation: The **certbundle** command encountered an error while it was parsing the options file. A CertBundleOptions statement was found that contains both CertificateLabel and CertificateChain parameters. A single CertBundleOptions statement can support only one of these parameters.

In the message text:

line_number

The line number on which the CertBundleOptions statement started.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1965I CertBundleOptions statement beginning on line 6 does not support both CertificateLabel and CertificateChain parameters

EZD1966I *parameter* parameter unexpected on line *new_line* because the parameter is already set to *value* on line *old_line*

Explanation: The **certbundle** command found more than one definition for the specified parameter while parsing the options file. This parameter can be defined only once.

In the message text:

parameter

The parameter that was previously defined.

value

The value to which the parameter was previously defined.

old_line

The line on which the parameter was originally defined.

new_line

The line on which the parameter value was provided in error.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1966I KeyRing parameter unexpected on line 8 because the parameter is already set to NSSD/RCSECPKI  
on line 7
```

EZD1967I Unbalanced or extra quote found on line *line_number*

Explanation: The **certbundle** command encountered an error as the result of incorrectly placed quotation marks while it was parsing the options file. If a parameter contains a value that itself contains double quotation marks, that value must be enclosed in two sets of double quotation marks, and the entire parameter must be enclosed in another set of double quotation marks. Only one value in a parameter value can contain quotation marks.

Examples:

Value that you enter	Value that is interpreted	Explanation
"EndEntity""Bob""Cert"	EndEntity"Bob"Cert	The value "Bob" includes double quotation marks
"EndEntityBob""Cert"""	EndEntityBob"Cert"	The value "Cert" includes double quotation marks

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1967I Unbalanced or extra quote found on line 14
```

EZD1968I • EZD1969I

EZD1968I CertBundleOptions statement beginning on line *line_number* references a self-signed certificate (*label*) but contains no CRLFile statement - bundle creation might be unnecessary

Explanation: The **certbundle** command parsed a CertBundleOptions statement that referenced a self-signed certificate. The same CertBundleOptions statement did not contain a CRLFile statement. The self-signed certificate will be added to the certificate bundle but the creation of a bundle file might be unnecessary.

In the message text:

line_number

The line number in the options file on which the CertBundleOptions statement begins.

label

The certificate label of the self-signed certificate that was referenced.

System action: The **certbundle** command processing continues.

Operator response: Contact the system programmer.

System programmer response: Determine if the self-signed certificate is required in the certificate bundle. If it is not required, remove the CertificateLabel or CertificateChain parameter that references the self-signed certificate and reissue the command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

EZD1968I CertBundleOptions statement beginning on line 6 references a self-signed certificate (FVT Root1 CA) but contains no CRLFile statement - bundle creation might be unnecessary

EZD1969I Unexpected parameter *parameter* found on line *line_number*

Explanation: The **certbundle** command encountered an error while parsing the options file. An unexpected parameter was found. Parameters must be contained within a valid statement block.

In the message text:

parameter

The unexpected parameter that was found.

line_number

The line number on which the parameter was found.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1969I Unexpected parameter BundleFile found on line 16
```

EZD1970I HOT STANDBY SERVER FOR *destipaddr* PORT *portnum* AT *tcpstackname* ON *mvsname* IS ACTIVE

Explanation: The Sysplex Distributor switched to the specified hot standby server.

In the message text:

destipaddr

The distributed DVIPA.

portnum

The distributed port.

tcpstackname

The name of the TCP/IP stack.

mvsname

The name of the MVS system where the TCP/IP job is running.

System action: TCP/IP continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFWLM

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1970I HOT STANDBY SERVER FOR 10.61.0.2 PORT 6000 AT TCPCS ON VIC018 IS ACTIVE
```

EZD1971I SYSPLEX DISTRIBUTOR CONTROL CONNECTION TO DESTINATION IP ADDRESS *ip_addr* FAILED WITH RETURN CODE *errno* REASON CODE *errnojr*

Explanation: The control connection to the non-z/OS target could not be established. The non-z/OS target cannot be used for distributed connections. The control connection can fail if no route is available to the target, or if there is a problem with the sysplex distributor agent server on the target.

In the message text:

ip_addr

The IP address of a distributed non-z/OS target.

errno

A UNIX System Services return code from a failing Connect() call. These return codes are listed and described in the return codes (errno) information in z/OS UNIX System Services Messages and Codes.

errnojr

The hexadecimal UNIX System Services reason code from a failing Connect() call. The format of the 4-byte reason code is explained in the introduction to the reason codes (errnojr) information in the z/OS UNIX System Services Messages and Codes, where the reason codes are listed.

System action: TCP/IP continues.

Operator response: Contact the system programmer.

EZD1972I • EZD1973E

System programmer response: Fix the problem after analyzing the return code and the reason code. For example, if the return code is 00000468 (ECONNREFUSED), verify that the sysplex distributor agent server is in LISTEN state and that it is accepting new connections. After you fix the problem, the sysplex distributor will establish the control connection because the sysplex distributor periodically tries the connection attempt again.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Sysplex Distributor

Module: EZBXFSUB

Routing code: 2,8

Descriptor code: 12

Automation: This message is written to the system console. This message is a good candidate for automation. Automation can allow you to monitor the status of sysplex distributor control connections to non-z/OS targets.

Example:

```
EZD1971I SYSPLEX DISTRIBUTOR CONTROL CONNECTION TO DESTINATION IP ADDRESS 9.42.105.53 FAILED WITH  
RETURN CODE 00000468 REASON CODE 00000000
```

**EZD1972I VIPADISTRIBUTE keyword IS NOT VALID BECAUSE THE CURRENT DISTRIBUTION METHOD
IS NOT HOTSTANDBY**

Explanation: The DISTMETHOD parameter was not specified on the VIPADISTRIBUTE statement. This keyword is valid only when the DISTMETHOD is HOTSTANDBY. Either the DISTMETHOD defaulted to BASEWLM, or a previous VIPADISTRIBUTE statement for this DVIPA and port set DISTMETHOD to a value other than HOTSTANDBY.

In the message text:

keyword

The keyword that is not valid.

System action: TCP/IP continues. The VIPADISTRIBUTE statement is rejected.

Operator response: Not applicable.

System programmer response: Change the VIPADISTRIBUTE DISTMETHOD to HOTSTANDBY or remove the keyword. Then issue a VARY TCPIP,,OBEYFILE command that specifies a data set file that contains the entire VIPADYNAMIC block. See the information about the VIPADYNAMIC statement in z/OS Communications Server: IP Configuration Reference for more information

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFDV2, EZBX6DV2

Routing code: 10

Descriptor code: 12

Automation: Not applicable.

Example:

```
EZD1972I VIPADISTRIBUTE AUTOSWITCHBACK IS NOT VALID BECAUSE THE CURRENT DISTRIBUTION METHOD  
IS NOT HOTSTANDBY
```

**EZD1973E MULTIPLE *tcpstackname* NONRECOVERABLE ERRORS ARE ADVERSELY AFFECTING SYSPLEX
PROCESSING**

Explanation: Five TCP/IP abends occurred within one minute.

In the message text:

tcpstackname

The name of the TCP/IP stack.

System action: TCP/IP continues.

- If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active and this stack is not the only member of its TCP/IP sysplex group, the following RECOVERY actions occur:
 - This stack leaves the TCP/IP sysplex group.
 - This stack no longer participates in sysplex distribution (as a distributor or target) or acts as an owner or a backup for DVIPAs. All DVIPAs defined on this stack are deactivated; however, the DVIPA definitions are saved.
 - When the stack leaves the TCP/IP sysplex group, this operator message is deleted.
- If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action is taken.

See the information about sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

See the GLOBALCONFIG configuration statement in z/OS Communications Server: IP Configuration Reference for more information about the SYSPLEXMONITOR parameters.

Operator response: Save the documentation that was taken when the problem occurred and contact the system programmer.

If the NORECOVERY option is active, no further actions are needed.

If the RECOVERY option is active, then even if the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack will not automatically rejoin the TCP/IP sysplex group. Message EZZ9676E will be displayed if the TCP/IP stack successfully deactivates all DVIPAs and leaves the TCP/IP sysplex group. After message EZZ9676E is displayed, issue the VARY TCPIP,,SYSPLEX,JOINGROUP command to cause the DVIPA definitions to be processed and to cause the stack to rejoin the TCP/IP sysplex group.

System programmer response: Contact IBM software support services with the TCP/IP profile, system log, and dump.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBXFPDC

Routing code: 2,8

Descriptor code: 2

Automation: Not applicable.

Example:

MULTIPLE TCPCS NONRECOVERABLE ERRORS ARE ADVERSELY AFFECTING SYSPLEX PROCESSING

EZD1974E *tcpstackname* CSM HAS BEEN CONSTRAINED FOR AT LEAST *timevalue* SECONDS

Explanation: Sysplex problem detection determined that storage managed by the communications storage manager (CSM) has been constrained for multiple monitoring intervals.

In the message text:

tcpstackname

The name of the TCP/IP stack.

timevalue

The number of seconds that sysplex problem detection has determined that CSM has been constrained.

System action: TCP/IP continues.

If the GLOBALCONFIG SYSPLEXMONITOR RECOVERY option is active, and this stack is not the only member of the TCP/IP sysplex group, the following RECOVERY actions will occur:

EZD1980I

- This stack will leave the sysplex group.
- This stack will no longer participate in sysplex distribution (as a distributor or target) or act as an owner or a backup for DVIPAs. All DVIPAs defined on this stack will be deactivated; however, the DVIPA definitions will be saved.
- If the problem is corrected, this operator message will be deleted. If the GLOBALCONFIG SYSPLEXMONITOR AUTOREJOIN option is active, the stack will process the DVIPA definitions and rejoin the TCP/IP sysplex group.

If the GLOBALCONFIG SYSPLEXMONITOR NORECOVERY option is active, no action will be taken. Monitoring will continue. This operator message will be deleted when the CSM constraint is corrected.

See sysplex problem detection and recovery in z/OS Communications Server: IP Configuration Guide for more information.

Operator response: Save the TCP/IP profile and system log. If a dump was not created, take a dump of the TCP/IP address space and dataspaces, and the CSM dataspace.

System programmer response: Messages were issued before this message to report that CSM storage is constrained. Those messages identify the type of CSM storage that is constrained. See the documentation for those messages for the actions that you must take to resolve the storage constraint.

If the CSM storage problem cannot be corrected, contact your IBM support center with the documentation that was obtained when the problem occurred.

If the CSM storage problem can be corrected:

- If RECOVERY is being used, enable the stack to rejoin the sysplex group. Message EZZ9676E is issued after the process of leaving the sysplex group has successfully completed. After this message is issued, reapply the sysplex profile definitions by issuing VARY OBEY. This will cause the stack to rejoin the sysplex group.
- If NORECOVERY is being used, no further actions are needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBXFPDM

Routing code: 2, 8

Descriptor code: 2

Automation: Not applicable.

Example:

EZD1974E TCPCS1 CSM HAS BEEN CONSTRAINED FOR AT LEAST 90 SECONDS

EZD1980I CertBundleOptions statement beginning on line *line_number* is missing a closing brace ()

Explanation: The **certbundle** command encountered an error while it was parsing the options file. A CertBundleOptions statement was missing a closing brace ()).

In the message text:

line_number

The line number in the options file on which the CertBundleOptions statement begins.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Correct the options file syntax and reissue the command. See the information about the **certbundle** command in z/OS Communications Server: IP System Administrator's Commands or issue the **man certbundle** command in a z/OS UNIX shell to obtain information about the certbundle options file syntax.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CBCParser.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1980I CertBundleOptions statement beginning on line 6 is missing a closing brace {}
```

EZD1981I Storage allocation failed

Explanation: The **certbundle** command failed to allocate memory for internal processing.

System action: The **certbundle** command processing ends.

Operator response: The error might be transient; reissue the request. If the error persists, contact the system programmer

System programmer response: Trace or log entries might provide more information about the error. Ensure that there is enough memory available on the system. See the information about diagnosing storage abends and storage growth in z/OS Communications Server: IP Diagnosis Guide for more information about storage problems.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: main.cpp CBCParser.cpp CertBundle.cpp

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1981I Storage allocation failed
```

EZD1982I GSK function call failed with status code error - description

Explanation: A call to the System SSL Certificate Management Services (CMS) API returned an error.

In the message text:

function

The API call that failed. See the System SSL CMS API in z/OS Cryptographic Services System SSL Programming for more information.

error

The hexadecimal CMS status code. See CMS status codes in z/OS Cryptographic Services System SSL Programming for more information.

description

Describes the meaning of the error.

System action: The **certbundle** command processing ends.

Operator response: Contact the system programmer.

System programmer response: Use error and the description provided to fix the error.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server: z/OS UNIX certbundle command

Module: CertBundle.cpp

Routing code: Not applicable.

EZD1982I

Descriptor code: Not applicable.

Automation: Not applicable.

Example:

```
EZD1982I GSK gsk_decode_crl call failed with status code 0x014ce00e - Data type is not correct
```

Chapter 13. EZD2xxxx messages

EZD2011I THE VARY TCPIP,,DROP COMMAND WAS IGNORED BECAUSE THE COMMAND PARAMETERS DID NOT MATCH A LISTENING APPLICATION

Explanation: A VARY TCPIP,,DROP command was issued with parameters used to select a listening application. The command was ignored because no listening application was found that matched the parameters that were specified on the command.

System action: TCP/IP continues.

Operator response: Change the parameters specified on the VARY TCPIP,,DROP command so that they match an active listening application, and re-issue the command.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBTCICT

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD2012I THE VARY TCPIP,,DROP COMMAND WAS REJECTED BECAUSE MORE THAN ONE LISTENING APPLICATION WAS FOUND THAT MATCHED THE COMMAND PARAMETERS

Explanation: A VARY TCPIP,,DROP command was issued. The command was rejected because there was more than one listening application that matched the parameters specified on the command.

System action: TCP/IP continues.

Operator response: Re-issue the command with the JOBNAME parameter and possibly the ASID parameter to identify a unique listening application.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBTCICT

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example: Not applicable.

EZD2013I numconns CONNECTIONS WERE SUCCESSFULLY DROPPED

Explanation: A VARY TCPIP,,DROP command was issued. The command completed successfully. This message displays the number of connections that were dropped.

In the message text:

EZD2014I

numconns

The number of connections that were successfully dropped. If the *numconns* value is 0, then no connections associated with the server that matched the input parameters were found.

System action: TCP/IP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBTCICT

Routing code: 2,8

Descriptor code: 12

Automation: Not applicable.

Example:

EZD2013I 10 CONNECTIONS WERE SUCCESSFULLY DROPPED

EZD2014I Real-time application-controlled TCP/IP trace NMI has been disabled – reason code *rsnocode*

Explanation: The real-time application-controlled TCP/IP trace network management interface (NMI) has been disabled because of an error. The *rsnocode* value provides the reason for the error. See Real-time application-controlled TCP/IP trace NMI in z/OS Communications Server: IP Programmer's Guide and Reference for more information about this NMI.

In the message text:

rsnocode

A code that explains the error. Possible values are:

- 1 Unable to obtain the TCP/IP address space private storage for internal control blocks
- 2 Unable to obtain the 64-bit common storage for internal control blocks
- 3 Internal error

System action: TCP/IP processing continues, but applications will not be able to use the real-time application-controlled TCP/IP trace NMI.

Operator response: Save the system log for problem determination and contact the system programmer.

System programmer response: When the NMI has been disabled, the TCP/IP stack must be recycled to enable it. Use the *rsnocode* value to determine what action to take before recycling the TCP/IP stack:

- 1 Increase the size of the TCP/IP address space to ensure that enough private storage is available for use by the NMI. If you continue to receive this message with a *rsnocode* value of 1, obtain a dump of the TCP/IP address space and examine the private storage usage. Under IPCS, you can use the z/OS Communications Server **TCPIPICS MAP** command to examine information from the dump about storage use by the TCP/IP stack. See TCPIPICS MAP in z/OS Communications Server: IP Diagnosis Guide for more information about this command.
- 2 The amount of 64-bit common storage is controlled by the HVCOMMON parameter in member IEASYSxx of PARMLIB. For more information about this parameter, see the z/OS MVS Initialization and Tuning Reference. You can use the MVS console command **D VIRTSTOR,HVCOMMON** to display the summary information about the current use of the HVCOMMON storage on the MVS systems. For more information about this command, see the z/OS MVS System Commands. Review the value specified on the HVCOMMON parameter to determine whether it should be increased. If you continue to receive this message with a *rsnocode* value of 2, obtain a system dump and examine the 64-bit common storage usage. Under IPCS, you can use the **RSMDATA HVCOMMON** command to display detailed information about the users of the storage and the ranges in use. For more information about this command, see the z/OS MVS Diagnosis: Reference.

3 Obtain a dump of the TCP/IP address space and contact the IBM support center.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBRCINI, EZBRCOC2

Routing code: 10

Descriptor code: 12

Automation: You can set up the automation for this message, so you will know when the NMI has been disabled.

Example:

EZD2014I Real-time application-controlled TCP/IP trace NMI has been disabled – reason code 2

EZD2015I ICMPv6 WILL IGNORE REDIRECTS DUE TO INTRUSION DETECTION POLICY

Explanation: Intrusion Detection Services (IDS) policy is active, and the ICMP_REDIRECT attack policy specifies that ICMPv6 redirect packets are to be discarded. All future ICMPv6 redirects will be ignored.

System action: TCPIP continues.

Operator response: None.

System programmer response: None.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: EZBIDATK

Routing code: 2, 8

Descriptor code: 8, 9

Automation: Not applicable.

Example:

EZD2015I ICMPv6 WILL IGNORE REDIRECTS DUE TO INTRUSION DETECTION POLICY

EZD2016I DISPLAY TRACE for *stackname*

Explanation: This message indicates the beginning of the output of the **DISPLAY TCPIP,,TRACE** command. It provides the TCP/IP stack name for which the command was started. For a description of the command output, see **DISPLAY TCPIP,,TRACE** command in z/OS Communications Server: IP System Administrator's Commands.

In the message text:

stackname

The name of the TCP/IP stack to which the command was directed.

System action: The **DISPLAY TCPIP,,TRACE** command continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZACDDTR

Routing code: *

EZD2017I • EZD2019I

Descriptor code: 8, 9

Automation: Not applicable for automation.

Example: Not applicable.

EZD2017I ICSF services are currently unavailable to the IKE daemon operating in FIPS 140 mode

Explanation: The IKE daemon has been configured for FIPS 140 mode and is initializing. ICSF is not currently active. The IKE daemon requires services from ICSF when configured for FIPS 140 mode.

System action: The IKE daemon ends.

Operator response: Contact the system programmer.

System programmer response: The IKE daemon fails to initialize if it is configured for FIPS 140 mode and ICSF is not active.

If you want the IKE daemon to operate in FIPS 140 mode, start ICSF and then restart the IKE daemon.

If you do not want the IKE daemon to operate in FIPS 140 mode, specify "FIPS140 No" in the IKE configuration file and restart the IKE daemon.

User response: None.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 2, 8

Descriptor code: 12

Automation: This message is sent to the system console and to syslogd.

Example:

EZD2017I ICSF services are currently unavailable to the IKE daemon operating in FIPS 140 mode

EZD2018I *location*

Explanation: This message is issued as part of a message group. See message EZZ8453I in z/OS Communications Server: IP Messages Volume 4 (EZB, SNM) for a complete description of the message group.

System action: See message EZZ8453I.

Operator response: See message EZZ8453I.

System programmer response: See message EZZ8453I.

User response: See message EZZ8453I.

Problem determination: See message EZZ8453I.

Module: See message EZZ8453I.

Routing code: See message EZZ8453I.

Descriptor code: See message EZZ8453I.

Automation: See message EZZ8453I.

Example: See message EZZ8453I.

EZD2019I ICSF services are currently available to the IKE daemon

Explanation: The IKE daemon is initializing and ICSF is active.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 2, 8

Descriptor code: 12

Automation: This message is sent to the system console and to syslogd.

Example:

```
EZD2019I ICSF services are currently available to the IKE daemon
```

EZD2020A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF TCPIP PROFILE FILTER RULES

Explanation: QDIO Accelerator will accelerate only Sysplex Distributor traffic. Routed traffic cannot be accelerated for one of the following reasons:

- You have no IP security filters configured in your TCP/IP profile, or the current IP security filters configured in your TCP/IP profile do not explicitly permit all routed traffic.
- Filter logging is enabled for routed traffic in your TCP/IP profile.

To satisfy your configured IP filters, routed traffic must be processed by the TCP/IP stack, where IP filtering is implemented.

System action: Processing continues with QDIO Accelerator enabled only for sysplex distributor traffic.

Operator response: Contact the system programmer.

System programmer response: No action is required if any of the following conditions are true:

- Your security policy requires some routed traffic to be denied
- Your security policy requires some routed traffic to be protected using IPsec
- Your security policy requires some routed traffic to be subject to filter logging
- You do not want to use QDIO acceleration for your routed traffic

If your security policy allows all routed traffic to be permitted and does not require any routed traffic to be subject to filter logging, you can change the IP security filters configured in your TCP/IP profile so that QDIO Accelerator is enabled for routed traffic. To do this, modify the IPSEC statement in your TCP/IP profile:

1. Ensure that the first IPv4 IPSECRULE statement with a ROUTING specification of ROUTED or EITHER permits all IPv4 addresses, all protocols, and all security classes.

Tip: If your rule has a ROUTING specification of EITHER, it applies to both local and routed traffic. If your security policy does not allow you to permit all local traffic, split this rule into two rules, one with a ROUTING specification of ROUTED and one with a ROUTING specification of LOCAL.

2. Ensure that this IPSECRULE statement does not specify LOG to enable filter logging.

For more information, see QDIO Accelerator and IP security in z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: EZBIPEPR, EZBISPSW, EZBISEPR, EZBISSFT

Routing code: 10

Descriptor code: 2

EZD2021A

Automation: You can automate on this message to detect situations when routed traffic is not being QDIO accelerated because of IP filtering rules.

Example:

EZD2020A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF TCPIP PROFILE FILTER RULES

EZD2021A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF POLICY FILTER RULES

Explanation: QDIO Accelerator will accelerate only Sysplex Distributor traffic. Routed traffic cannot be accelerated for one of the following reasons:

- The current IP security filters in your policy configuration do not explicitly permit all routed traffic.
- Filter logging is enabled for routed traffic in your policy configuration.

To satisfy your configured IP filters, routed traffic must be processed by the TCP/IP stack, where IP filtering is implemented.

System action: Processing continues with QDIO Accelerator enabled only for sysplex distributor traffic.

Operator response: Contact the system programmer.

System programmer response: No action is required if any of the following conditions are true:

- Your security policy requires some routed traffic to be denied
- Your security policy requires some routed traffic to be protected using IPsec
- Your security policy requires some routed traffic to be subject to filter logging
- You do not want to use QDIO acceleration for your routed traffic

If your security policy allows all routed traffic to be permitted and does not require any routed traffic to be subject to filter logging, you can change the IP security filters in your policy configuration so that QDIO Accelerator is enabled for routed traffic. To do this, modify your policy configuration:

1. If you are using the IBM Configuration Assistant for z/OS Communications Server to configure your IPSec policy:
 - a. Ensure that the first connectivity rule that applies to routed IPv4 traffic specifies a topology of *filtering* only, applies to all IPv4 addresses, and uses a requirement map that maps all IP protocols and all security classes to a security level of Permit.
 - b. Ensure that this connectivity rule specifies that filter matches are not to be logged.
2. Otherwise, if you are manually configuring your IPSec policy:
 - a. Ensure that the first IpFilterRule statement whose associated IpService statement has a Routing specification of Routed or Either permits all IPv4 addresses, permits all protocols and all security classes, and has a Direction specification of Bidirectional.

Tip: If your rule has a Routing specification of Either, it applies to both local and routed traffic. If your security policy does not allow you to permit all local traffic, split this rule into two rules, one that applies to filtering for routed traffic, and one that applies to filtering for local traffic.

- b. Ensure that this IpFilterRule statement's associated IpGenericFilterAction statement does not specify an IpFilterLogging setting of Yes to enable filter logging.

For more information, see QDIO Accelerator and IP security in z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: EZBISSFT, EZBISPSW, EZBIPEPR

Routing code: 10

Descriptor code: 2

Automation: You can automate on this message to detect situations when routed traffic is not being QDIO accelerated because of IP filtering rules.

Example:

EZD2021A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF POLICY FILTER RULES

EZD2022A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF DEFENSIVE FILTER RULES

Explanation: QDIO Accelerator will accelerate only Sysplex Distributor traffic. Routed traffic cannot be accelerated because the defensive filters managed by the defense manager daemon (DMD) are being used to block some routed traffic. To satisfy the defensive filters, routed traffic must be processed by the TCP/IP stack, where defensive filtering is implemented.

System action: Processing continues with QDIO Accelerator enabled only for sysplex distributor traffic.

Operator response: Contact the system programmer.

System programmer response: Defensive filters are usually added to block a temporary security condition such as an attack or scan. The defensive filters causing this condition are removed when their configured expiration time passes. You can wait for the filters to expire.

Before these defensive filters expire, you can work with the security administrator to evaluate whether the filters are still needed. If the defensive filters are no longer needed, the security administrator can use the **<ipsec -F command>** to delete them.

For more information, see QDIO Accelerator and IP security in z/OS Communications Server: IP Configuration Guide.

User response: Not applicable.

Problem determination: None.

Source: z/OS Communications Server TCP/IP

Module: EZBISDAD, EZBIPEPR

Routing code: 10

Descriptor code: 2

Automation: You can automate on this message to detect situations when routed traffic is not being QDIO accelerated because of defensive filter rules.

Example:

EZD2022A QDIO ACCELERATOR IS ENABLED ONLY FOR SYSPLEX DISTRIBUTOR BECAUSE OF DEFENSIVE FILTER RULES

EZD2023I QDIO ACCELERATOR IS ENABLED WITH CURRENTLY INSTALLED IP FILTER RULES

Explanation: QDIO Accelerator is enabled for all traffic because the installed IP filters permit all routed traffic to pass through the associated TCP/IP stack. Therefore, that traffic can be accelerated without requiring special processing by the TCP/IP stack.

System action: Processing continues.

Operator response: No action is needed.

System programmer response: No action is needed.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP

Module: EZBIPEPR, EZAPSCAN, EZBISDDL, EZBISPSW, EZBISSFT, EZBISEPR

EZD2024I • EZD2025I

Routing code: 10

Descriptor code: 12

Automation: You can automate on this message to detect situations when QDIO Acceleration is permitted by IP filtering rules.

Example:

EZD2023I QDIO ACCELERATOR IS ENABLED WITH CURRENTLY INSTALLED IP FILTER RULES

EZD2024I *type current maximum*

Explanation: This message is issued as part of a message group. See message EZZ8453I in z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM) for a complete description of the message group.

System action: See message EZZ8453I.

Operator response: See message EZZ8453I.

System programmer response: See message EZZ8453I.

User response: See message EZZ8453I.

Problem determination: See message EZZ8453I.

Source: See message EZZ8453I.

Module: See message EZZ8453I.

Routing code: See message EZZ8453I.

Descriptor code: See message EZZ8453I.

Automation: See message EZZ8453I.

Example: See message EZZ8453I.

EZD2025I ICSF services are currently unavailable to the IKE daemon

Explanation: The IKE daemon is initializing and ICSF is not active.

This message does not indicate an immediate problem. However, some IKE daemon requests can fail if ICSF remains inactive.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: IKE daemon

Module: ike_config.cpp

Routing code: 2, 8

Descriptor code: 12

Automation: This message is sent to the system console and to syslogd.

Example:

EZD2025I ICSF services are currently unavailable to the IKE daemon

EZD2026I *Tcpname GSK_FIPS_STATE_SET FAILED FOR AT-TLS GROUP group_name WITH RETURN CODE gsk_status description*

Explanation: The AT-TLS group *group_name* is configured with FIPS140 On. *Tcpname* received an error from the System SSL Certificate Management Services (CMS) API *gsk_fips_state_set*. The *gsk_fips_state_set* API is documented in z/OS Cryptographic Services System SSL Programming. AT-TLS services are not available for *group_name*.

In the message text:

Tcpname

The name of the TCPIP stack

group_name

The name of the AT-TLS group that is specified on a TTLSGroupAction statement

gsk_status

The hexadecimal *gsk_status* code that is returned from *gsk_fips_state_set()*

description

Describes the meaning of *gsk_status*

System action: TCPIP continues. AT-TLS services are not available for the AT-TLS group specified by the *group_name* value.

Operator response: Contact the system programmer.

System programmer response: For more information about the error, see CMS status codes in z/OS Cryptographic Services System SSL Programming. If the CSFSERV resource class is active, review RACF CSFSERV resource requirements in z/OS Cryptographic Services System SSL Programming and ensure that the user ID for *Tcpname* has access to the appropriate resources in this class.

User response: None.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: EZBTLCMN

Routing code: 2, 8

Descriptor code: 12

Automation: This message goes to the console. Automation can notify the system programmer.

Example:

EZD2026I TCPCS GSK_FIPS_STATE_SET FAILED FOR AT-TLS GROUP grp3 WITH RETURN CODE 0335308A Known Answer Test has failed when attempting to use ICSF

EZD2027I *Initiation of UDP encapsulated IKE version major.minor security association generation for tunnel ID is not permitted following DVIPA takeover; the remote peer is behind an NAPT, or is acting as a security gateway*

Explanation: Negotiation of a UDP encapsulated security association (SA) following a dynamic virtual IP address (DVIPA) takeover was denied.

When performing UDP encapsulation, the z/OS host is limited to acting in responder mode when the remote peer is behind a network address port translation (NAPT) device, or is acting as a security gateway. See Configuration scenarios supported for NAT traversal in z/OS Communications Server: IP Configuration Guide for more information.

Additional diagnostic messages that have the same message instance number will be issued to identify the impacted SA. The message instance number precedes the message number in the log output and is used to group related messages from the Internet Key Exchange (IKE) daemon.

In the message text:

major.minor

The major and minor version of the IKE protocol for the SA.

generation

The number used to differentiate SAs for the same tunnel. The first SA created for a tunnel is number 1.

ID The tunnel prefix and number used to identify the tunnel. The tunnel prefix is K for an IKE tunnel and Y for a dynamic tunnel.

System action: The SA for the DVIPA was not reestablished; IKE daemon processing continues.

Operator response: Examine the IKE syslog to determine the remote peer. Attempt to recover the SA by initiating the SA negotiation from the remote security endpoint. See Configuration scenarios supported for NAT traversal in z/OS Communications Server: IP Configuration Guide for more information.

System programmer response: None.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: IPSec

Module: CommonIPsecSA.cpp

Routing code: Not applicable for syslog message.

Descriptor code: Not applicable for syslog message.

Automation: This message goes to the syslog.

Example:

```
EZD2027I Initiation of UDP encapsulated IKE version 2.0 security association 0  
for tunnel Y0 is not permitted following DVIPA takeover;  
the remote peer is behind an NAPT or is acting as a security gateway
```

EZD2028I ResourceType ResourceName Activation failed – Reason

Explanation: A configuration error was detected during activation of the resource (device or interface).

In the message text:

ResourceType

The type of resource that failed activation. Possible values are device or interface.

ResourceName

The name of the device or interface.

Reason

Reason indicates the cause of the failure and can be one of the following:

An MPC group is defined as MPCUSAGE=EXC and is already in use

The MPC group that this user is trying to use is coded for exclusive use (MPCUSAGE=EXC), and it is already in use by another user.

IQDCHPID is not specified when multiple IQD CHPIDs are available

Multiple IQD (HiperSockets) CHPIDs are defined on this LPAR, and VTAM start option IQDCHPID does not specify which is to be used for dynamic XCF connectivity.

IQDIO devices are not available to build an MPC group

An attempt was made to build an IQDIO MPC group, but VTAM could not find at least three subchannel devices associated with the same IQD CHPID.

IQDIO IQD CHPID is in conflict with sysplex IQD CHPID

The user defined an IQDIO device CHPID on a TCP/IP DEVICE or INTERFACE statement and it conflicts with the sysplex IQD CHPID defined by the IQDCHPID VTAM start option for DYNAMICXCF communication.

Processor is not IQD capable

The processor does not support IQD CHPIDs.

IQDIO or OSA CHPID is not available to build an MPC group

An attempt to activate an IQDIO or OSA CHPID was rejected because the CHPID was not found.

- For IQDIO, one of the following conditions occurred:

- When attempting dynamic XCF HiperSockets, either the VTAM start option IQDCHPID=NONE was coded, or the IQDCHPID value specified a CHPID that was not defined to the LPAR.
- A TCP/IP HiperSockets DEVICE or INTERFACE statement specified a CHPID value that was not defined to the LPAR.
- For OSA-Express, the CHPID value specified on the TRLE or TCP/IP DEVICE or INTERFACE statement was not defined to the LPAR.

OSA control channels are not available to build an MPC group

Two consecutive subchannel addresses, starting with an even number, are required when dynamically building a TRLE for OSA-Express devices that use queued direct I/O (QDIO). The consecutive subchannel addresses are required for the READ and WRITE control channels. The CHPID was found for the failing device, but two consecutive subchannel addresses starting with an even number were not found.

Incorrect PORTNAME or TRLENNAME is specified

For devices and interfaces where the TRLE is defined in VTAM and not dynamically generated, the DEVICE or INTERFACE statement must point to a valid TRLE. Either the PORTNAME value, TRLENNAME value, or DEVICE name does not match a corresponding value on a TRLE statement.

PNETID is not configured

An IBM 10GbE RoCE Express feature configured on the GLOBALCONFIG statement does not have a physical network ID.

No datapath device addresses are available

A QDIO or iQDIO device or interface activation failed because there were no datapath devices available.

The channel unit address is not available

The device is attempting to use a channel unit address (CUA) that is not defined or not available.

An incorrect channel unit address is specified

The device is attempting to use an incorrect channel unit address (CUA).

The channel unit address is already in use

The channel unit address (CUA) is being used by other resources.

QDIO CHPID type mismatch is detected

The CHPID type for the OSA-Express device using QDIO does not match the type of CHPID that it is attempting to use.

OSM/OSX activation not permitted because LPAR is not in Ensemble

Activating OSM or OSX interface is not supported because the LPAR is not participating in an Ensemble.

OSM/OSX activation not permitted because CPC is not in Ensemble

Activating OSM or OSX devices is not supported because the CPC is not configured as a member of an Ensemble.

IQD activation is not permitted against an IQDX device

The DEVICE or INTERFACE statement for the failing resource specifies a HiperSockets CHPID that is defined with the Internal Queued Direct I/O extensions (IQDX) function of HiperSockets. A CHPID with the IQDX function is reserved for IQDX communications and cannot be specified on the DEVICE or INTERFACE statement.

Portname is already in use by another port on this CHPID

An attempt was made to activate an OSA-Express port in QDIO mode. The portname used on this activation attempt was already in use on the other port on this CHPID. Two ports on the same CHPID cannot have the same portname.

Different portname is already assigned to OSA

An attempt was made to activate an OSA-Express port in QDIO mode. The portname for this activation attempt did not match the portname already assigned to this port by a previous user. All z/OS users of a port must activate it with the same portname.

System action: TCP/IP marks the device or interface inactive.

Operator response: Contact the system programmer.

System programmer response: Depending on the value of *Reason*, take the following actions:

An MPC group is defined as MPCUSAGE=EXC and is already in use

Ensure that there is only one user of a TRLE defined with MPCUSAGE=EXC. A user can be a TCP/IP device or interface, or a VTAM PU.

IQDCHPID is not specified when multiple IQD CHPIDs are available

When more than one IQD CHPID is defined, VTAM start option IQDCHPID must specify the one that is to be used for dynamic XCF connectivity. Choose which CHPID is to be used for dynamic XCF, and specify it on the IQDCHPID VTAM start option. Also, ensure that the CHPID to be used for dynamic XCF is not used on a HiperSockets device of type MPCIPA, or a HiperSockets interface of type IPAQIDIO or IPAQIDIO6 for any stack on the LPAR. The CHPID specified on IQDCHPID is reserved for dynamic XCF connectivity.

IQDIO devices are not available to build an MPC group

Verify the Hardware Configuration Definition (HCD) or Input Output Control Data Set (IOCDS) configuration for accuracy for this logical partition. The HCD configuration might need to be updated to specify a sufficient number of HiperSockets devices.

IQDIO IQD CHPID is in conflict with sysplex IQD CHPID

- If dynamic XCF connectivity is required, ensure that no TCP/IP DEVICE or INTERFACE statement specifies the same CHPID that is defined for XCF connectivity on the IQDCHPID VTAM start option.
- If dynamic XCF connectivity is not required, ensure that DYNAMICXCF is not defined on the TCP/IP IPCONFIG or IPCONFIG6 statement, or specify IQDCHPID=NONE as a VTAM start option.

Processor is not IQD capable

Remove all TCP/IP HiperSockets DEVICE and INTERFACE statements. They are not available on this processor.

IQDIO or OSA CHPID is not available to build an MPC group

Ensure that the CHPID defined for the OSA-Express or HiperSockets DEVICE or INTERFACE is defined for this LPAR.

OSA control channels are not available to build an MPC group

Ensure that sufficient subchannel addresses exist for all users of the TRLE, and that at least two addresses are consecutive starting with an even number for the two control channels.

Incorrect PORTNAME or TRLENAMES is specified

For the failing device or interface, determine which VTAM TRLE definition should be used.

- If the TRLE is identified on the INTERFACE statement by the PORTNAME parameter, ensure that the PORTNAME parameter contains a value that matches the PORTNAME parameter on the VTAM TRLE statement.
- If the TRLE is identified on the INTERFACE statement by the TRLENAMES parameter, ensure that the TRLENAMES parameter contains a value that matches the TRLE name of the VTAM TRLE statement.
- If the port name is identified on the DEVICE statement by a DEVICE name, ensure that the DEVICE name matches the PORTNAME parameter on the VTAM TRLE statement.

PNETID is not configured

Configure a physical network ID for the 10GbE RoCE Express feature in HCD or remove the PCI-function ID (PFID) definition representing the 10GbE RoCE Express feature from the SMCR parameter of the GLOBALCONFIG statement.

No datapath device addresses are available

Ensure that there are sufficient datapath device addresses defined for the device.

- When the TRLE is defined in VTAM, define sufficient DATAPATH addresses on the TRLE statement for all users of the TRLE. See DATAPATH in z/OS Communications Server: SNA Resource Definition Reference for more information about how many DATAPATH addresses are required for your configuration.
- When the TRLE is dynamically generated by VTAM, a certain number of DATAPATH addresses are dynamically allocated depending on the type of device and the number of addresses defined in HCD for the device. See Resources automatically activated by VTAM in z/OS Communications Server: SNA Network Implementation Guide for more detail about how many DATAPATH addresses are allocated.

The channel unit address is not available

Verify that the channel unit address is defined in HCD or IOCDS and that it is varied online.

An incorrect channel unit address is specified

Verify that the channel unit address is correctly defined. Verify that both READ and WRITE CUAs are specified if they are both required.

The channel unit address is already in use

Verify that the device uses a channel unit address that is not in use by another user. Examples of other users are another TCP/IP stack on this LPAR, or VTAM.

QDIO CHPID type mismatch is detected

Verify that the CHPID type specified or defaulted on the configuration statement is the same as the type that is assigned to this device.

OSM/OSX activation not permitted because LPAR is not in Ensemble

Enable LPAR participation in the Ensemble by specifying the ENSEMBLE=YES VTAM start option.

See TCP/IP in an ensemble in z/OS Communications Server: IP Configuration Guide for more information about Ensembles.

OSM/OSX activation not permitted because CPC is not in Ensemble

If connectivity to the intraensemble data network or intranode management network is needed, ensure that the LPAR is configured as a member of the Ensemble. See TCP/IP in an ensemble in z/OS Communications Server: IP Configuration Guide for more information about Ensembles.

IQD activation is not permitted against an IQDX device

Either remove the HiperSockets DEVICE or INTERFACE statement, or specify a different HiperSockets CHPID. For more information about the IQDX function, see HiperSockets connectivity to the intraensemble data network in z/OS Communications Server: IP Configuration Guide.

Portname is already in use by another port on this CHPID

Identify the portname of the failing DEVICE or INTERFACE statement. It is specified as the DEVICE name on a DEVICE statement and as the PORTNAME value on an INTERFACE statement. Change the portname value on the DEVICE or INTERFACE statement and on the PORTNAME operand on the TRLE representing this port to a name that is unique on this CHPID.

Different portname is already assigned to OSA

Identify all users of the OSA-Express port and ensure that the portname is the same for all users. Users might be other TCP/IP stacks on this LPAR, or TCP/IP stacks on other LPARs.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: Configuration & Initialization

Module: EZBIFIUT

Routing code: 2, 8

Descriptor code: 12

Automation: Not applicable for automation.

Example:

```
EZD2028I DEVICE IUTIQDIO ACTIVATION FAILED - IQDIO DEVICES ARE NOT
AVAILABLE TO BUILD AN MPC GROUP
EZD2028I INTERFACE OSAQDIO46 ACTIVATION FAILED -
INCORRECT PORTNAME or TRLENAMES is SPECIFIED
```

EZD2029I DCAS CONFIGURATION keyword value IS NOT SUPPORTED

Explanation: This message is issued when Digital Certificate Access Server (DCAS) is processing the DCAS configuration file, and the keyword value is not supported.

In the message text:

keyword The keyword that was specified

value The value that is not supported for the specified *keyword*

System action: DCAS ends.

Operator response: Contact the system programmer.

System programmer response: Correct the DCAS configuration file. See z/OS Communications Server: IP

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Configuration Reference for a list of the keywords and values that are supported for each keyword in the DCAS configuration file.

User response: Not applicable.

Problem determination: See the system programmer response.

Source: z/OS Communications Server TCP/IP

Module: dcasconf.c

Routing code: 8, 10

Descriptor code: 12

Automation: This message goes to the console. Automation can notify the system programmer to correct the DCAS configuration.

Example:

```
EZD2029I DCAS CONFIGURATION TLSMECHANISM YES IS NOT SUPPORTED
```

| EZD2030I TOO MANY VIPADEFINE AND VIPABACKUP VIPAS - ipaddr REJECTED

| **Explanation:** There are already 1024 active and backup dynamic or moveable VIPAs on this stack. These VIPAs were defined using a combination of VIPADYNAMIC VIPADEFINE and VIPADYNAMIC VIPABACKUP statements on this stack and VIPADYNAMIC VIPADISTRIBUTE statement on other stacks. The specified IP address is not defined to the stack.

| **System action:** TCP/IP continues.

| **Operator response:** Correct the appropriate definitions and try the command or activation again.

| **System programmer response:** Reduce the number of defined or backup Dynamic VIPAs for this stack or remove this stack as a distribution target used by other stacks.

| **User response:** No action is needed.

| **Problem determination:** See the System Programmer Response.

| **Source:** z/OS Communications Server TCP/IP

| **Module:** EZBXFDVI, EZBX6DVI

| **Routing code:** 2, 8

| **Descriptor code:** 12

| **Automation:** The message goes to the system console and the system log. This message indicates an error in the profile, which requires analysis and a proper response cannot be easily automated.

| **Example:**

```
EZZ8320I TOO MANY VIPADEFINE AND VIPABACKUP VIPAS - 9.67.242.3 REJECTED
```

| EZD2031I SMC APPLICABILITY TOOL HAS STARTED COLLECTING DATA

| **Explanation:** This message is a result of the **VARY TCPIP,,SMCAT** command and indicates that the SMC applicability tool has started collecting data.

| **System action:** The system begins to collect data for the SMCAT report and displays the **VARY TCPIP,,SMCAT** command configuration parameters by issuing message EZD2040I to the system log and job log.

| **Operator response:** Do one of the following actions:

- | • Wait until the current data collection interval expires. To determine when the interval expires, review the console messages to determine when the tool was turned on.
- | • Use the **VARY TCPIP,,SMCAT,OFF** command to turn the tool off.

| See "VARY TCPIP,,SMCAT" in z/OS Communications Server: IP System Administrator's Commands for more information about the SMC applicability tool.

| **System programmer response:** No action is needed.

- | **User response:** No action is needed.
 - | **Problem determination:** Not applicable.
 - | **Source:** z/OS Communications Server TCP/IP
 - | **Module:** EZBTCIC2
 - | **Routing code:** 2, 8
 - | **Descriptor code:** 12
 - | **Automation:** Not applicable for automation.
 - | **Example:**
 - | EZD2031I SMC APPLICABILITY TOOL HAS STARTED COLLECTING DATA
-

| EZD2032I SMC APPLICABILITY TOOL HAS STOPPED COLLECTING DATA

- | **Explanation:** This message is a result of the **VARY TCPIP,,SMCAT,OFF** command or is a result of the expiration of the time interval specified on a previous **VARY TCPIP,,SMCAT** command. It indicates that the SMC applicability tool has stopped collecting data.
 - | **System action:** The system generates the SMCAT report and issues message EZD2033I to the system log and job log.
 - | **Operator response:** Inform the system programmer that the SMCAT report is available to be analyzed.
 - | **System programmer response:** Review the data in message EZD2033I. See the Report Examples portion of the "VARY TCPIP,,SMCAT" section in z/OS Communications Server: IP System Administrator's Commands for assistance in understanding the output.
 - | **User response:** No action is needed.
 - | **Problem determination:** Not applicable.
 - | **Source:** z/OS Communications Server TCP/IP
 - | **Module:** EZBTCIC2
 - | **Routing code:** 2, 8
 - | **Descriptor code:** 12
 - | **Automation:** Not applicable for automation.
 - | **Example:**
 - | EZD2032I SMC APPLICABILITY TOOL HAS STOPPED COLLECTING DATA
-

| EZD2033I TCP/IP CS *versionRelease* TCPIP Name: *name*

- | **Explanation:** This is the first message in the **VARY TCPIP,,SMCAT** command report. This report is written to the system log and the job log. See the information about the "VARY TCPIP,,SMCAT" command in z/OS Communications Server: IP System Administrator's Commands for a detailed description of the report.

- | In the message text:
- | *versionRelease*
| The z/OS Communications Server version and release.
- | *name*
| The name of the TCP/IP stack.
- | **System action:** Not applicable.
- | **Operator response:** No action is needed.
- | **System programmer response:** Analyze the report to determine the benefits that SMC-R can provide for your workload. See the Report Examples section of "VARY TCPIP,,SMCAT" in z/OS Communications Server: IP System Administrator's Commands for assistance in understanding the output.
- | **User response:** No action is needed.

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- | **Problem determination:** Not applicable.
 - | **Source:** z/OS Communications Server TCP/IP
 - | **Module:** EZBTCIC2
 - | **Routing code:** 11
 - | **Descriptor code:** 6
 - | **Automation:** Not applicable for automation.
 - | **Example:**
EZD2033I TCP/IP CS V2R2 TCPIP Name: TCPCS1
SMC-R Applicability Interval Report - 09/25/2014, 15:56:05.15
-

EZD2034I *name server IS NOT SUPPORTED*

- | **Explanation:** The z/OS Communications Server server indicated by *name*, is not supported.
 - | In the message text:
 - | *name*
The name of the server that is not supported.
 - | **System action:** The server ends.
 - | **Operator response:** See the z/OS Communications Server documentation for information about the server.
 - | **System programmer response:** See the z/OS Communications Server documentation for information about the server.
 - | **User response:** See the z/OS Communications Server documentation for information about the server.
 - | **Problem determination:** Not applicable.
 - | **Source:** z/OS Communications Server TCP/IP
 - | **Module:** Not applicable.
 - | **Routing code:** 10
 - | **Descriptor code:** *
 - | **Automation:** Not applicable for automation.
 - | **Example:**
EZD2034I SNALINK_LU0 SERVER IS NOT SUPPORTED
-

EZD2035I NAME SERVER *ipaddress*

Message Format:
NAME SERVER *ipaddress*
STATUS: *status*

FAILURE RATE: *percent*

Explanation: This is a multi-line message that is issued by the resolver in response to a MODIFY RESOLVER,DISPLAY command or a MODIFY RESOLVER,REFRESH command when the autonomic quiescing of unresponsive name servers function is active. The resolver issues a message for each name server specified on an NSINTERADDR statement in the global TCPIP.DATA file. The message displays the status and the DNS query failure rate for the specified name server.

In the message text:

ipaddress
The IPv4 or IPv6 network address of the name server.

status
The status of the name server specified by the *ipaddress* value. Possible values are:

ACTIVE

The resolver considers the name server to be responsive to the DNS queries that are generated by an application or by the resolver. The resolver continues to forward the DNS queries that are generated by an application to this name server.

QUIESCED

The resolver considers the name server to be unresponsive to the DNS queries that are generated by an application or by the resolver. Unless all name servers are quiesced, the resolver does not forward the DNS queries that are generated by an application to this name server. If all name servers are quiesced, the resolver sends the DNS queries that are generated by an application to the quiesced name servers, instead of immediately failing the query.

percent

The DNS query failure rate that was calculated by the resolver at the last monitoring checkpoint for the name server specified by the *ipaddress* value. The DNS query failure rate is the sum of the DNS queries that are generated by applications or by the resolver that received no response divided by the total number of DNS queries that are generated by an application or by the resolver that were sent during a checkpoint interval. The percent value is a value in the range 0% - 100%. The value *N/A* is displayed when the resolver was unable to calculate a DNS query failure rate at the last monitoring checkpoint. The resolver might be unable to calculate a DNS query failure rate for the following reasons:

- The resolver sent less than total ten DNS queries to the name server. The resolver requires a sample set of ten DNS queries during a monitoring interval to declare that a name server is unresponsive.
- The resolver has detected recent system changes, such as activation of the TCPIP stack, which might affect name server responsiveness. The resolver delays declaring that a name server is unresponsive for a predefined period of time after such system changes.

System action: Processing continues.

Operator response:

- Contact the system programmer if one or more name servers display the QUIESCED status.
- Contact the system programmer if the network is experiencing delays and one or more name servers display the ACTIVE status with a nonzero DNS query failure rate.

System programmer response: If the status of a name server is QUIESCED, perform one of the following actions:

- If a network condition is preventing resolver requests or name server responses from reaching the correct destination, correct the network condition. When the name server successfully responds to resolver polling queries, the resolver will resume sending DNS queries that are generated by an application to the name server.
- If a configuration error is causing the name server to be unresponsive, use resolver diagnostic tools such as the MODIFY RESOLVER,DISPLAY command or the Trace Resolver output to determine which of the following conditions is causing the error:
 - If the IP address is no longer valid as a name server, remove the IP address from the list of name servers to be used by the resolver. The list of name servers is defined by using the NSINTERADDR or NAMESERVER configuration statement in the global TCPIP.DATA file.
 - If the RESOLVERTIMEOUT value is too low for responses to consistently return from the name server within the specified time value, increase the timeout setting to a value that permits a larger percentage of responses to arrive within the timeout interval.

After you correct the configuration error, instruct the operator to issue the MODIFY RESOLVER,REFRESH command.

- If you eliminate a network condition and a configuration error as the reason for the message, the resolver might be generating the message for a temporary condition that might resolve itself. For example, the name server might be having maintenance applied, or the name server might have a very high percentage of failures because few queries were sent to the name server during the monitoring interval. Even a short network interruption can severely impact the calculations. If this situation repeats itself, an overly aggressive UNRESPONSIVETHRESHOLD value might be contributing to the situation. Consider increasing the setting value for the UNRESPONSIVETHRESHOLD parameter in the resolver setup file, and then instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command to make the resolver less sensitive to name server response failures.
- If you want the resolver to resume forwarding the DNS queries that are generated by an application to the name server, even if the name server is unresponsive at the current UNRESPONSIVETHRESHOLD percentage, perform one of the following actions:

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- Increase the UNRESPONSIVETHRESHOLD percentage in the resolver setup file to be greater than the displayed DNS query failure rate. For example, if the UNRESPONSIVETHRESHOLD percentage is 10%, but the name server is failing to respond to 15% of the queries, increase the threshold to a value in the range 20%. The resolver will continue to monitor the responsiveness of name servers in your network, but will forward DNS queries to this name server as long as the failure rate stays below the new threshold percentage.
- Delete the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD statement in the resolver setup file. The resolver will continue to monitor the responsiveness of name servers in your network, but will alert only the network operator of the unresponsive condition, and will continue to send DNS queries to all name servers.

After you modify the resolver setup file, instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command.

If the status of a name server is ACTIVE with a nonzero DNS query failure rate, your network is experiencing network delays. The diagnosis of the network failures indicates that the DNS query failures are causing the network delays. You might want to decrease the unresponsive threshold percentage. A lower percentage setting causes the resolver to detect unresponsive name servers more rapidly and to stop forwarding the DNS queries that are generated by an application to those name servers sooner. Decrease the threshold percentage by coding a lower value on the UNRESPONSIVETHRESHOLD statement in the resolver setup file. You must specify a value lower than the DNS query failure rate displayed for the name server. After you modify the UNRESPONSIVETHRESHOLD statement, instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command.

User response: Not applicable.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: System Resolver

Module: ezbrecfg

Routing code: 2, 8

Descriptor code: 12

Automation: This message is not a good candidate for automation.

Example:

```
F RESOLVER,DISPLAY
EZZ9298I DEFAULTTCPIDATA - None
EZZ9298I GLOBALTCPIDATA - SYS1.TCPPARMS(TCPDATA)
EZZ9298I DEFAULTIPNODES - None
EZZ9298I GLOBALIPNODES - /etc/iphnodes
EZZ9304I COMMONSEARCH
EZZ9304I NOCACHE
EZZ9298I UNRESPONSIVETHRESHOLD - 100
EZZ9304I AUTOQUIESCE
EZD2035I NAME SERVER 10.1.1.1
    STATUS: ACTIVE      FAILURE RATE:  0%
EZD2035I NAME SERVER 10.2.2.2
    STATUS: QUIESCED   FAILURE RATE: 100%
EZD2035I NAME SERVER 10.3.3.3
    STATUS: ACTIVE      FAILURE RATE: *NA*
EZZ9293I DISPLAY COMMAND PROCESSED
```

EZD2036I AUTOQUIESCE IGNORED - GLOBALTCPIDATA REQUIRED

Explanation: The resolver issues this message when the AUTOQUIESCE operand is specified on the UNRESPONSIVETHRESHOLD resolver setup statement, but no GLOBALTCPIDATA resolver setup statement is coded. The AUTOQUIESCE operand setting is ignored.

System action: The resolver uses the UNRESPONSIVETHRESHOLD percentage value to perform the network operator notification function instead of performing the autonomic quiescing of unresponsive name servers function.

Operator response: Contact the system programmer.

System programmer response: If you do not want unresponsive name servers to be automatically quiesced, perform one of the following actions:

- Remove the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD statement, but leave the threshold percentage coded on the statement.
- Remove the UNRESPONSIVETHRESHOLD statement completely. The network operator notification function will run by default.
- Leave the resolver setup file unchanged. You will continue to see message EZD2036I every time the resolver is started or a MODIFY RESOLVER,REFRESH command is issued, but the autonomic quiescing function will not be active.

If you want unresponsive name servers to be automatically quiesced, perform the following actions:

- If you do not have a global TCPIP.DATA file, create one. Code the appropriate resolver-related TCPIP.DATA statements in the global TCPIP.DATA file you just created.
- Code the GLOBALTCPIPDATA statement in the resolver setup file, specifying the name of the global TCPIP.DATA file to be used.

If you have corrected the resolver setup file, instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command to activate the changes.

User response: None.

Problem determination: Not applicable.

Source: z/OS Communications Server TCP/IP: System Resolver

Module: EZBRECFG

Routing code: 2, 8

Descriptor code: 12

Automation: This message is not a good candidate for automation.

Example:

EZD2036I AUTOQUIESCE IGNORED - GLOBALTCPIPDATA REQUIRED

EZD2037E *resolver_setup_value* PROCESSING ENDED - ISSUE RESOLVER REFRESH TO REACTIVATE

Explanation: This message is issued when the resolver function defined by the *resolver_setup_value* value ends abnormally. The operator can restart the resolver function by issuing a MODIFY RESOLVER,REFRESH or MODIFY RESOLVER,REFRESH,SETUP= command.

Possible values of *resolver_setup_value* are:

- AUTOQUIESCE
- UNRESPONSIVETHRESHOLD

System action: Processing continues.

- If the *resolver_setup_value* value is AUTOQUIESCE, the resolver stops performing the autonomic quiescing of unresponsive name server function, and instead performs the network operator notification of unresponsive name server function. All name servers previously identified by message EZZ9311E in z/OS Communications Server: IP Messages Volume 4 (EZB, SNM) as being unresponsive are now considered responsive, and the resolver will now send the DNS queries that are generated by an application to these name servers. If the resolver determines subsequently that the name server is still unresponsive, the resolver will generate message EZZ9308E in z/OS Communications Server: IP Messages Volume 4 (EZB, SNM) to notify the network operator.
- If the *resolver_setup_value* value is UNRESPONSIVETHRESHOLD, the resolver stops performing all monitoring of unresponsive name servers. All name servers previously identified by message EZZ9308E as being unresponsive are now considered responsive. All name servers previously identified by message EZZ9311E as being unresponsive are now considered responsive, and the resolver will now send DNS queries that are generated by an application to these name servers. The resolver will not generate any additional messages EZZ9308E or EZZ9311E.

The message remains on the operator console until one of the following events occurs:

- The operator issues a MODIFY RESOLVER,REFRESH command. The resolver restarts the function at the previously defined level of functionality.
- The operator issues a MODIFY RESOLVER,REFRESH,SETUP=*resolver_setup_file* command. The resolver activates the level of function defined in the *resolver_setup_file* file.

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- The resolver is stopped.

Operator response: If you want the resolver to use the same level of monitoring function, issue a MODIFY RESOLVER,REFRESH command. If not, contact the system programmer.

System programmer response: If you want the resolver to use the same level of function, instruct the operator to issue a MODIFY RESOLVER,REFRESH command.

If you want the resolver to use a different level of function, first modify your resolver setup file.

- If you want the resolver to automatically quiesce unresponsive name servers, specify the AUTOQUIESCE operand on the UNRESPONSIVETHRESHOLD resolver setup statement. When the AUTOQUIESCE operand is specified, the resolver automatically stops sending the DNS queries generated by an application to unresponsive name servers. The resolver uses the threshold value specified on the UNRESPONSIVETHRESHOLD resolver setup statement to determine whether a name server is unresponsive.
- If you no longer want the resolver to automatically quiesce unresponsive name servers, delete the AUTOQUIESCE operand from the UNRESPONSIVETHRESHOLD resolver setup statement. The resolver continues to monitor the responsiveness of name servers in your network, but only alerts the network operator of the unresponsive condition. The resolver continues to send the DNS queries generated by an application to all name servers.
- If you no longer want the resolver to perform any level of monitoring of unresponsive name servers, specify the UNRESPONSIVETHRESHOLD(0) statement in the resolver setup file.

After you modify the resolver setup file, instruct the operator to issue the MODIFY RESOLVER,REFRESH,SETUP=*setup_file_name* command.

User response: Not applicable.

Problem determination: In most cases, the resolver will generate a dump in addition to displaying this message. Contact IBM Service with the dump information for additional problem determination.

Source: z/OS Communications Server TCP/IP: System Resolver

Module: EZBREUPS, EZBRENSR

Routing code: 2, 8

Descriptor code: 2

Automation: This message is a good candidate for automation, if you want to restart the same level of resolver function by using the MODIFY RESOLVER,REFRESH command.

Example:

```
EZD2037E AUTOQUIESCE PROCESSING ENDED - ISSUE RESOLVER REFRESH TO REACTIVATE
```

EZD2038I RESOLVER INITIALIZATION COMPLETED WITH WARNINGS

Explanation: The resolver detected errors in setup statements in the resolver setup file and issued warning messages during the initialization of the resolver address space. The resolver address space has initialized and is ready to accept MODIFY and STOP commands, and resolver services are available to applications.

System action: Processing continues.

Operator response: Save the system log and contact the system programmer.

System programmer response: Examine the system log to find the warning messages that are issued during the initialization of the resolver address space.

- If the errors in the resolver setup file did not change the resolver configuration settings from what you wanted, you can ignore the errors. If, at a later time, you want to use the same setup file as part of the MODIFY RESOLVER,REFRESH,SETUP command processing, correct the errors at that time.
- If the errors in the resolver setup file changed the resolver configuration settings from what you wanted, correct the errors in the setup file. See the system programmer actions defined for the warning messages that are issued by the resolver to determine the corrective actions to take. After you have corrected the errors, instruct the operator to issue a MODIFY RESOLVER,REFRESH,SETUP command to correct the resolver configuration settings.

User response: No action is needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: System Resolver

Module: EZBREINI

Routing code: 2, 8

Descriptor code: 5

Automation: This message is displayed at the operator console and is suitable for automation. You can use it to detect resolver setup file errors that might impact your system operations.

Example:

```
EZD2038I RESOLVER INITIALIZATION COMPLETED WITH WARNINGS
```

EZD2039I WARNINGS ISSUED DURING RESOLVER INITIALIZATION

Explanation: The resolver includes this message in the response to a **MODIFY RESOLVER,DISPLAY** command if the resolver issued warning messages during the initialization of the resolver address space and you did not subsequently issue a **MODIFY RESOLVER,REFRESH,SETUP** command to correct the errors.

System action: Processing continues.

Operator response: Save the resolver configuration settings and contact the system programmer.

System programmer response: Examine the resolver configuration settings.

- If the resolver configuration settings are accurate, you can ignore this message.
- If the resolver configuration settings are not accurate, examine the system log from the time when the resolver address space initialized to determine which warning messages the resolver issued. See the system programmer response for those warning messages to determine the corrective actions to take. After you correct the errors in the setup file, instruct the operator to issue a **MODIFY RESOLVER,REFRESH,SETUP** command to correct the resolver configuration settings.

User response: No action is needed.

Problem determination: None.

Source: z/OS Communications Server TCP/IP: System Resolver

Module: EZBREINI

Routing code: 2, 8

Descriptor code: 5

Automation: This message is displayed at the operator console and is suitable for automation. You can use it to detect resolver setup file errors that might impact your system operations.

Example:

```
F RESOLVER,DISPLAY
EZZ9298I DEFAULTTCPIPDATA - None
EZZ9298I GLOBALTCPIPDATA - None
EZZ9298I DEFAULTIPNODES - None
EZZ9298I GLOBALIPNODES - None
EZZ9304I NOCOMMONSEARCH
EZZ9304I CACHE
EZZ9298I CACHESIZE - 200M
EZZ9298I MAXTTL - 2147483647
EZZ9298I UNRESPONSIVETHRESHOLD - 25
EZZ2039I WARNINGS ISSUED DURING RESOLVER INITIALIZATION
EZZ9293I DISPLAY COMMAND PROCESSED
```

| EZD2040I TCP/IP CS *versionRelease* TCPIP Name: *name*

| **Explanation:** This is the first message in the display of configuration parameters from a successful VARY TCPIP,,SMCAT command. This message is written to the system log and the job log. See the information about the "VARY TCPIP,,SMCAT" command in z/OS Communications Server: IP System Administrator's Commands for a detailed description of the configuration parameters.

| In the message text:

EZD2041I

| **versionRelease**
| The z/OS Communications Server version and release.

| **name**
| The name of the TCP/IP stack.

| **System action:** The system reports the configuration parameters which will be used for the **VARY TCPIP,,SMCAT** command report.

| **Operator response:** No action is needed.

| **System programmer response:** No action is needed.

| **User response:** No action is needed.

| **Problem determination:** Not applicable.

| **Source:** z/OS Communications Server TCP/IP

| **Module:** EZBTCIC2

| **Routing code:** 11

| **Descriptor code:** 6

| **Automation:** Not applicable for automation.

| **Example:**
EZD2040I TCP/IP CS V2R2 TCPIP Name: TCPCS1
SMC-R Applicability Configuration Parameters - 09/25/2014, 13:28:25.65
Interval: 60 minutes
IP addresses/subnets being monitored
9.1.1.1/24
9.1.2.1/24
2001::1/116

EZD2041I IP ADDRESS *ipaddr* ALREADY SPECIFIED

| **Explanation:** A duplicate IP address was detected in the data set specified on the **VARY TCPIP,,SMCAT** command.

| In the message text:

| **ipaddr**
| The IP address.

| **System action:** The system stops processing the **VARY TCPIP,,SMCAT** command.

| **Operator response:** Correct the configuration error in the data set and reissue the **VARY TCPIP,,SMCAT** command.

| **System programmer response:** No action is needed.

| **User response:** No action is needed.

| **Problem determination:** Not applicable.

| **Source:** z/OS Communications Server TCP/IP

| **Module:** EZBTCIC2

| **Routing code:** 2, 8

| **Descriptor code:** 12

| **Automation:** Not applicable for automation.

| **Example:**
EZD2041I IP ADDRESS 201.0.1.1 ALREADY SPECIFIED

Appendix A. Related protocol specifications

This appendix lists the related protocol specifications (RFCs) for TCP/IP. The Internet Protocol suite is still evolving through requests for comments (RFC). New protocols are being designed and implemented by researchers and are brought to the attention of the Internet community in the form of RFCs. Some of these protocols are so useful that they become recommended protocols. That is, all future implementations for TCP/IP are recommended to implement these particular functions or protocols. These become the *de facto* standards, on which the TCP/IP protocol suite is built.

You can request RFCs through electronic mail, from the automated Network Information Center (NIC) mail server, by sending a message to `service@nic.ddn.mil` with a subject line of RFC *nnnn* for text versions or a subject line of RFC *nnnn.PS* for PostScript versions. To request a copy of the RFC index, send a message with a subject line of RFC INDEX.

For more information, contact `nic@nic.ddn.mil` or at:

Government Systems, Inc.
Attn: Network Information Center
14200 Park Meadow Drive
Suite 200
Chantilly, VA 22021

Hard copies of all RFCs are available from the NIC, either individually or by subscription. Online copies are available at the following Web address:
<http://www.rfc-editor.org/rfc.html>.

Draft RFCs that have been implemented in this and previous Communications Server releases are listed at the end of this topic.

Many features of TCP/IP Services are based on the following RFCs:

RFC Title and Author

RFC 652

Telnet output carriage-return disposition option D. Crocker

RFC 653

Telnet output horizontal tabstops option D. Crocker

RFC 654

Telnet output horizontal tab disposition option D. Crocker

RFC 655

Telnet output formfeed disposition option D. Crocker

RFC 657

Telnet output vertical tab disposition option D. Crocker

RFC 658

Telnet output linefeed disposition D. Crocker

RFC 698

Telnet extended ASCII option T. Mock

- RFC 726**
Remote Controlled Transmission and Echoing Telnet option J. Postel, D. Crocker
- RFC 727**
Telnet logout option M.R. Crispin
- RFC 732**
Telnet Data Entry Terminal option J.D. Day
- RFC 733**
Standard for the format of ARPA network text messages D. Crocker, J. Vittal, K.T. Pogran, D.A. Henderson
- RFC 734**
SUPDUP Protocol M.R. Crispin
- RFC 735**
Revised Telnet byte macro option D. Crocker, R.H. Gumpertz
- RFC 736**
Telnet SUPDUP option M.R. Crispin
- RFC 749**
Telnet SUPDUP—Output option B. Greenberg
- RFC 765**
File Transfer Protocol specification J. Postel
- RFC 768**
User Datagram Protocol J. Postel
- RFC 779**
Telnet send-location option E. Killian
- RFC 783**
TFTP Protocol (revision 2) K.R. Sollins
- RFC 791**
Internet Protocol J. Postel
- RFC 792**
Internet Control Message Protocol J. Postel
- RFC 793**
Transmission Control Protocol J. Postel
- RFC 820**
Assigned numbers J. Postel
- RFC 821**
Simple Mail Transfer Protocol J. Postel
- RFC 822**
Standard for the format of ARPA Internet text messages D. Crocker
- RFC 823**
DARPA Internet gateway R. Hinden, A. Sheltzer
- RFC 826**
Ethernet Address Resolution Protocol: Or converting network protocol addresses to 48.bit Ethernet address for transmission on Ethernet hardware D. Plummer
- RFC 854**
Telnet Protocol Specification J. Postel, J. Reynolds

RFC 855

Telnet Option Specification J. Postel, J. Reynolds

RFC 856

Telnet Binary Transmission J. Postel, J. Reynolds

RFC 857

Telnet Echo Option J. Postel, J. Reynolds

RFC 858

Telnet Suppress Go Ahead Option J. Postel, J. Reynolds

RFC 859

Telnet Status Option J. Postel, J. Reynolds

RFC 860

Telnet Timing Mark Option J. Postel, J. Reynolds

RFC 861

Telnet Extended Options: List Option J. Postel, J. Reynolds

RFC 862

Echo Protocol J. Postel

RFC 863

Discard Protocol J. Postel

RFC 864

Character Generator Protocol J. Postel

RFC 865

Quote of the Day Protocol J. Postel

RFC 868

Time Protocol J. Postel, K. Harrenstien

RFC 877

Standard for the transmission of IP datagrams over public data networks J.T. Korb

RFC 883

Domain names: Implementation specification P.V. Mockapetris

RFC 884

Telnet terminal type option M. Solomon, E. Wimmers

RFC 885

Telnet end of record option J. Postel

RFC 894

Standard for the transmission of IP datagrams over Ethernet networks C. Hornig

RFC 896

Congestion control in IP/TCP internetworks J. Nagle

RFC 903

Reverse Address Resolution Protocol R. Finlayson, T. Mann, J. Mogul, M. Theimer

RFC 904

Exterior Gateway Protocol formal specification D. Mills

RFC 919

Broadcasting Internet Datagrams J. Mogul

- RFC 922**
Broadcasting Internet datagrams in the presence of subnets J. Mogul
- RFC 927**
TACACS user identification Telnet option B.A. Anderson
- RFC 933**
Output marking Telnet option S. Silverman
- RFC 946**
Telnet terminal location number option R. Nedved
- RFC 950**
Internet Standard Subnetting Procedure J. Mogul, J. Postel
- RFC 952**
DoD Internet host table specification K. Harrenstien, M. Stahl, E. Feinler
- RFC 959**
File Transfer Protocol J. Postel, J.K. Reynolds
- RFC 961**
Official ARPA-Internet protocols J.K. Reynolds, J. Postel
- RFC 974**
Mail routing and the domain system C. Partridge
- RFC 1001**
Protocol standard for a NetBIOS service on a TCP/UDP transport: Concepts and methods NetBios Working Group in the Defense Advanced Research Projects Agency, Internet Activities Board, End-to-End Services Task Force
- RFC 1002**
Protocol Standard for a NetBIOS service on a TCP/UDP transport: Detailed specifications NetBios Working Group in the Defense Advanced Research Projects Agency, Internet Activities Board, End-to-End Services Task Force
- RFC 1006**
ISO transport services on top of the TCP: Version 3 M.T. Rose, D.E. Cass
- RFC 1009**
Requirements for Internet gateways R. Braden, J. Postel
- RFC 1011**
Official Internet protocols J. Reynolds, J. Postel
- RFC 1013**
X Window System Protocol, version 11: Alpha update April 1987 R. Scheifler
- RFC 1014**
XDR: External Data Representation standard Sun Microsystems
- RFC 1027**
Using ARP to implement transparent subnet gateways S. Carl-Mitchell, J. Quarterman
- RFC 1032**
Domain administrators guide M. Stahl
- RFC 1033**
Domain administrators operations guide M. Lottor
- RFC 1034**
Domain names—concepts and facilities P.V. Mockapetris

RFC 1035

Domain names—implementation and specification P.V. Mockapetris

RFC 1038

Draft revised IP security option M. St. Johns

RFC 1041

Telnet 3270 regime option Y. Rekhter

RFC 1042

Standard for the transmission of IP datagrams over IEEE 802 networks J. Postel, J. Reynolds

RFC 1043

Telnet Data Entry Terminal option: DODIIS implementation A. Yasuda, T. Thompson

RFC 1044

Internet Protocol on Network System's HYPERchannel: Protocol specification K. Hardwick, J. Lekashman

RFC 1053

Telnet X.3 PAD option S. Levy, T. Jacobson

RFC 1055

Nonstandard for transmission of IP datagrams over serial lines: SLIP J. Romkey

RFC 1057

RPC: Remote Procedure Call Protocol Specification: Version 2 Sun Microsystems

RFC 1058

Routing Information Protocol C. Hedrick

RFC 1060

Assigned numbers J. Reynolds, J. Postel

RFC 1067

Simple Network Management Protocol J.D. Case, M. Fedor, M.L. Schoffstall, J. Davin

RFC 1071

Computing the Internet checksum R.T. Braden, D.A. Borman, C. Partridge

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TCP extensions for long-delay paths V. Jacobson, R.T. Braden

RFC 1073

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RFC 1079

Telnet terminal speed option C. Hedrick

RFC 1085

ISO presentation services on top of TCP/IP based internets M.T. Rose

RFC 1091

Telnet terminal-type option J. VanBokkelen

RFC 1094

NFS: Network File System Protocol specification Sun Microsystems

RFC 1096

Telnet X display location option G. Marcy

RFC 1101

DNS encoding of network names and other types P. Mockapetris

- RFC 1112**
Host extensions for IP multicasting S.E. Deering
- RFC 1113**
Privacy enhancement for Internet electronic mail: Part I — message encipherment and authentication procedures J. Linn
- RFC 1118**
Hitchhikers Guide to the Internet E. Krol
- RFC 1122**
Requirements for Internet Hosts—Communication Layers R. Braden, Ed.
- RFC 1123**
Requirements for Internet Hosts—Application and Support R. Braden, Ed.
- RFC 1146**
TCP alternate checksum options J. Zweig, C. Partridge
- RFC 1155**
Structure and identification of management information for TCP/IP-based internets M. Rose, K. McCloghrie
- RFC 1156**
Management Information Base for network management of TCP/IP-based internets K. McCloghrie, M. Rose
- RFC 1157**
Simple Network Management Protocol (SNMP) J. Case, M. Fedor, M. Schoffstall, J. Davin
- RFC 1158**
Management Information Base for network management of TCP/IP-based internets: MIB-II M. Rose
- RFC 1166**
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- RFC 1179**
Line printer daemon protocol L. McLaughlin
- RFC 1180**
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- RFC 1183**
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- RFC 1184**
Telnet Linemode Option D. Borman
- RFC 1186**
MD4 Message Digest Algorithm R.L. Rivest
- RFC 1187**
Bulk Table Retrieval with the SNMP M. Rose, K. McCloghrie, J. Davin
- RFC 1188**
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G. Carpenter, B. Wijnen

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RFC 1647

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RFC 1702

Generic Routing Encapsulation over IPv4 networks S. Hanks, T. Li, D. Farinacci, P. Traina

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G. Vaudreuil

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SMTP Service Extension for Message Size Declaration J. Klensin, N. Freed, K. Moore

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Internet Protocol, Version 6 (IPv6) Specification S. Deering, R. Hinden

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DNS Extensions to support IP version 6 S. Thomson, C. Huitema

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An Extensible Message Format for Delivery Status Notifications K. Moore, G. Vaudreuil

RFC 1901

Introduction to Community-based SNMPv2 J. Case, K. McCloghrie, M. Rose, S. Waldbusser

RFC 1902

Structure of Management Information for Version 2 of the Simple Network Management Protocol (SNMPv2) J. Case, K. McCloghrie, M. Rose, S. Waldbusser

RFC 1903

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

Using assistive technologies

Assistive technology products, such as screen readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using such products to access z/OS interfaces.

Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. See z/OS TSO/E Primer, z/OS TSO/E User's Guide, and z/OS ISPF User's Guide Vol I for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

z/OS information

z/OS information is accessible using screen readers with the BookServer or Library Server versions of z/OS books in the Internet library at www.ibm.com/systems/z/os/zos/bkserv/.

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Bibliography

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z/OS Communications Server documentation is available in the following forms:

- Online at the z/OS Internet Library web page at www.ibm.com/systems/z/os/zos/bkserv/
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z/OS Communications Server library updates

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z/OS Communications Server information

z/OS Communications Server product information is grouped by task in the following tables.

Planning

Title	Number	Description
z/OS Communications Server: New Function Summary	GC27-3664	This document is intended to help you plan for new IP or SNA function, whether you are migrating from a previous version or installing z/OS for the first time. It summarizes what is new in the release and identifies the suggested and required modifications needed to use the enhanced functions.
z/OS Communications Server: IPv6 Network and Application Design Guide	SC27-3663	This document is a high-level introduction to IPv6. It describes concepts of z/OS Communications Server's support of IPv6, coexistence with IPv4, and migration issues.

Resource definition, configuration, and tuning

Title	Number	Description
z/OS Communications Server: IP Configuration Guide	SC27-3650	This document describes the major concepts involved in understanding and configuring an IP network. Familiarity with the z/OS operating system, IP protocols, z/OS UNIX System Services, and IBM Time Sharing Option (TSO) is recommended. Use this document with the z/OS Communications Server: IP Configuration Reference.

Title	Number	Description
z/OS Communications Server: IP Configuration Reference	SC27-3651	<p>This document presents information for people who want to administer and maintain IP. Use this document with the z/OS Communications Server: IP Configuration Guide. The information in this document includes:</p> <ul style="list-style-type: none"> • TCP/IP configuration data sets • Configuration statements • Translation tables • Protocol number and port assignments
z/OS Communications Server: SNA Network Implementation Guide	SC27-3672	This document presents the major concepts involved in implementing an SNA network. Use this document with the z/OS Communications Server: SNA Resource Definition Reference.
z/OS Communications Server: SNA Resource Definition Reference	SC27-3675	This document describes each SNA definition statement, start option, and macroinstruction for user tables. It also describes NCP definition statements that affect SNA. Use this document with the z/OS Communications Server: SNA Network Implementation Guide.
z/OS Communications Server: SNA Resource Definition Samples	SC27-3676	This document contains sample definitions to help you implement SNA functions in your networks, and includes sample major node definitions.
z/OS Communications Server: IP Network Print Facility	SC27-3658	This document is for systems programmers and network administrators who need to prepare their network to route SNA, JES2, or JES3 printer output to remote printers using TCP/IP Services.

Operation

Title	Number	Description
z/OS Communications Server: IP User's Guide and Commands	SC27-3662	This document describes how to use TCP/IP applications. It contains requests with which a user can log on to a remote host using Telnet, transfer data sets using FTP, send and receive electronic mail, print on remote printers, and authenticate network users.
z/OS Communications Server: IP System Administrator's Commands	SC27-3661	This document describes the functions and commands helpful in configuring or monitoring your system. It contains system administrator's commands, such as TSO NETSTAT, PING, TRACERTE and their UNIX counterparts. It also includes TSO and MVS commands commonly used during the IP configuration process.
z/OS Communications Server: SNA Operation	SC27-3673	This document serves as a reference for programmers and operators requiring detailed information about specific operator commands.
z/OS Communications Server: Quick Reference	SC27-3665	This document contains essential information about SNA and IP commands.

Customization

Title	Number	Description
z/OS Communications Server: SNA Customization	SC27-3666	<p>This document enables you to customize SNA, and includes the following information:</p> <ul style="list-style-type: none"> • Communication network management (CNM) routing table • Logon-interpret routine requirements • Logon manager installation-wide exit routine for the CLU search exit • TSO/SNA installation-wide exit routines • SNA installation-wide exit routines

Writing application programs

Title	Number	Description
z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference	SC27-3660	<p>This document describes the syntax and semantics of program source code necessary to write your own application programming interface (API) into TCP/IP. You can use this interface as the communication base for writing your own client or server application. You can also use this document to adapt your existing applications to communicate with each other using sockets over TCP/IP.</p>
z/OS Communications Server: IP CICS Sockets Guide	SC27-3649	<p>This document is for programmers who want to set up, write application programs for, and diagnose problems with the socket interface for CICS® using z/OS TCP/IP.</p>
z/OS Communications Server: IP IMS Sockets Guide	SC27-3653	<p>This document is for programmers who want application programs that use the IMS™ TCP/IP application development services provided by the TCP/IP Services of IBM.</p>
z/OS Communications Server: IP Programmer's Guide and Reference	SC27-3659	<p>This document describes the syntax and semantics of a set of high-level application functions that you can use to program your own applications in a TCP/IP environment. These functions provide support for application facilities, such as user authentication, distributed databases, distributed processing, network management, and device sharing. Familiarity with the z/OS operating system, TCP/IP protocols, and IBM Time Sharing Option (TSO) is recommended.</p>
z/OS Communications Server: SNA Programming	SC27-3674	<p>This document describes how to use SNA macroinstructions to send data to and receive data from (1) a terminal in either the same or a different domain, or (2) another application program in either the same or a different domain.</p>
z/OS Communications Server: SNA Programmer's LU 6.2 Guide	SC27-3669	<p>This document describes how to use the SNA LU 6.2 application programming interface for host application programs. This document applies to programs that use only LU 6.2 sessions or that use LU 6.2 sessions along with other session types. (Only LU 6.2 sessions are covered in this document.)</p>
z/OS Communications Server: SNA Programmer's LU 6.2 Reference	SC27-3670	<p>This document provides reference material for the SNA LU 6.2 programming interface for host application programs.</p>
z/OS Communications Server: CSM Guide	SC27-3647	<p>This document describes how applications use the communications storage manager.</p>

Title	Number	Description
z/OS Communications Server: CMIP Services and Topology Agent Guide	SC27-3646	This document describes the Common Management Information Protocol (CMIP) programming interface for application programmers to use in coding CMIP application programs. The document provides guide and reference information about CMIP services and the SNA topology agent.

Diagnosis

Title	Number	Description
z/OS Communications Server: IP Diagnosis Guide	GC27-3652	This document explains how to diagnose TCP/IP problems and how to determine whether a specific problem is in the TCP/IP product code. It explains how to gather information for and describe problems to the IBM Software Support Center.
z/OS Communications Server: ACF/TAP Trace Analysis Handbook	GC27-3645	This document explains how to gather the trace data that is collected and stored in the host processor. It also explains how to use the Advanced Communications Function/Trace Analysis Program (ACF/TAP) service aid to produce reports for analyzing the trace data information.
z/OS Communications Server: SNA Diagnosis Vol 1, Techniques and Procedures and z/OS Communications Server: SNA Diagnosis Vol 2, FFST Dumps and the VIT	GC27-3667 GC27-3668	These documents help you identify an SNA problem, classify it, and collect information about it before you call the IBM Support Center. The information collected includes traces, dumps, and other problem documentation.
z/OS Communications Server: SNA Data Areas Volume 1 and z/OS Communications Server: SNA Data Areas Volume 2	GC31-6852 GC31-6853	These documents describe SNA data areas and can be used to read an SNA dump. They are intended for IBM programming service representatives and customer personnel who are diagnosing problems with SNA.

Messages and codes

Title	Number	Description
z/OS Communications Server: SNA Messages	SC27-3671	This document describes the ELM, IKT, IST, IUT, IVT, and USS messages. Other information in this document includes: <ul style="list-style-type: none"> • Command and RU types in SNA messages • Node and ID types in SNA messages • Supplemental message-related information
z/OS Communications Server: IP Messages Volume 1 (EZA)	SC27-3654	This volume contains TCP/IP messages beginning with EZA.
z/OS Communications Server: IP Messages Volume 2 (EZB, EZD)	SC27-3655	This volume contains TCP/IP messages beginning with EZB or EZD.
z/OS Communications Server: IP Messages Volume 3 (EZY)	SC27-3656	This volume contains TCP/IP messages beginning with EZY.
z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM)	SC27-3657	This volume contains TCP/IP messages beginning with EZZ and SNM.
z/OS Communications Server: IP and SNA Codes	SC27-3648	This document describes codes and other information that appear in z/OS Communications Server messages.

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