z/OS

IBM Tivoli Directory Server Messages and Codes for z/OS

Version 2 Release 2

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About this document

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

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

Intended audience

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

How to use this document

Messages are generally arranged in alphanumeric order by message identifier.

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

Conventions used in this document

This document may use the following typographic conventions:

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

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

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

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

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

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

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

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

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

exceeds one line, use the backslash character \ as the last nonblank character on the line to be continued, and continue the command on the next line.

Where to find more information

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

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

Internet sources

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

- **Online library**

  To view and print online versions of the z/OS publications, use this address:

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

- **Redbooks**®

  The documents known as IBM Redbooks that are produced by the International Technical Support Organization (ITSO) are available at the following address:

  http://www.redbooks.ibm.com

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2. Send an email from the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html).

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

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- Contact your IBM service representative.
- Call IBM technical support.
- Visit the IBM Support Portal at z/OS Support Portal (http://www-947.ibm.com/systems/support/z/zos/).

Summary of changes for z/OS IBM Tivoli Directory Server Messages and Codes for z/OS

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

The following LDAP server reason codes are new.

R004212

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

New

The following messages are new.

GLD1310W
GLD1311E
GLD1312E
GLD1313E
GLD1314I
GLD1315I
GLD1316W
GLD1317W
GLD1318E
GLD1319E
GLD1320E
GLD1321E
GLD1322E
GLD1323E
GLD1324E
GLD1325E
GLD1326E
GLD1327E
GLD1328W
GLD1329E
GLD1330E
GLD1331E
GLD1332W
GLD1333W
GLD1334W
GLD1335I
GLD1336E
GLD1337E
GLD1338E
GLD1339E
GLD1340E
GLD1341E
GLD1342E
GLD1343E
GLD1344E
GLD8507E

GLD8508E
GLD8509E
GLD8511I
GLD8512I

Changed

The following messages are changed.
GLD1237
GLD1337
GLD1338
GLD1340
GLD1341

Summary of changes for z/OS Version 2 Release 1

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

- *z/OS V2R2 Migration*
- *z/OS Planning for Installation*
- *z/OS Summary of Message and Interface Changes*
- *z/OS V2R2 Introduction and Release Guide*

Chapter 1. LDAP server and ldif2ds messages (1000)

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

LDAP server messages

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

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

In the message text:

version
> Server version

release
> Server release

level
> Server service level

date
> Server build date

time
> Server build time

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

version
> Runtime version

release
> Runtime release

1

level
> Runtime service level

date
> Runtime build date

time
> Runtime build time

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1003I   LDAP server is starting.

Explanation: The LDAP server is starting.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1004I   LDAP server is ready for requests.

Explanation: The LDAP server has started and is ready for requests.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1005I   LDAP server start command processed.

Explanation: The LDAP server has processed the **START** command.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1006I   LDAP server stop command received.

Explanation: The LDAP server has received the **STOP** command.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1007I   LDAP server is stopping.

Explanation: The LDAP server is stopping.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1008E   Unable to allocate storage.

Explanation: The LDAP server or utility is unable to allocate the necessary storage to continue processing the request.

System action: The program ends.

Operator response: Increase the storage available for use by the LDAP server or utility. Then restart the program. If the problem persists, contact the service representative.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1009A   LDAP server is not APF-authorized.

Explanation: The LDAP server is not running with APF authorization. The PDS which contains the LDAP server, SYS1.SIEALNKE, and the PDSs containing all the DLLs that the LDAP server loads must be APF-authorized to allow the LDAP server to make the necessary program control threading calls.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add SYS1.SIEALNKE to the list of APF-authorized data sets. If using a **JOBLIB** or **STEPLIB** for the LDAP server started task, verify that all data sets in the concatenation are also APF-authorized. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **SYSEVENT**

System action: The program ends.

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1011E **Unable to register for restart: Error** *error_code*, **Reason 0x**reason_code.

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

In the message text:

error_code
    Error code from **IXCARM**

reason_code
    Reason code from **IXCARM**

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1012I   **LDAP server restart registration complete on system** *system_name*.

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

In the message text:

system_name
    Local system name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1013I   **LDAP server restarting on system** *system_name*.

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

In the message text:

system_name
    Local system name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the reason for the restart and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1014E   **Unable to deregister for restart: Error** *error_code*, **Reason 0x**reason_code.

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

In the message text:

error_code
> Error code from **IXCARM**

reason_code
> Reason code from **IXCARM**

System action: The LDAP server is in the process of stopping and continues with shutdown.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1015I   **LDAP server restart deregistration complete on system** *system_name*.

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

In the message text:

system_name
> Local system name

System action: The LDAP server is in the process of stopping and continues with shutdown. The LDAP server is no longer registered with ARM (Automatic Restart Management).

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
> Error code from **pthread_mutex_init()**

reason_code
> Reason code from **pthread_mutex_init()**

error_text
> Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
> Error code from **pthread_cond_init()**

reason_code
> Reason code from **pthread_cond_init()**

error_text
> Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1018A   Unable to initialize the directory schema.

Explanation: The LDAP server or utility is unable to initialize the directory schema. A previous message indicates the reason for the failure.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1019A   Unable to open *from_code_page* **to** *to_code_page* **converter:** *error_code*/*reason_code* **-** *error_text*

Explanation: The LDAP server or utility is unable to open a code page converter to convert character strings. See the description of **iconv_open()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

from_code_page
    Code page to be converted from

to_code_page
    Code page to be converted to

error_code
    Error code from **iconv_open()**

reason_code
    Reason code from **iconv_open()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1020E   Unrecognized LDAP server command.

Explanation: An unrecognized LDAP server operator modify command is detected. The valid LDAP server commands are **AUDIT**, **BACKEND**, **COMMIT**, **DEBUG**, **DISPLAY**, **LOG**, **MAINTMODE**, **REFRESH**, **RESET**, **SNAP**, **UNLOCK**, and **WLMEXCEPT**. The **SNAP** command is available only with the 31-bit LDAP server.

System action: The LDAP server ignores the entered command and continues. A new LDAP server operator modify command may be entered.

Operator response: Issue a valid LDAP server operator modify command.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Operator response or contact Operator.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1021E   Incorrect LDAP server command option specified.

Explanation: An incorrect command option was found within an LDAP server operator modify command.

System action: The LDAP server ignores the entered command and continues. A new LDAP server operator modify command may be entered.

Operator response: Issue a valid LDAP server operator modify command.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Operator response or contact Operator.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1022I   **Debug option processed:** *debug_level*.

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

In the message text:

debug_level
    Debug level

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1023I   **Processing configuration file** *filename*.

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

In the message text:

filename
    LDAP server configuration file name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1024I   **Configuration file** *filename* **processed.**

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

In the message text:

filename
    LDAP server configuration file name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1025A   **Unable to process command options.**

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

debug_options
    Debug options

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See the description of the **-d** parameter on the LDAP server or utility command line for more information about the available debug options and how they are specified. Specify valid debug options for the **-d** command parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1027E   *parameter* **is an unrecognized command parameter.**

Explanation: The command-line parameter indicated in the message is not supported by the LDAP server or utility.

In the message text:

parameter
    Unrecognized command parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the correct command-line parameter to use. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1028E   **No value specified for the** *option* **parameter.**

Explanation: The command-line parameter indicated in the message cannot be specified without a value when starting the LDAP server or utility. The parameter must have a value.

In the message text:

option
    Command parameter with missing value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid value for the command-line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1029E   *port* **is not a valid TCP/IP port number.**

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

In the message text:

port
    TCP/IP port number

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Provide a valid TCP/IP port number. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1030E   **Unable to parse LDAP URL** *url***:** *error_text***.**

Explanation: The LDAP URL specified for an LDAP server command-line parameter or in the LDAP server configuration file is not valid.

In the message text:

url
    LDAP URL

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1031A   Unable to process the server configuration file.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1032E   Unable to open configuration file *filename*: *error_code*/*reason_code* - *error_text*

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

In the message text:

filename
    LDAP server configuration file name

error_code
    Error code from **fopen()**

reason_code
    Reason code from **fopen()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

GLD1033E • GLD1034E

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1033E   **Unable to read configuration file** *filename*: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

filename
    LDAP server configuration file name

error_code
    Error code from **fgets()**

reason_code
    Reason code from **fgets()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1034E   **Configuration line is too long.**

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1035E *option* **is an unrecognized configuration option.**

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

In the message text:

option
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1036W *option* **is an obsolete configuration option.**

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

In the message text:

option
    LDAP server configuration option

System action: The program ignores the configuration option and continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the obsolete option from the LDAP server configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1037E   **Either no value or not enough values have been specified for the** *option* **configuration option.**

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

In the message text:

option
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1038E   **Value** *value* **for configuration option** *option* **is not valid.**

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

In the message text:

value
    LDAP server configuration option value

option
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1039W **Extraneous value specified for the** *option* **configuration option.**

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

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

In the message text:

option
    LDAP server configuration option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1040E **Unable to normalize** *name*: *error_text*.

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

In the message text:

name
    DN or source of DN

error_text
    Error message text

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

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

option
    LDAP server configuration option

section
    LDAP server configuration section name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1042E   Backend name *name* **is already defined.**

Explanation: The LDAP server or utility found a backend name on a **database** option in the LDAP server configuration file that is the same as the name for a previous backend. If a backend name is specified, the name must

be unique. There are also several reserved backend names that cannot be used: `RootDSE`, `Schema`, and `Monitor`. Backend names are not case-sensitive.

In the message text:

name
    Backend name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1043E   **Configuration file** *filename* **causes a recursion loop.**

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

In the message text:

filename
    LDAP server configuration file name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the nested **include** options from the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1045E   **The MAC address must be 12 hexadecimal digits.**

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

option
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1047E   **Directory** *path* **is in use by another database instance.**

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

In the message text:

path
    Database directory path

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the **databaseDirectory** option to specify a unique file directory for each LDBM, CDBM, and file-based GDBM backend in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1048E   Unable to add schema definition: *error_text*.

Explanation: The LDAP server is unable to add a new definition to the directory schema.

In the message text:

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1050E   Unable to create thread: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

error_code
    Error code from **pthread_create()**

reason_code
    Reason code from **pthread_create()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1051A   Unable to start the console task.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1052A   Unable to start the network task.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1053E   **Unable to wait on condition variable:** *error_code*/*reason_code* **-** *error_text*

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

In the message text:

error_code
    Return code from **pthread_cond_wait()**

reason_code
    Reason code from **pthread_cond_wait()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **pthread_cond_signal()**

reason_code
    Reason code from **pthread_cond_signal()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **socket()**

reason_code
    Reason code from **socket()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **ioctl()**

reason_code
    Reason code from **ioctl()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

name
    Network interface name

error_code
    Error code from **ioctl()**

reason_code
    Reason code from **ioctl()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

GLD1059I

error_code
    Error code from **ioctl()**

reason_code
    Reason code from **ioctl()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1059I   **Listening for requests on** *ip* **port** *port***.**

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

In the message text:

ip   IP address

port
    TCP/IP port number

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1060I   **No longer listening for requests on** *ip* **port** *port***.**

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

In the message text:

ip   IP address

port
    TCP/IP port number

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1061E   **Network monitor terminating abnormally.**

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error, if there is one. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1063E   **Unable to initialize the SSL environment:** *return_code* **-** *error_text***.**

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

In the message text:

GLD1064E

return_code
    Return code from SSL routine

error_text
    Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **dllload()**

reason_code
    Reason code from **dllload()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **dllqueryfn()**

reason_code
    Reason code from **dllqueryfn()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

ip   IP address

port
> TCP/IP port number

error_code
> Error code from **bind()**

reason_code
> Reason code from **bind()**

error_text
> Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
> Error code from **listen()**

reason_code
> Reason code from **listen()**

error_text
> Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **accept()**

reason_code
    Reason code from **accept()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **recv()**

reason_code
    Reason code from **recv()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

GLD1070E • GLD1071E

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1070E   *suffix* **is a reserved database suffix.**

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

In the message text:

`suffix`
    Suffix option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the **suffix** option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1071E   *suffix* **is a duplicate database suffix.**

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

In the message text:

`suffix`
    Suffix option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the **suffix** option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **send()**

reason_code
    Reason code from **send()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request may fail. This message could be accompanied by a failure of the client application because of lost response data. Client symptoms might include time-outs, long waits, or connection failures.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Ensure TCP/IP is operating correctly. Then retry the request if it failed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

Explanation: The value for the **maxConnections** configuration option in the LDAP server configuration file is too large compared to the maximum number of file descriptors allowed for the LDAP server process. The **maxConnections** configuration option determines the maximum number of concurrent client connections. Each client connection requires a socket descriptor and each socket descriptor counts against the maximum number of files for a

process. The LDAP server requires 4 file descriptors plus 2 file descriptors for each backend, plus a minimum of 30 file descriptors for network connections. To avoid running out of file descriptors, a limit is placed on the maximum number of concurrent client connections based on the current file limit.

In the message text:

old_value
    Old maximum client connections value

new_value
    New maximum client connections value

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

current_value
    Current number of client connections

maximum_value
    Maximum number of client connections

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

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

- If the **maxConnections** configuration option is set in the LDAP server configuration file, increase its value. Verify the increased value of **maxConnections** can be supported by obtaining the values of the **MAXFILEPROC** statement and of **MAXSOCKETS** on the **NETWORK** statement in the **BPXPRMxx** member. Also, verify that the **FILEPROCMAX** value in the RACF OMVS segment of the user ID running the LDAP server is set to a sufficient value to support the increased value of **maxConnections**.
- If **maxConnections** is not set in the LDAP server configuration file, the number of connections is limited by the values of the **MAXFILEPROC** statement and of **MAXSOCKETS** on the **NETWORK** statement in **BPXPRMxx**, and also by the value of **FILEPROCMAX** in the RACF OMVS segment of the user ID running the LDAP server. Ensure these are set to a sufficient value.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

current_value
    Current number of client connections

maximum_value
    Maximum number of client connections

System action: The program continues.

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1077E   Maximum client connections reached, connection from *ip* **rejected.**

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

In the message text:

ip   IP address

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

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

- If the **maxConnections** configuration option is set in the LDAP server configuration file, increase its value. Verify the increased value of **maxConnections** can be supported by obtaining the values of the **MAXFILEPROC** statement and of **MAXSOCKETS** on the **NETWORK** statement in the **BPXPRMxx** member. Also, verify that the **FILEPROCMAX** value in the RACF OMVS segment of the user ID running the LDAP server is set to a sufficient value to support the increased value of **maxConnections**.
- If **maxConnections** is not set in the LDAP server configuration file, the number of connections is limited by the values of the **MAXFILEPROC** statement and of **MAXSOCKETS** on the **NETWORK** statement in **BPXPRMxx**, and also by the value of **FILEPROCMAX** in the RACF OMVS segment of the user ID running the LDAP server. Ensure these are set to a sufficient value.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **getrlimit()**

reason_code
    Reason code from **getrlimit()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

current_limit
    Current maximum file limit

new_limit
    Recommended maximum file limit

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

GLD1081A

In the message text:

return_code
Return code from **krb5_dll_load()**

reason_code
Reason code from **krb5_dll_load()**

error_text
Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the SYS1.SIEALNKE data set is available to the LDAP server job step. If Kerberos authentication is not needed, set the **supportKrb5** option in the LDAP server configuration file to **off**. Restart the program if it ended or if Kerberos support is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1082A   Network interface *ip* **on port** *port* **is not available.**

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

In the message text:

ip   IP address

port
    TCP/IP port number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1083A   Host *host* **cannot be resolved.**

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

In the message text:

host
    Host name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1084I   Network interface status

Explanation: This message is displayed in response to the LDAP server **DISPLAY NETWORK** operator modify command. The remaining lines in this multi-line message display the status of each network interface. A network interface is **ACTIVE** if the LDAP server is listening for requests on that interface. A network interface is **INACTIVE** if the interface has been stopped and has not been restarted yet. No entry is displayed for network interfaces which were not started when the LDAP server was started. The LDAP server checks for network interface changes based on the value of the **LDAP_NETWORK_POLL** environment variable, which has a default value of 5 minutes.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1085I   No active network interfaces.

Explanation: This message is displayed in response to the LDAP server **DISPLAY NETWORK** operator modify command when there are no active network interfaces to display, and no network interfaces ever started successfully.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1086I   Maximum number of lines displayed.

Explanation: There is a limit of 254 lines of output from an LDAP server operator modify command. The maximum number of output lines has been reached for this command and the rest of the output is not displayed.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1087E   The *type* backend is already defined.

Explanation: The LDAP server or utility found multiple **database** options in the LDAP server configuration file for a CDBM, GDBM, SDBM, or EXOP backend. Each of these backends can be defined at most once in the configuration file.

In the message text:

type
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the extra backend section from the LDAP server configuration file. The backend section includes the **database** option and all the options following it until the next **database** option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1088E   The EXOP backend requires Program Call services.

Explanation: The Policy Directory extended operations backend requires Program Call services. The LDAP server must have a **listen** option specifying `ldap://:pc` or `ldaps://:pc` to provide Program Call services. The **listen** option can be specified in the LDAP server configuration file or on the LDAP server command line when starting the server.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

option
    Option name

type
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1090E   The SDBM backend supports a single suffix.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
   Schema database file name

error_code
   Error code from **fopen()**

reason_code
   Reason code from **fopen()**

error_text
   Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
   Schema database file name

error_code
   Error code from **fread()**

reason_code
   Reason code from **fread)_**

error_text
   Error text corresponding to the error code

System action:

• If the error occurs during LDAP server initialization, the program ends.

GLD1093E

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
    Schema database file name

error_code
    Error code from **fwrite()**

reason_code
    Reason code from **fwrite()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1094E   Unable to create directory *name***:** *error_code*/*reason_code* **-** *error_text*

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

In the message text:

name
   Directory name

error_code
   Error code from **mkdir()**

reason_code
   Reason code from **mkdir()**

error_text
   Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1095E   Schema database file *filename* **is not valid.**

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

In the message text:

filename
     Schema database file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1096E   Unable to decode schema database record.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1097E   Unable to encode schema database record.

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

System action: If the error occurs during LDAP server initialization, the server ends. If it occurs during a modify

operation of the schema, the modify operation fails and the server continues to run with its current schema.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1098E   **Unable to rename** *oldfile* **to** *newfile***:** *error_code***/***reason_code* **-** *error_text*

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

In the message text:

oldfile
    Old file name

newfile
    New file name

error_code
    Error code from **rename()**

reason_code
    Reason code from **rename()**

error_text
    Error text corresponding to the error code

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

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1099E   Schema unique identifier *number* **is already assigned.**

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

In the message text:

number
    Identifier number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

System action: The server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1101A   Unable to load the database backends.

Explanation: The LDAP server is unable to load the database backends. A previous message indicates the reason for the failure.

System action: The server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

Explanation: The LDAP server or utility is running in 64-bit addressing mode but one of the **database** options in the LDAP server configuration file does not specify a load module for 64-bit addressing mode. As a result, the backend is not loaded.

In the message text:

type
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either specify a load module for 64-bit addressing mode on the **database** option or remove

the backend section from the LDAP server configuration file. The backend section includes the **database** option and all the options following it until the next **database** option. Restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

backend
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

module
    DLL module

error_code
    Error code from **dllload()**

reason_code
    Reason code from **dllload()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

name
    Entry point name

module
    DLL module

error_code
    Error code from **dllqueryfn()**

reason_code
    Reason code from **dllqueryfn()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

GLD1106E • GLD1107I

Automation: Not applicable.

GLD1106E *type* **backend initialization failed for backend named** *name*.

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

In the message text:

type
   Backend type

name
   Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1107I **SNAP dump completed.**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1108I   Server statistics reset.

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1109I   Server activity statistics

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1111E   Unable to normalize schema owner: *text***.**

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

In the message text:

text
   Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1112E   Unable to process schema ACL: *error_text***.**

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

In the message text:

error_text
   Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

`label1 1010101010101010 1010101010101010`

In the message text:

keylabel
    Encryption key label name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1115E   Label '*keylabel***' is not available:** *error_text*.

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

In the message text:

keylabel
    Encryption key label name

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

IP_address
    Client IP address

return_code
    Return code from SSL routine

Error_text
    Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

IP_address
    Client IP address

return_code
    Return code from **gsk_secure_socket_read()**

Error_text
    Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

IP_address
　　Client IP address

return_code
　　Return code from **gsk_secure_socket_write()**

Error_text
　　Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

return_code
　　Return code from **gsk_attribute_get_cert_info()**

Error_text
　　Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1120E   **Kerberos initialization failed: 0x***return_code* **-** *error_text***.**

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

In the message text:

return_code
    Return code from Kerberos routine

error_text
    Error text corresponding to the return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1121E   **Unable to parse Kerberos principal '***principal_name***': 0x***return_code* **-** *error_text***.**

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

In the message text:

principal_name
    Kerberos principal name

return_code
    Return code from **krb5_parse_name()**

error_text
    Error text corresponding to the return code

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

GLD1122E

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that a valid Kerberos principal name is specified for the **serverKrbPrinc** option in the LDAP server configuration file. Correct the option, or, if Kerberos authentication is not needed, set the **supportKrb5** option in the LDAP server configuration file to **off**. Restart the program if it ended or if Kerberos support is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1122E   GSSAPI initialization failed: Major 0x*major_error***, Minor 0x***minor_error* **-** *principal_name*.

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

In the message text:

major_error
    Major error code from Kerberos routine

minor_error
    Minor error code from Kerberos routine

principal_name
    Kerberos server principal name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the LDAP server has access to the encryption key for the Kerberos principal associated with the LDAP server. The encryption key is in a key table or the local KDC depending on the **krbKeytab** option value in the LDAP server configuration file. Correct the LDAP server configuration file or the GSSAPI environment on the system. If Kerberos authentication is not needed, set the **supportKrb5** option in the LDAP server configuration file to **off**. Restart the program if it ended or if Kerberos support is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1123E • GLD1124E

GLD1123E   Unable to wrap a GSSAPI message: Major 0x*major_error***, Minor 0x***minor_error*** - ***principal_name***.**

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

In the message text:

major_error
> Major error code from **gss_wrap()**

minor_error
> Minor error code **gss_wrap()**

principal_name
> Kerberos server principal name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1124E   Unable to unwrap a GSSAPI message: Major 0x*major_error***, Minor 0x***minor_error*** - ***principal_name***.**

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

In the message text:

major_error
> Major error code from **gss_unwrap()**

minor_error
> Minor error code from **gss_unwrap()**

principal_name
> Kerberos server principal name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

on the system. Then retry the client operation. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1125W **The** *option* **configuration option is specified more than once.**

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

In the message text:

option
    LDAP server configuration option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1126I **Server lock statistics**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1127I   Server lock statistics reset.

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1128E   ARM element name *arm_name* is already in use.

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

In the message text:

arm_name
    ARM element name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1129I   **Program Call communication is active.**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

1   Job step is not APF-authorized.

2   Program Call support is being used by another LDAP server on the same system.

3   **ESTAEX** create failed. The reason code is the **ESTAEX** return code. See the description of **ESTAEX** in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for more information about the error.

5   **LXRES** failed. The reason code is the **LXRES** return code. See the description of **LXRES** in *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* for more information about the error.

6   **ETCRE** failed. The reason code is the **ETCRE** return code. See the description of **ETCRE** in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for more information about the error.

7   **ETCON** failed. The reason code is the **ETCON** return code. See the description of **ETCON** in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for more information about the error.

8   **IEANTCR** failed. The reason code is the **IEANTCR** return code. See the description of **IEANTCR** in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for more information about the error.

In the message text:

return_code
    Return code

reason_code
    Reason code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1131E   Program Call support not activated because another server already provides Program Call support.

Explanation: Another LDAP server is already running with Program Call support activated. Only one LDAP server on each system can provide Program Call support.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If Program Call support is needed on this LDAP server, stop the other LDAP server that is running with Program Call support and remove the **listen** option for Program Call support from the LDAP server configuration file for the other server. Then restart both LDAP servers. If Program Call support is not needed on this LDAP server, remove the **listen** option for Program Call support from the LDAP server configuration file for the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1132E   Program Call termination failed: Return code *return_code*, **Reason code** *reason_code*.

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

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

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

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

In the message text:

return_code
    Return code

reason_code
> Reason code

System action: The LDAP server continues. The server may be in the process of ending.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1133A   Unable to start the Program Call support.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1135I   Sysplex status

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1136I   Cross-system services are not available.

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1137A   Unable to initialize sysplex services.

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

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1138E   **Cross-system group name** *value* **is not valid.**

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

In the message text:

value
    Cross-system group name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1139E   **Not authorized to join cross-system group** *group_name*.

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

In the message text:

group_name
    Cross-system group name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1140E   Cross-system group *group_name* **is not defined.**

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

In the message text:

group_name
>   Cross-system group name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

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

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

In the message text:

return_code
>   Return code

reason_code
>   Reason code

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

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Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

system_name
    System name

group_name
    Cross-system group name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

In the message text:

return_code
    Return code

reason_code
    Reason code

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1144I   SSL environment refreshed.

Explanation: A new SSL environment has replaced the existing SSL environment. This message is displayed upon completion of the LDAP server **REFRESH SSL** operator modify command.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1145I   SSL support is not active.

Explanation: The LDAP server **REFRESH SSL** operator modify command cannot be processed because SSL support is not enabled in the LDAP server. Either SSL support is not configured or the LDAP server is unable to initialize the SSL environment.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

system_name
    System name

group_name
    Cross-system group name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

system_name
    System name

group_name
    Cross-system group name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1148E   Unable to set cross-system group owner: Return code *return_code*, **Reason code x'***reason_code***'.**

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

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

In the message text:

return_code
    Return code

reason_code
    Reason code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1149I   System *system_name* **is leaving the sysplex.**

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

In the message text:

system_name
    System name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

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Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

In the message text:

return_code
> Return code

reason_code
> Reason code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1151E Unable to reply to cross-system message: Return code *return_code*, **Reason code x'***reason_code***'.**

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

2 XCF services are not available.

4 Insufficient storage available on source system.

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

11 Message cancelled.

12 Unknown notification response.

In the message text:

return_code
    Return code

reason_code
    Reason code

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1152E Time limit exceeded while loading schema from group owner.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

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Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1153E   The schema owner cannot be contacted.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a backend name on the **database** option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

Explanation: The backend name for an LDBM, TDBM, CDBM, or GDBM backend has a maximum length of 8 characters when multi-server mode is enabled for the backend. Multi-server mode is enabled by specifying the **serverSysplexGroup** option in the global section and the **multiserver on** option in the backend section of the LDAP server configuration file.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid backend name on the **database** option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

Explanation: The directory specified by the **databaseDirectory** option in the LDBM, CDBM, or GDBM backend section of the LDAP server configuration file must be a fully qualified path. That is, the path must start with a '/'.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a fully qualified path on the **databaseDirectory** option in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1157E Multi-server mode requires cross-system services.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1158E Multi-server change log support is required.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1159E   Multi-server support required for all LDBM, TDBM, CDBM, and GDBM backends.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

return_code
    Return code from **ldap_ssl_client_init()**

reason_code
    Reason code from **ldap_ssl_client_init()**

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

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Descriptor code: None.

Automation: Not applicable.

GLD1161E   **The** *option1* **configuration option requires the** *option2* **configuration option.**

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

In the message text:

option1
    LDAP server configuration option

option2
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1162E   **Configuration options** *option1* **and** *option2* **are mutually exclusive.**

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

In the message text:

option1
    Configuration option one

option2
    Configuration option two

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove one or both of the options from the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1163I   Replication status

Explanation: This message is displayed in response to the LDAP server **DISPLAY REPLICAS** operator modify command. The remaining lines in this multi-line message display the status of each peer or replica server.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1164I   No replication status.

Explanation: This message is displayed in response to the LDAP server **DISPLAY REPLICAS** operator modify command when there are no peer or replicas servers. It can also be displayed if the LDAP server that received the operator modify command is in a sysplex but is not the sysplex owner. Only the LDAP server that is the cross-system group owner has information about peer and replica servers.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If this LDAP server is in a sysplex and is not the cross-system group owner, issue the LDAP server **DISPLAY XCF** operator modify command against this LDAP server to determine the cross-system group owner. Then direct the **DISPLAY REPLICAS** operator modify command to the group owner.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1165I   **The LDAP server is in maintenance mode.**

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1166I   **LDAP server maintenance mode has ended.**

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1167I   **The LDAP server is already in maintenance mode.**

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

System action: The LDAP server continues in maintenance mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1168I   The LDAP server is not in maintenance mode.

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

System action: The LDAP server continues in regular mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

option
    LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

return_code
    Native return code

state
    SQL state

error_text
    SQL message text

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1172E   **Error code** *error_code* **received for ODBC function** *name*.

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

In the message text:

error_code
    Error code

name
    ODBC function name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1174E   LDAP server stopping because DB2 is terminating.

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

type
    DB2 attachment facility type

return_code
    Return code

reason_code
    Reason code

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify the values in the DSNAOINI configuration file used by the LDAP server and ensure that DB2 is running. Restart the program if it ended or if the DB2 backends are needed. If the problem is unable to be resolved, contact the DB2 database administrator.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

error_code
    Error code from **fopen()**

reason_code
    Reason code from **fopen()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the encryption keys data set exists and can be accessed by the LDAP server or utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1177E   **Unable to read the encryption keys dataset:** *error_code/reason_code* **-** *error_text*

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

In the message text:

error_code
    Error code from **fgets()**

reason_code
    Reason code from **fgets()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1178E   **The schema owner busy, retrying.**

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1179E **The** *option* **configuration option value must be different for each** *type* **backend.**

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

In the message text:

option
    Configuration option name

type
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

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

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

option
    Activity log option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1181E   **Incorrect LDAP server activity log option specified:** *option*.

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

In the message text:

option
      Incorrect activity log option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1182A   **Unable to initialize activity logging.**

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

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1184E   **Unable to start activity logging.**

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1185I   LDAP server audit option processed: *option.*

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

In the message text:

option
     Audit option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1186E   Incorrect LDAP server audit option specified: *option.*

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

In the message text:

option
     Incorrect audit option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1187I   LDAP server SMF auditing ON.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1188I   LDAP server SMF auditing OFF.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1189I   **LDAP server audit settings updated with values** *values***.**

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

In the message text:

values
     String representation of audit values

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1190I   **Audit status**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the **audit** option from the LDAP server configuration file and do not issue the LDAP server **AUDIT** or **DISPLAY AUDIT** operator modify commands.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1193E   XCF send for *name* **timed out, retrying.**

Explanation: XCF was unable complete the send of a request from the indicated backend to the owner of the resource in the LDAP server cross-system group.

In the message text:

name
     Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1194I   Component Trace has been successfully started for GLDSRVR.

Explanation: Component TRACE (CTRACE) has successfully started on the LDAP server in CTRACE component name GLDSRVR. The LDAP server writes CTRACE records to a subnode under the GLDSRVR component name.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

return_code
   Return code from **CTRACE DEFINE**

reason_code
   Reason code from **CTRACE DEFINE**

System action: The program continues, but component trace is not used.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1197I   **Active trace points now written to memory and trace file for GLDSRVR.**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
    Log file file name

error_code
    Error code from **fopen()**

reason_code
    Reason code from **fopen()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1199I   **The backend named** *name* **has been set to read-only mode.**

Explanation: The indicated backend is successfully set to read-only mode after the LDAP server **BACKEND** operator modify command is issued.

In the message text:

name
     Backend name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1200I   **The backend named** *name* **has been set to read/write mode.**

Explanation: The indicated backend is successfully set to read/write mode after the LDAP server **BACKEND** operator modify command is issued.

In the message text:

name
     Backend name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1201I   The backend named *name* **is already set to read-only mode.**

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

In the message text:

name
　　Backend name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

name
　　Backend name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1203E   Incorrect LDAP server backend option specified: *options***.**

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

In the message text:

options
> Options specified on LDAP server **BACKEND** operator modify command

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Retry the **BACKEND** operator modify command with valid options.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1204I   **Schedule commit for all backends completed.**

Explanation: A database commit resulting from an LDAP server **COMMIT** operator modify command has successfully completed on all backends.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1205I   **Schedule commit for all backends failed.**

Explanation: A database commit resulting from an LDAP server **COMMIT** or **BACKEND** operator modify command has failed. A previous message may indicate the reason for the failure.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message (if any) to correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1206I   Only sysplex owner can perform command.

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1207E   *type* backend specified for a non-*type* database.

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

In the message text:

type
    LDAP server backend type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1208E　　Configuration for *type* **backend named** *name* **failed.**

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

In the message text:

type
　　Backend type

name
　　Backend name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error in the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
　　File name

error_code
　　Error code from **fcntl()**

reason_code
　　Reason code from **fcntl()**

error_text
　　Error text corresponding to the error code

System action:

- If a read or write file lock error is encountered during LDAP server initialization of an LDBM, CDBM, or GDBM (file-based) backend, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.

- If a read or write file lock error is encountered while executing the **ds2ldif** utility to unload an LDBM or CDBM backend, an **unloadRequest** extended operation is attempted to unload the wanted backend data.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

ip   IP address

port
    TCP/IP port number

GLD1212E

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1212E   Unable to chmod file *filename*: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

filename
    LDBM database, CDBM database, schema file name, or replication error log

error_code
    Error code from routine

reason_code
    Reason code from routine

error_text
    Error text corresponding to the error code

System action:

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1213E   **Unable to chown file** *filename*: *error_code*/*reason_code* - *error_text*

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

In the message text:

filename
　　LDBM database or schema file name

error_code
　　Error code from routine

reason_code
　　Reason code routine

error_text
　　Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Ensure that the LDAP server has the appropriate authority to change the owner on all of the LDBM, CDBM, GDBM (file-based), and schema files.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

return_code
    LDAP return code

error_text
    Error text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

name
    Backend name

return_code
    LDAP return code

error_text
    Error text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1216E   Unable to send request for backend *name* **to sysplex group owner: return code** *return_code***.**

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

1   An unavailable XCF service.

80   An XCF error.

In the message text:

name
    Backend name

return_code
    Return code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the XCF service is available. Restart the program if it ended. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1217E   Unable to receive schema.

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

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

GLD1218E

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that there is enough storage available for use by the LDAP server. Then restart the program if it ended. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

operation
     Operation name

dn   Distinguished name of entry to replicate

host
     Replica server host name

port
     Replica server port number

return_code
     LDAP return code

filename
     Replication error log file name

System action: The LDAP server continues. Replication to the indicated replica server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Examine the replication error log to determine the cause of the failure. Fix the problem on the replica server. Then apply the change in the replication error log to the replica server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1219I **The amount of replication changes set aside has reached the maximum for error log** *filename*

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

In the message text:

filename
    Replication error log file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1220I **Replication to replica** *host***:***port* **has stalled.**

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

In the message text:

host
    Replica server host name

port
    Replica server port number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

GLD1221E • GLD1222E

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

filename
    File name

error_code
    Error code from **fprintf()** or **fwrite()**

reason_code
    Reason code from **fprintf()** or **fwrite()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file can be written to by the LDAP server and is not full. If the error occurred while writing an activity log record, use the LDAP server **LOG** operator modify command to activate activity logging after the error is corrected.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

routine
    File operation routine name

filename
    File name

error_code
    Error code from the C API

reason_code
 Reason code from the C API

error_text
 Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1223I End display output

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1224I Backend status

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1225I   Maintenance Mode status

Explanation: This message is displayed at the beginning of the output of the LDAP server **DISPLAY MAINTMODE** operator modify command. The maintenance mode status follows.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1226I   Debug settings

Explanation: This message is displayed at the beginning of the output of the LDAP server **DISPLAY DEBUG** operator modify command. The debug settings follow.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1227I   **This LDAP server has become LDAP sysplex group owner.**

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

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1228E   **Unable to cancel thread:** *error_code*/*reason_code* **-** *error_text*

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

In the message text:

error_code
    Error code from **pthread_cancel()**

reason_code
    Reason code from **pthread_cancel()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1229E   **Environment variable file cannot be opened. Processing is continuing without setting additional environment variables.**

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

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

line_number
    Line number

filename
    Environment variables file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1231E   Environment variable ignored because '=' is missing: line *line_number*, **file** *filename*.

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

In the message text:

line_number
>   Line number

filename
>   Environment variables file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1232E   Environment variable is ignored because name is NULL: line *line_number*, **file** *filename*.

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

In the message text:

line_number
>   Line number

filename
>   Environment variables file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1233E **Environment variable is ignored because value could not be set: line** *line_number*, **file** *filename*.

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

In the message text:

line_number
    Line number

filename
    Environment variables file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

line_number
    Line number

filename
    Environment variables file name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

Explanation:

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

System action:

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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

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

In the message text:

type
    Backend type

name
    Backend name

attribute
    Undefined attribute type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

GLD1240E • GLD1241W

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1240E   A *type* **backend named** *name* **database update is missing.**

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

In the message text:

type
>   Backend type

name
>   Backend name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Check the system log for an earlier message indicating a cross-system communication error. After correcting the problem, restart this LDAP server to synchronize the indicated database with the group owner.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1241W   The *option1* **configuration option value** *value* **cannot be used because it is not in a configured suffix and** *option2* **is not specified.**

Explanation: The distinguished name specified for the LDAP root administrator (**adminDN**), peer server (**peerServerDN**), or master replica server (**masterServerDN**) in the LDAP server configuration file cannot be used to bind to the LDAP server because the password is not specified, either in the corresponding password configuration option (**adminPW**, **peerServerPW**, or **masterServerPW**) or in an entry for the distinguished name in the directory. The DN does not fall under any of the suffixes in the LDAP server configuration file or any of the suffixes added by plug-in extensions to the LDAP server, thus there cannot be an entry for the DN in the directory.

In the message text:

option1
>   LDAP server configuration option

value
>   LDAP server configuration option value

option2
>   LDAP server configuration option

System action: The program continues but the LDAP root administrator, peerServer DN, or masterServer DN cannot access the LDAP server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If intending to bind to the LDAP server using the root administrator, peer server, or master server distinguished name, it is recommended that the configuration option value be changed so that the DN falls under one of the suffixes in the LDAP server configuration file or one of the suffixes added by plug-in extensions to the LDAP server. Then restart the server and add an entry for the distinguished name containing a **userPassword** value to the directory. As a less-secure alternative, the corresponding password configuration option can be added to LDAP server configuration file and then restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1242W   SDBM update operations and some search operations cannot be performed because there is no RACF address space.

Explanation: The SDBM backend has detected that the RACF address space is not running. SDBM operations that use the RACF address space fail and return a return code of decimal 52 (LDAP_UNAVAILABLE - 'Directory server function is unavailable'). These operations include all update operations and any search operation that scans the RACF database using the RACF **SEARCH** command. Binding to SDBM and searches for a specific RACF user, group, connection, or resource profile can be performed because they do not use the RACF address space.

System action: The program continues but SDBM update operations and some search operations cannot be performed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If SDBM is needed to update RACF user, group, connection, or resource profiles or to search the RACF database, start the RACF address space. These SDBM operations can then be performed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1243I   Analysis of DB2 RUNSTATS utility output complete.

Explanation: The output of the DB2 RUNSTATS utility in the DB2 catalog has been reexamined. This message is displayed upon completion of the LDAP server **REFRESH DB2RUNSTATS** operator modify command.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1244E   Unable to analyze DB2 RUNSTATS utility output.

Explanation: The LDAP server cannot analyze DB2 RUNSTATS utility output in the DB2 catalog. This message is displayed when errors are encountered during the LDAP server **REFRESH DB2RUNSTATS** operator modify command.

System action: The LDAP server uses the updated DB2 catalog statistics for those that were successfully analyzed, but continues using the previous DB2 catalog statistics for those that it could not process successfully. More error messages may precede this message which provides more details.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the previous error messages in the LDAP server job log to analyze and correct the error. Then, reissue the **REFRESH DB2RUNSTATS** operator modify command.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1245E   Unable to get thread-specific value: *error_code/reason_code - error_text*

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

In the message text:

error_code
    Error code from **pthread_getspecific()**

reason_code
    Reason code from **pthread_getspecific()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1246E   Unable to set thread-specific value: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

error_code
     Error code from **pthread_setspecific()**

reason_code
     Reason code from **pthread_setspecific()**

error_text
     Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1247E   Unable to create key identifier: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

error_code
     Error code from **pthread_key_create()**

reason_code
     Reason code from **pthread_key_create()**

error_text
     Error text corresponding to the error code

System action: The program ends.

GLD1248W

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1248W   Unable to connect to DB2; will attempt retry *current_retry* **of** *maximum_retries* **in** *number* **seconds.**

Explanation: The LDAP server is unable to establish a connection with DB2 during LDAP server startup. It retries to connect to DB2. The LDAP server global configuration option **db2StartUpRetryLimit** sets the maximum number of times the LDAP server can retry a DB2 connection during server startup. The number of seconds to wait before each retry attempt is determined by the value of the **db2StartUpRetryInterval** LDAP server global configuration option. The LDAP server, by default, waits 45 seconds before each retry attempt.

In the message text:

current_retry
    Current® retry attempt

maximum_retries
    Maximum retry attempts

number
    Interval before the next retry attempt

System action: The LDAP server waits for the specified number of seconds before retrying to connect to DB2. If the final retry attempt is unsuccessful, then the DB2-based backends do not start.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the values in the DSNAOINI configuration file used by the LDAP server and ensure that DB2 is running or is starting. If using the RRS attachment facility, ensure that it is running or is starting. The attachment facility being used is specified in the DSNAOINI configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1249E   Unable to start DB2 monitor.

Explanation: The LDAP server is unable to start the DB2 monitor thread. A previous message indicates the reason for the failure.

System action: All DB2-based backends do not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the problem. Restart the program if it did not start or if DB2-based backends are needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1250E   The *option* configuration option requires the *type* backend.

Explanation: The LDAP server or utility found an option in the LDAP server configuration file whose processing requires that a specific type of backend also be configured, but a backend of that type is not contained in the configuration file.

In the message text:

option
> LDAP server configuration option

type
> Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the option from the LDAP server configuration file or add a backend of the specified type to the configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1251E   **Schema database version** *version1* **not supported, highest supported** *version2***.**

Explanation: The LDAP server or utility found that the schema database is at a higher version level than is currently supported by the LDAP server. This indicates that the schema database may contain values that the LDAP server cannot process. The schema cannot be loaded from the database.

In the message text:

version1
   Database schema version

version2
   Server schema version

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restore the LDAP server to the level used to create the schema database. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1252E   **Unencrypted data from** *IP_address1* **has been sent to a secure connection on** *IP_address2* **port** *port***.**

Explanation: The LDAP server encountered unencrypted data sent from the IP address indicated in the message to a secure connection on the LDAP server. The server can only process encrypted data when using a secure connection.

In the message text:

IP_address1
   Client IP address

IP_address2
   Server IP address

port
   Server port number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If a command utility such as **ldapsearch** is being used and secure communications are intended, ensure that the **-Z** (use secure communications) option is specified. If secure communications are not wanted, then make sure that a non-secure port is specified on the command utility. If another LDAP client application is being used and secure communications are intended, verify that the application calls **ldap_ssl_init()**

and **ldap_ssl_client_init()**. If secure communications are not wanted, make sure that the application uses a non-secure port.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1253W   The '*old_option*' configuration option value has been replaced by '*new_option*'.

Explanation: The LDAP server or utility found an option or value in the LDAP server configuration file that is no longer supported. That option or value has been replaced by another option or value. To facilitate migration, the program still accepts the old option or value, but internally converts it to the new option or value, as displayed in the message. The LDAP server configuration file is not changed.

In the message text:

old_option
    Old LDAP server configuration option

new_option
    New LDAP server configuration option

System action: The program continues, using the replacement configuration option or value. Support for the old configuration option or value may be removed in a future release of the LDAP server, resulting in the program ending.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Replace the old option or value with the new option or value in the LDAP server configuration file. If using a new option, ensure that the option is in the appropriate section of the configuration file. For example, if replacing the 'database ictx' option with the 'plugin' option, move the 'plugin' option to the global section of the configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1254E   Plug-in initialization failed for plug-in named '*name*'.

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

In the message text:

name
    Plug-in name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. Restart the program if it did not initialize or if the plug-in is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1255E   Plug-in start-up failed for plug-in named '*name*'.

Explanation: The indicated plug-in failed to start. A previous message indicates the reason for the failure.

In the message text:

name
     Plug-in name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. Restart the program if it did not start or if the plug-in is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1256E   Replication entry '*name*' is not supported in this replication configuration.

Explanation: The LDAP server or utility found a replication entry that is not supported in this replication configuration. If **useAdvancedReplication on** is specified in the LDAP server configuration file, then entries with an object class of **replicaObject** are not supported. If **useAdvancedReplication off** is specified in the LDAP server configuration file, then entries with object classes of **ibm-replicationAgreement**, **ibm-replicationContext**, **ibm-replicationGroup**, and **ibm-replicationSubEntry** are not supported. If running the **ldif2ds** utility, a previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
     Entry distinguished name

System action:
- If the error occurs while running an LDAP utility, the program ends.

- If the error occurs during initialization of an LDAP server backend, then the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response:

- If **useAdvancedReplication on** is specified in the LDAP server configuration file, the LDAP server or utility does not support basic replication entries with an object class of **replicaObject**. If configuring a basic replication environment, change the **useAdvancedReplication** option setting from **on** to **off** to allow basic replication entries to be used. If configuring an advanced replication environment, then all entries with an object class of **replicaObject** must be removed from the LDAP server backend or the input LDIF file.

- If **useAdvancedReplication off** is specified in the LDAP server configuration file, the LDAP server or utility does not support advanced replication entries with object classes of **ibm-replicationAgreement**, **ibm-replicationContext**, **ibm-replicationGroup**, and **ibm-replicationSubEntry**. If configuring an advanced replication environment, change the **useAdvancedReplication** option setting from **off** to **on** to allow advanced replication entries to be used. If configuring a basic replication environment, then all entries with object classes of **ibm-replicationAgreement**, **ibm-replicationContext**, **ibm-replicationGroup**, and **ibm-replicationSubEntry** must be removed from the LDAP server backend or the input LDIF file.

Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1257E   **Multi-server configuration backend (CDBM) support is required.**

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

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1258E   The operations monitor ID '*opid***' is already associated with WLM transaction name '***name***'.**

Explanation: The operations monitor ID (OPID) specified on the LDAP server **WLMEXCEPT** operator modify command is already associated with a WLM transaction name. An OPID is only allowed to be associated with one WLM transaction name at a time.

In the message text:

opid
     Operations monitor identifier

name
     WLM transaction name

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

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

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the OPID specified on the LDAP server **WLMEXCEPT** operator modify command is correct and is not already associated with a WLM transaction name. If the correct OPID was specified, issue the LDAP server **RESET WLMEXCEPT** operator modify command to remove the current OPID mapping. Then, reissue the same LDAP server **WLMEXCEPT** operator modify command to set the OPID mapping to the WLM transaction name specified in the message.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1259I   The operations monitor ID '*opid***' is now associated with WLM transaction name '***name***'.**

Explanation: The operations monitor ID (OPID) is successfully associated with the WLM transaction name specified. Future client requests in the LDAP server that match the search pattern identified by the OPID are routed to the specified WLM transaction name.

In the message text:

opid
     Operations monitor identifier

name
     WLM transaction name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1260I   **Now setting the LDAP server health value to '*value*' percent.**

Explanation: The LDAP server has adjusted its internal health value to accurately reflect the number of errors that have occurred in the LDAP server. The health value is the number of failures that have occurred in the last 5000 client operations. The health value is only updated if one minute has passed since the internal health value was last set. The internal health value is used by the sysplex distributor to help distribute incoming client requests to the LDAP servers within the sysplex.

In the message text:

value
    LDAP health percentage

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If activity or audit logging is active, analyze the activity or audit logs to determine the client application errors. If activity or audit logging is not active, consider turning on ERROR tracing on the LDAP server to determine the client application errors. Correct any client applications that are resulting in errors in the LDAP server. After the client application errors are fixed, continue to monitor the LDAP server's health value.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1261E   **The operations monitor ID '*opid*' is not valid.**

Explanation: The operations monitor ID (OPID) value entered on the LDAP server **WLMEXCEPT** operator modify command is not valid.

In the message text:

opid
    Operations monitor identifier

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

Operator response: Issue an LDAP server **WLMEXCEPT** operator modify command with a valid OPID value. Contact the LDAP Administrator to determine a valid OPID value.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the OPID specified on the LDAP server **WLMEXCEPT** operator modify command is a valid number and exists as an ID value in a search pattern returned on the `cn=operations,cn=monitor` entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1262E   **The WLM transaction name '*name*' is not valid.**

Explanation: The WLM transaction name entered on the **WLMEXCEPT** operator modify command is not valid.

In the message text:

name
    WLM transaction name

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

Operator response: Issue an LDAP server **WLMEXCEPT** operator modify command with a valid WLM transaction name. Contact the LDAP Administrator to determine a valid WLM transaction name.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the WLM transaction name specified on the LDAP server **WLMEXCEPT** operator modify command is 1 to 8 characters long. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1263I   **wlmExcept reset completed.**

Explanation: If an operations monitor ID (OPID) has been specified on the LDAP server **RESET WLMEXCEPT** operator modify command, then that OPID is no longer associated with a WLM transaction name. If an OPID has not been specified on the LDAP server **RESET WLMEXCEPT** operator modify command, then the LDAP server defaults to using only the configured **wlmExcept** options for routing incoming client requests to WLM transaction names.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1264E   The Extended Operation owner cannot be contacted.

Explanation: The LDAP server is unable to contact the Extended Operation owner to request a function be performed.

System action: An error is returned to the client requesting the operation. The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1265E   The Extended Operation owner is busy, retrying.

Explanation: The LDAP server which is the owner of Extended Operations in the LDAP cross-system group in the sysplex is currently busy and cannot respond to the Extended Operation request.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the problem persists, restart the LDAP server that owns the Extended Operations in the LDAP cross-system group. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1266E   The LDAP server must have READ access to the BPX.WLMSERVER profile.

Explanation: The user ID that runs the LDAP server must have READ access to the BPX.WLMSERVER profile in the RACF FACILITY class so that the LDAP server can connect to Workload Manager (WLM).

System action: If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The BPX.WLMSERVER profile must be defined in the FACILITY class before running the LDAP server by issuing a RACF **RDEFINE** command. Once the profile is defined, grant READ access to the user ID that runs the LDAP server by issuing a RACF **PERMIT** command. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1267E **The serverCompatLevel is set to** *value*. **The configuration option '***option***' requires minimum serverCompatLevel** *min_value*.

Explanation: The **serverCompatLevel** value specified in the configuration file is set to an unsupported level for the configuration option indicated in the message.

In the message text:

value
    serverCompatLevel option value

option
    LDAP server configuration option

min_value
    serverCompatLevel option minimum value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Set the **serverCompatLevel** configuration option to the minimum level specified in the message or remove the configuration option indicated in the message.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1268E **The serverCompatLevel is set to** *value*. **The sysplex owner has a different serverCompatLevel setting.**

Explanation: The **serverCompatLevel** value specified in the configuration file for this server is incompatible with the **serverCompatLevel** value established by the sysplex owner.

In the message text:

value
> **serverCompatLevel** option value

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Obtain the **serverCompatLevel** value established by the sysplex owner. Either migrate the server to an appropriate level for the sysplex or upgrade this LDAP server to a level that is compatible with the sysplex.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1269A   Unable to initialize WLM support.

Explanation: The LDAP server is unable to initialize WLM support.

System action: If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: To determine the problem, restart the LDAP server with ERROR tracing turned on to determine the failure. The WLM routine that has failed is present in the LDAP ERROR traces. See the *z/OS XL C/C++ Runtime Library Reference* for more information about the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1270E   IP address '*value*' for configuration option '*option*' is not valid.

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

In the message text:

value
> LDAP server configuration option IP address

option
   LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1271E   **The operations monitor ID parameter is missing.**

Explanation: The operations monitor ID (OPID) parameter is missing on the LDAP server **WLMEXCEPT** operator modify command.

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

Operator response: Issue an LDAP server **WLMEXCEPT** operator modify command with an OPID value. Contact the LDAP Administrator to determine the correct OPID value.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that an OPID is specified on the LDAP server **WLMEXCEPT** operator modify command.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1272E   **The WLM transaction name parameter is missing.**

Explanation: The WLM transaction name parameter is missing on the LDAP server **WLMEXCEPT** operator modify command.

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

Operator response: Issue an LDAP server **WLMEXCEPT** operator modify command with a WLM transaction name. Contact the LDAP Administrator to determine the correct WLM transaction name.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that a WLM transaction name is specified on the **WLMEXCEPT** operator modify command.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1273I   **Replication conflict: a conflict is detected on an add operation of '*dn*' in *type* backend named *name*. The add will be converted into a modify because it has a timestamp equal to or later than the target entry timestamp.**

Explanation: The LDAP server detected a replication conflict on an add operation of an entry in the specified backend. Since the replicated modify time stamp is equal to or later than the modify time stamp of the existing entry, this add conflict is resolved by converting the operation into a modify operation. The existing attributes that are being replaced are recorded in the lostandfound log. The location of the lost and found log is specified in the **ibm-slapdLog** attribute on the `cn=Replication,cn=Log Management,cn=Configuration` entry.

In the message text:

dn   Entry distinguished name

type
    Backend type

name
    Backend name

System action: The LDAP server converts the add operation into a modify operation, and continues to process the request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Inspect the recorded entry in the lost and found log file and verify that the attributes and their values are modified correctly.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1274W   **Replication conflict: a conflict is detected on a modify operation of '*dn*' in *type* backend named *name*. A refresh of the entry will be requested because the entry has been modified on this server before it was modified on the supplier.**

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an incoming modification has a newer time stamp than the time stamp on the target entry. This server requests the supplier to send a refreshed entry to resolve this conflict.

In the message text:

GLD1275W

dn Entry distinguished name

type
  Backend type

name
  Backend name

System action: The LDAP server sends an entry refresh request to the supplier.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1275W **Replication conflict: a conflict is detected on a modify operation of '*dn*' in *type* backend named *name*. A refresh of the entry will be requested because an earlier update on the supplier has not yet been applied to this server.**

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an earlier update on the supplier has not yet been applied to this server. This server requests the supplier to send a refreshed entry to resolve this conflict.

In the message text:

dn Entry distinguished name

type
  Backend type

name
  Backend name

System action: The LDAP server sends an entry refresh request to the supplier.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1276W **Replication conflict: a conflict is detected on a modify operation of '*dn*' in *type* backend named *name*. The modification was rejected because it had a timestamp older than or equal to the target entry timestamp.**

Explanation: The LDAP server detected a replication conflict on a modify operation of an entry in the specified backend. The conflict occurred because an incoming modification has the same or older time stamp than the time stamp on the target entry. This server ignores the modify request.

In the message text:

dn Entry distinguished name

type
   Backend type

name
   Backend name

System action: The LDAP server ignores the incoming request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Check that no updates have been lost by comparing the contents of this entry among all the servers in the replication topology.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1277W **Entries '*name1*' and '*name2*' contain conflicting password values for the masterServer DN '*value*'. The entry is not processed.**

Explanation: The LDAP server detected a difference in the password values for the same **ibm-masterServerDN** attribute value in two different consumer server credential entries. The same **ibm-masterServerPW** value should be used for the conflicting entries specified in this message. The replication information in the first entry is ignored.

In the message text:

name1
   Entry distinguished name of conflicting entry

name2
   Entry distinguished name of conflicting entry

value
   Master server distinguished name

System action: The LDAP server continues, but the consumer server credential entry settings in the first entry are ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the **ibm-masterServerPW** attribute values on the conflicting consumer server credential entries to use the same value or use a different **ibm-masterServerDN** attribute value for one of the conflicting consumer server credential entries. A consumer server credential entry has an object class value of **ibm-slapdSupplier** or **ibm-slapdReplication** and must reside under the **cn=configuration** suffix in the CDBM backend.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1278E   **Routine '**_routine_**' failed: Return code** _return_code_ **-** _error_text_**.**

Explanation: An internal programming error has been detected by the routine identified in the message.

In the message text:

routine
    Routine name

_return_code_
    Return code from routine

_error_text_
    Error text corresponding to the return code

System action: The current LDAP operation being handled by the server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Try running the LDAP operation again with **DEBUG ERROR** activated in the server using the operator modify command. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1279A   **LDAP server stopping because it is unable to become owner of** _type_ **backend named** _name_**.**

Explanation: An error occurred when the LDAP server attempted to become the sysplex group owner for the named backend. A previous message indicates the reason for the failure.

In the message text:

type
    Backend type

name
    Backend name

System action: The LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1280E   Unable to load the System SSL CMS runtime: *error_code/reason_code* **-** *error_text*

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

In the message text:

error_code
    Error code from **dllload()**

reason_code
    Reason code from **dllload()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1281E   Unable to query the gsk_get_cms_vector routine: *error_code/reason_code* **-** *error_text*

Explanation: The LDAP server or utility is unable to query the **gsk_get_cms_vector()** routine in the System SSL CMS runtime DLL. The LDAP server or utility uses the System SSL CMS runtime DLL to call the **gsk_generate_random_bytes()** routine for random byte generation of **ibm-entryUUID** attribute values, CRAM-MD5 and DIGEST-MD5 binds, and the salt value for Salted SHA password hashing. See the description of **dllqueryfn()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

GLD1282E

In the message text:

error_code
    Error code from **dllqueryfn()**

reason_code
    Reason code from **dllqueryfn()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1282E   **Unable to generate random data bytes:** *return_code* **-** *error_text*

Explanation: The LDAP server or utility encountered an error while attempting to generate random data bytes using the **gsk_generate_random_bytes()**. See the description of **gsk_generate_random_bytes()** in *z/OS Cryptographic Services System SSL Programming* for more information about the error.

In the message text:

return_code
    Return code from **gsk_generate_random_bytes()**

error_text
    Error text corresponding to the return code

System action: The LDAP server or utility continues but the operation fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1283W   Filtered access control has reduced the access rights for DN '*name*'.

Explanation: The LDAP server has matched filtered access control values for an LDAP administrator DN. This has reduced the access rights for the root administrator DN (**adminDN**), the Kerberos administrator DN (**krbLDAPAdmin**), or an administrative group member.

In the message text:

name
> DN of the administrator

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1284E   Required attribute type *attribute* is not defined in the schema.

Explanation: The LDAP server or utility found that the required attribute type indicated in the message is not defined in the LDAP server schema.

In the message text:

attribute
> Undefined attribute type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **schemaPath** configuration option has the correct value and restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1285E   **Required object class** *objectclass* **is not defined in the schema.**

Explanation: The LDAP server or utility found that the required object class indicated in the message is not defined in the LDAP server schema.

In the message text:

objectclass
    Undefined object class

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **schemaPath** configuration option has the correct value and restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1286E   **The serverCompatLevel is set to** *value*. **A filtered '***attribute***' value was found in backend '***name***'.**
Filtered '*attribute***' values require minimum serverCompatLevel** *min_value*.

Explanation: The **serverCompatLevel** value specified in the configuration file is set to an unsupported level for filtered values in the backend indicated in the message.

In the message text:

value
    serverCompatLevel option value

attribute
    Attribute type

name
    Backend name

min_value
    serverCompatLevel option minimum value

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Set the **serverCompatLevel** configuration option to the minimum level specified in the message. If the **serverCompatLevel** configuration option must remain at the current level, the filtered attribute values must be removed from the backend. To find the filtered attribute values in the specified backend, the following steps must be performed:

- Temporarily set the **serverCompatLevel** configuration option to the minimum level specified and use the **ds2ldif** utility to unload the specified backend.
- Analyze the unloaded LDIF file and look for entries that have filtered attribute values.
- Start the LDAP server and modify the entries that have filtered attribute values by removing the filtered attribute values.
- Set the **serverCompatLevel** configuration option back to the wanted setting and restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1287E   The LDAP administrator entry cannot be unlocked because the password is defined in the configuration file.

Explanation: The LDAP server **UNLOCK** operator modify command failed because the password for the LDAP root administrator entry is specified in the **adminPW** option in the LDAP server configuration file. The LDAP server **UNLOCK** operator modify command only works when the LDAP root administrator entry and password reside in an LDBM, TDBM, or CDBM backend.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The LDAP server **UNLOCK** operator modify command only works when the **adminDN** server configuration option specifies a distinguished name (DN) that resides in an LDBM, TDBM, or CDBM backend and that entry must have a **userPassword** attribute value. The **adminPW** option must be removed from the LDAP server configuration file for the **UNLOCK** operator modify command to succeed. Then restart the server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1288I   The LDAP administrator entry is now unlocked.

Explanation: The LDAP server **UNLOCK** operator modify command has completed successfully and unlocked the LDAP root administrator entry.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The LDAP root administrator entry is now unlocked and can now authenticate to the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1289E   The LDAP administrator entry cannot be unlocked because the credentials could not be set.

Explanation: The LDAP server **UNLOCK** operator modify command encountered an internal error while attempting to set the credentials for the LDAP root administrator. A previous message or LDAP error trace identifies the reason for the failure.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message or LDAP error trace to correct the problem. If LDAP error tracing is not active at the time of the failure, the error trace is automatically written to CTRACE. LDAP error tracing can be activated using the LDAP server **DEBUG** operator modify command to set ERROR tracing. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1290I   Activity log status

Explanation: This message displays the current LDAP server activity log settings as a result of issuing the LDAP server **DISPLAY LOG** operator modify command.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1291I   The Activity log file is rolled over.

Explanation: The activity log file has been successfully rolled over.

System action: The LDAP server continues with activity logging active.

- If a z/OS UNIX System Services file is specified in the **logfile** configuration option and a UNIX System Services directory is specified in the **logfileRolloverDirectory** configuration option, the current activity log file is renamed with a time stamp appended to the end of the log file name and then moved to the directory specified. A new activity log file is created with the name specified in the **logfile** configuration option.
- If a z/OS UNIX System Services file is specified in the **logfile** configuration option and the **logfileRolloverDirectory** configuration option is not specified, the current activity log file is renamed in the same directory with a time stamp appended to the end of the log file name. A new activity log file is created with the name specified in the **logfile** configuration option.
- If a generated data group (GDG) base is specified in the **logfile** and **logfileRolloverDirectory** configuration options, the current activity log file is closed and a new data set generation is created in the base specified by the **logfileRolloverDirectory** option. The new data set generation is used for the new activity log file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The rolled over activity log file can now be analyzed and archived.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1292E   The Activity log file cannot be rolled over.

Explanation: The activity log file could not be rolled over because an error was encountered. A previous message indicates the reason for the failure.

System action:

- If a z/OS UNIX System Services file is specified in the **logfile** configuration option, the LDAP server continues with activity logging writing to the same activity log file.
- If the **logfile** and the **logfileRolloverDirectory** configuration options specify a generated data group (GDG) base, the LDAP server continues with activity logging writing to the same data set generation.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response:

- If a z/OS UNIX System Services directory is specified in the **logfileRolloverDirectory** configuration option, verify that the directory exists and that the LDAP server has the appropriate permissions to write to the directory. If the

directory does not exist, create the directory or update the **logfileRolloverDirectory** option in the LDAP server configuration file to specify a valid directory. Then retry the request.

- If the **logfileRolloverDirectory** configuration option is not specified, the activity log file specified in the **logfile** configuration option could not be found. Verify that the LDAP server can write to the directory and file specified in the **logfile** option still exists.
- If the **logfile** and the **logfileRolloverDirectory** configuration options specify a z/OS UNIX System Services directory, ensure the directories reside in the same type of file system. Activity log file rollover is not supported between different file system types.
- If the **logfile** and the **logfileRolloverDirectory** configuration options specify a data set, verify that each data set specified is a generated data group (GDG) base. Activity log file rollover is only supported in data sets when using GDGs.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1293E   **The LDAP administrator entry cannot be unlocked because the entry is not defined in a LDBM, TDBM, or CDBM backend.**

Explanation: The LDAP server **UNLOCK** operator modify command was unable to unlock the LDAP root administrator entry because it is not defined within a configured LDBM, TDBM, or CDBM backend.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If password policy should apply to the LDAP root administrator, add an LDAP root administrator user entry that has a **userPassword** attribute value in the LDBM, TDBM, or CDBM backend. The distinguished name (DN) specified in the **adminDN** option in the LDAP server configuration file must specify an LDBM, TDBM, or CDBM entry with a **userPassword** attribute value and the **adminPW** option must be removed from the LDAP server configuration file. Then stop and restart the server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1294E   **The LDAP administrator cannot be unlocked because a modify error occurred:** *error_code***.**

Explanation: The LDAP server **UNLOCK** operator modify command encountered an error while attempting to modify the LDAP root administrator entry in the backend. The error code has the following common values:

1   Operations error modifying the LDAP root administrator entry

32   LDAP root administrator entry does not exist

121   A parameter is not valid

122   Unable to process the MODIFY request

132   Insufficient storage is available

Any LDAP error codes documented in the `/usr/include/ldap.h` file may also be returned.

In the message text:

error_code
    Error code from modify operation

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Additional information about this error is provided in the LDAP error trace. Use the information in this message and error trace to correct the problem. If LDAP error tracing is not active at the time of the failure, the error trace is automatically written to CTRACE. LDAP error tracing can be activated using the LDAP server **DEBUG** operator modify command to set ERROR tracing. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1295E   The LDAP administrator entry cannot be unlocked because the entry participates in native authentication.

Explanation: The LDAP server **UNLOCK** operator modify command was unable to unlock the LDAP root administrator entry because it is defined in a backend or subtree which participates in native authentication. The LDAP server **UNLOCK** operator modify command only works when the LDAP root administrator entry and password reside in an LDBM, TDBM, or CDBM backend.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The LDAP server **UNLOCK** operator modify command only works when the **adminDN** server configuration option specifies a distinguished name (DN) that resides in an LDBM, TDBM, or CDBM backend and that entry must have a **userPassword** attribute value. If password policy should apply to the LDAP root administrator, update the **adminDN** option to specify a distinguished name (DN) that resides outside the scope of a backend or subtree that is participating in native authentication. Then stop and restart the server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1296I   **Display Replica completed.**

Explanation: This message is displayed in response to the LDAP server **DISPLAY REPLICAS** operator modify command, when advanced replication is configured. The advanced replication **DISPLAY REPLICAS** output is only displayed in the LDAP server's job log.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1297A   **System failure in** *service_name*, **taking SYSMDUMP system dump with abend code** *abend_error_code* **and abend reason code** *abend_reason_code*. **Failure point: file** *filename*, **line** *line_number*, **function** *function_name*.

Explanation: The LDAP server or utility encountered a problem using the LE system service or routine specified and is taking a SYSMDUMP system dump. The SYSMDUMP is written to the data set specified by the SYSMDUMP DD statement in the JCL used to start the LDAP server or utility. The abend error code is always 90 and indicates that the LDAP server or utility has requested the abend. The abend reason code ranges from 1 to 11 and there is a one to one relationship with the LE routine specified in the message. The file name, line number, and function name indicate the location in the LDAP code where the abend occurred.

In the message text:

service_name
   LE routine name

abend_error_code
   LDAP abend code

abend_reason_code
   LDAP abend reason code

filename
   LDAP file name where this abend occurred

line_number
   Line number where this abend occurred

function_name
   LDAP routine name where this abend occurred

System action: The program ends.

Operator response: None.

System programmer response: Analyze the SYSMDUMP system dump and fix the problem, then restart the program. If the problem persists, contact the service representative.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1298E **The following encryption or hashing method is not available:** *value*, **reason:** *error_text*.

Explanation: The LDAP server or utility encountered an error attempting to encrypt or hash a value using the algorithm indicated in the message. The algorithm that is used is specified on the **pwEncryption** option in the LDAP server configuration file. See *z/OS Cryptographic Services ICSF Application Programmer's Guide* for more information about the error.

In the message text:

value
    Encryption or hashing algorithm

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the appropriate level of ICSF is available on the system to perform the wanted encryption or hashing. Use the error message text to determine the exact cause of the problem. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1299I **The value** *value_specified* **specified for attribute** *attribute* **in entry** *entry* **is not valid. The default value** *value_default* **has been set.**

Explanation: The LDAP server encountered an attribute value which is not valid. The default attribute value is used.

In the message text:

value_specified
    Attribute value specified

attribute
    Attribute type

entry
    Entry name

GLD1300E

value_default
    Default attribute value

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1300E   **The administrator group member DN** *value* **is already defined. The values in entry** *name* **are ignored.**

Explanation: The LDAP server encountered a duplicate administrator member in the entry specified. A duplicate is detected if multiple administrative group member entries (**ibm-slapdAdminMember** objectclass) have the same **ibm-slapdAdminDN** value. Duplicates are also detected if an **ibm-slapdAdminDN** value matches the **masterServerDN**, **peerServerDN**, or the **adminDN** options in the LDAP server configuration file. If an **ibm-slapdAdminDN** value matches the **ibm-slapdMasterDN** value in an advanced replication supplier credentials entry (**ibm-slapdSupplier** or **ibm-replicationConfiguration** objectclasses), a duplicate is also detected. Finally, a duplicate is detected if the value matches a **member** value in the **cn=safadmingroup,cn=configuration** (**ibm-SAFAdminGroup** objectclass).

In the message text:

value
    Distinguished name

name
    Entry distinguished name

System action: The LDAP server continues. When detected, the values in the administrative group member entry are ignored. These may include the **ibm-slapdAdminPW** and **ibm-slapdAdminRole** attribute values.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the **ibm-slapdAdminDN** attribute to specify a value that is not already in use by the entries or configuration options described in the explanation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1301E   **The administrator group member DN** *value* **is already defined. The roles defined in the security manager may be ignored.**

Explanation: The LDAP server encountered a duplicate administrator member in the entry specified. A duplicate is detected if multiple administrative group member entries (**ibm-slapdAdminMember** objectclass) have the same **ibm-slapdAdminDN** value. Duplicates are also detected if an **ibm-slapdAdminDN** value matches the **masterServerDN**, **peerServerDN**, or the **adminDN** options in the LDAP server configuration file. If an **ibm-slapdAdminDN** value matches the **ibm-slapdMasterDN** value in an advanced replication supplier credentials entry (**ibm-slapdSupplier** or **ibm-replicationConfiguration** objectclasses), a duplicate is also detected. Finally, a duplicate is detected if the value matches a **member** value in the **cn=safadmingroup,cn=configuration** (**ibm-SAFAdminGroup** objectclass).

In the message text:

value
    Distinguished name

System action: The LDAP server continues. When detected, the security manager may not be queried for role assignments.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the **member** attribute to specify a value that is not already in use by the entries or configuration options described in the explanation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1302E   **Unable to query the SAF Administration roles for** *SAF_user*: *error_code/reason_code - error_text*

Explanation: The LDAP server is unable to query SAF to determine the administration roles for the indicated SAF user ID. SAF is being queried for the administration roles because the SAF user ID is a member of the **cn=safadmingroup,cn=configuration** administration group entry. See the description of **__check_resource_auth_np()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

SAF_user
    SAF user ID

error_code
    Error code returned from **__check_resource_auth_np()**

reason_code
    Reason code from **__check_resource_auth_np()**

error_text
    Error text corresponding to the error code

System action: The LDAP server continues but the bound administrator is assigned the NOADMIN role. When detected, the security manager may not be queried for SAF role assignments.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message and the information in the __check_resource_auth_np() description to correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1303E   **Message catalog name not set for plug-in** *name***.**

Explanation: The indicated plug-in failed to initialize. A message catalog had not been set by calling **slapi_pblock_set()** with function code **SLAPI_PLUGIN_MSG_CAT_NP**.

In the message text:

name
    Plug-in name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Contact the provider of the plug-in.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1304E   **Unable to open message catalog** *filename***:** *error_code* **-** *error_text*

Explanation: A plug-in is unable to open the specified message catalog. See the description of **catopen()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

filename
    Message catalog file name

error_code
    Error code from **catopen()**

error_text
    Error text corresponding to the error code

System action: The plug-in's messages are not displayed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1305E   Message 0x*message_id* **not found in catalog** *filename*

Explanation: A plug-in has attempted to retrieve the specified message from the specified catalog. The message is not in the catalog.

In the message text:

message_id
   Message identifier

filename
   Message catalog file name

System action: The requested plug-in message is not displayed. The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Contact the provider of the plug-in.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1306E   Job *job_name* **failed to connect to WLM:** *return_code/reason_code*

Explanation: The LDAP server is unable to connect to WLM as a work manager. See the description of **ConnectWorkMgr** in *z/OS MVS Programming: Workload Management Services* for more information about the error. If the reason code is xxxx0847, then another address space with the same subsystem type and subsystem name is connected to WLM on the z/OS image and has the role of queue manager or router. The LDAP server uses **LDAP** for the subsystem type and its job name for the subsystem name.

In the message text:

job_name
   Job name of the LDAP server

return_code
   Return code from **ConnectWorkMgr**

GLD1307E

reason_code
    Reason code from **ConnectWorkMgr**

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. If the reason code is xxxx0847, ensure that the LDAP server job name is unique on the z/OS image. Then, restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1307E   **Unable to wait on condition variable:** *error_code/reason_code* **-** *error_text*

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

In the message text:

error_code
    Return code from **pthread_cond_timedwait()**

reason_code
    Reason code from **pthread_cond_timedwait()**

error_text
    Error text corresponding to the error code

System action: The program continues. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1308E **Value** *value* **for configuration option** *option* **cannot be combined with other values.**

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value that must be specified alone, but the value was incorrectly specified in combination with other values for the same option.

In the message text:

value
LDAP server configuration option value

option
LDAP server configuration option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1309E **Value for configuration option** *option* **is missing an operator before '**value_string**'.**

Explanation: The LDAP server or utility found an option in the LDAP server configuration file that has a value specified as an expression, but the expression is missing an operator. For the sslCipherSpecs configuration option, tokens within the expressions must be separated by a '+' or '-' operator.

In the message text:

option
LDAP server configuration option

value_string
String following the missing operator within the option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file. If the option value looks correct, check that the option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that is not supported for the option. Then, restart the program.

GLD1310W • GLD1311E

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD1310W**   **Configuration option** *option=value* **overlaps with environment variable** *environment_variable_name=environment_variable_value*, **the environment variable is ignored.**

Explanation: An LDAP configuration option is configured in the LDAP server configuration file and an environment variable that controls the same feature is also set.

In the message text:

option
 LDAP server configuration option

value
 LDAP server configuration value

environment_variable_name
 LDAP server environment variable name

environment_variable_value
 LDAP server environment variable value

System action: The program continues. The environment variable is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the corresponding environment variable.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1311E   **Unsupported data set type (***type***) for log file** *name*, **activity logging is disabled.**

Explanation: The specified log file is not supported by the LDAP server. For supported data set types, see Configuring the activity log support in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS*. For activity logging, the name of the file is specified by the **logfile** and **logFileRolloverDirectory** configuration options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the configuration option is not specified.

In the message text:

type
 Data set type.

name
 Log file data set name.

System action: The LDAP server continues, but logging using this file is not done.

Operator response: None.

System programmer response: None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Examine and correct the **logfile** and **logFileRolloverDirectory** configuration options in the
| LDAP server configuration file. Then, restart the program, if logging is needed.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1312E**   **Unable to open log file** *filename***:** *error_code*/*reason_code*- *error_text*(**operation** *operation*, **info 0x**value, **error**
| **code 0x**dyn_error_code**).**

| **Explanation:** The LDAP server is unable to open a log file. See the description of **fopen()** in *z/OS XL C/C++ Runtime*
| *Library Reference*, the section about *Using the __amrc structure* in *z/OS XL C/C++ Programming Guide*, and the section
| about and *Interpreting DYNALLOC return codes* in *z/OS MVS Programming: Authorized Assembler Services Guide* for
| more information about the error.

| For activity logging, the name of the file is specified by the **logfile** and **logFileRolloverDirectory** configuration
| options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the
| configuration option is not specified.

| In the message text:

| *filename*
| Log file file name.

| *error-code*
| Error code from **fopen()**.

| *reason-code*
| Reason code from **fopen()**.

| *error_text*
| Error text corresponding to the error code.

| *operation*
| Last I/O operation.

| *value*
| DYNALLOC information.

| *dyn_error_code*
| Error code from DYNALLOC.

| **System action:** The LDAP server continues, but logging using this file is not done.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Use the information in the message to correct the error. If the corrective action does not
| require a change to the LDAP server configuration file and logging is needed, try starting activity logging again with
| the **LOG** operator modify command. If the corrective action requires a change to the LDAP server configuration file
| and logging is needed, make the changes and then restart the LDAP server.

GLD1313E

| Source: LDAP

| Routing code: None.

| Descriptor code: None.

| Automation: Not applicable.

| GLD1313E   Unable to open log file *filename*: *error_code*/*reason_code* - *error_text* (operation = *operation*, **Error code**
| **0x***io_error_code*, **Abend code 0x***abend_code*, **rc 0x***return_code*).

| **Explanation:** The LDAP server is unable to open a log file. See the description of **fopen()** in *z/OS XL C/C++ Runtime*
| *Library Reference*, the section about *Using the __amrc structure* in *z/OS XL C/C++ Programming Guide*, and the section
| about *OPEN return and reason codes* in *z/OS DFSMS Macro Instructions for Data Sets* for more information about the
| error.

| For activity logging, the name of the file is specified by the **logfile** and **logFileRolloverDirectory** configuration
| options in the LDAP server configuration file. The default log file name is /etc/ldap/gldlog.output, if the
| configuration option is not specified.

| In the message text:

| *filename*
| Log file file name.

| *error-code*
| Error code from **fopen()**.

| *reason-code*
| Reason code from **fopen()**.

| *error_text*
| Error text corresponding to the error code.

| *operation*
| Last I/O operation.

| *io_error_code*
| I/O error code.

| *abend_code*
| ABEND code.

| *return_code*
| I/O return code

| **System action:** The LDAP server continues, but logging using this file is not done.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

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

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1314I**   **LDAP server is in transition mode.**

Explanation: The LDAP server is starting in transition mode. See Updating LDAP configurations settings in a
| sysplex without server outage in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more
| information.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD1315I**   **LDAP server compatibility level** *serverCompatLevel***.**

Explanation: Displays the server compatibility level.

In the message text:

serverCompatLevel
     Server compatibility level.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD1316W**   **The server compatibility level** *serverCompatLevel* **is deprecated.**

Explanation: This server compatibility level is deprecated and a higher compatibility level is suggested.

In the message text:

serverCompatLevel
     Server compatibility level.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Consider migrating to a higher server compatibility level. See the description of the **serverCompatLevel** configuration option in Customizing the LDAP server configuration, *Configuration file options*, in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1317W   **Server compatibility level is being downgraded from** *higher_level* **to** *lower_level*. **Delete any compatibility level** *higher_level* **specific entries.**

Explanation: The compatibility level is being downgraded. Any entries added specifically for the higher compatibility level must be deleted manually.

In the message text:

higher_level
    Higher compatibility level.

lower_level
    Lower compatibility level.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See the description of the **serverCompatLevel** configuration option in Customizing the LDAP server configuration, *Configuration file options*, in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information about the features provided by the specific server compatibility levels. If you have previously placed data within the directory related to the features which are now disabled by the downgraded compatibility level, you should consider whether you want to remove that data or retain it for future use when the feature is re-enabled.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1318E   **Server in transition mode requires 4 or higher compatibility level.**

Explanation: The LDAP server failed to start in transition mode. The compatibility level must be 4 or higher.

System action: The program ends.

Operator response: None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** If the **serverCompatLevel** you want is less than 4, transition mode cannot be used.
| Otherwise, set the **serverCompatLevel** to an appropriate value in the LDAP server configuration file for the transition
| mode server. Then, start the transition mode server again to continue the migration to the new server compatibility
| level. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli Directory*
| *Server Administration and Use for z/OS* for more information.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1319E   The serverCompatLevel option must be set for LDAP server to start in transition mode.**

| **Explanation:** The LDAP server failed to start in transition mode. **serverCompatLevel** is not set in the configuration
| file. The default value is not allowed in transition mode.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Set the **serverCompatLevel** that you want in the LDAP server configuration file for the
| transition mode server. Then, start the transition mode server again to continue the migration to the new server
| compatibility level. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli*
| *Directory Server Administration and Use for z/OS* for more information.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1320E   Failed to start server in transition mode. The sysplex owner is not on release V2R2 or higher.**

| **Explanation:** A transition server requires all other server instances in the sysplex group to be z/OS Version 2
| Release 2 or higher.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

GLD1321E • GLD1322E

Administrator response: You cannot use transition mode to update your LDAP server configuration in a sysplex without downtime if one of your servers active in the sysplex is running on a level earlier than z/OS Version 2 Release 2. You can avoid a total outage if you have at least two servers running z/OS Version 2 Release 2 or later and perform the transition mode update with only those servers active during transition mode. If only one server is running z/OS Version 2 Release 2 or later, then you must have all servers down to perform the update and you cannot use transition mode. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1321E   **Failed to start LDAP server in transition mode. The sysplex group's configuration and compatibility level were not updated.**

Explanation: The LDAP server failed to start in transition mode. Either the compatibility level or backend settings must be changed when using transition mode.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure your LDAP server configuration file is changed appropriately before starting the transition server. If the changes you are making to the LDAP server configuration file are not applicable to transition mode, then you can not use transition mode to perform these updates. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1322E   **Failed to start LDAP server in transition mode. A transition server must be started as a member of a sysplex group.**

Explanation: The purpose of a transition server is to allow a functioning sysplex group to transition from one **serverCompatLevel** to the next or change the configuration. If there are no functioning servers in the sysplex group, then changing the configuration and starting an LDAP server allows these changes to occur. Transition mode is not necessary.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

| **Administrator response:** Start the single, active LDAP server without transition mode.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1323E**   **Sysplex group** *group* **already has a transition server as a member.**

| **Explanation:** There is already a transition server running in the sysplex group. Only one transition server is
| permitted in a sysplex group.

| In the message text:

| *group*
| Sysplex group name.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Allow the current transition mode server to complete the transition by stopping the other
| LDAP servers in the sysplex group. This allows the transition mode server to become sysplex owner and complete its
| transition to normal mode. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS*
| *IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1324E**   **Failed to retrieve resource information from the sysplex owner.**

| **Explanation:** The transition server is unable to retrieve the current resource information from the sysplex owner.
| This information is necessary to check for configuration changes during transition mode.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Ensure the LDAP server that is the sysplex owner in the sysplex group is functioning
| properly and that it is running on z/OS Version 2 Release 2 or higher. If so, try starting the transition mode server
| again. If the problem persists, contact the service representative.

| **Source:** LDAP

| **Routing code:** None.

GLD1325E • GLD1326E

Descriptor code: None.

Automation: Not applicable.

GLD1325E   **Unable to send request to sysplex group owner: return code** *return_code*.

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

1   An unavailable XCF service.

80   An XCF error.

In the message text:

return_code
    Return code.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the XCF service is available. Restart the program if it ended. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1326E   **The transition server failed to become the owner.**

Explanation: The LDAP server is in transition mode, and it is not ready to become sysplex owner before it completes initialization.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The transition server failed to do an orderly transition from non-owner to owner of the sysplex group because the prior owner did not remain active long enough for the transition server to finish its initialization, and the transition server has terminated. Verify that there are no active servers in the sysplex group. If all are inactive, the intended transition server can be restarted in normal mode with the configuration changes, and then the remaining servers can be activated with the configuration changes. If some other servers in the sysplex group are active without completing the configuration changes, then the entire transition process must be started again. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

Source: LDAP

| Routing code: None.

| Descriptor code: None.

| Automation: Not applicable.

| **GLD1327E   The transition server failed because a new server joined the sysplex group.**

| **Explanation:**   The LDAP server is in transition mode, and it detected a new server joining the sysplex group before
| it became owner. A transition server must be the last server in the sysplex group so that when all other LDAP servers
| terminate it can become owner and change the configuration.

| **System action:**   The program ends.

| **Operator response:**   None.

| **System programmer response:**   None.

| **User response:**   None.

| **Problem determination:**   Not applicable.

| **Module:**   None.

| **Example:**   None.

| **Administrator response:**   Start the transition server again, and do not start additional servers in the sysplex group
| until the transition server completes its transition and becomes sysplex owner. See Updating LDAP configurations
| settings in a sysplex without server outage in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for
| more information.

| **Source:**   LDAP

| **Routing code:**   None.

| **Descriptor code:**   None.

| **Automation:**   Not applicable.

| **GLD1328W   The LDAP server does not support ARM after the transition.**

| **Explanation:**   The LDAP server does not support ARM, even after the transition server completes the transition and
| running in normal mode.

| **System action:**   The program continues.

| **Operator response:**   None.

| **System programmer response:**   None.

| **User response:**   None.

| **Problem determination:**   Not applicable.

| **Module:**   None.

| **Example:**   None.

| **Administrator response:**   To utilize the ARM feature, the transition mode server must be restarted in normal mode
| after transition completes and other servers in the sysplex group are started in normal mode with the configuration
| update. See Updating LDAP configurations settings in a sysplex without server outage in *z/OS IBM Tivoli Directory
| Server Administration and Use for z/OS* for more information.

| **Source:**   LDAP

| **Routing code:**   None.

| **Descriptor code:**   None.

| **Automation:**   Not applicable.

| **GLD1329E   The sysplex owner cannot be contacted.**

| **Explanation:** The LDAP server is unable to contact the sysplex owner.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Ensure the LDAP server that is the sysplex owner in the sysplex group is functioning
| properly. If so, try starting the failing server again. If the problem persists, contact the service representative.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1330E   The sysplex owner busy, retrying.**

| **Explanation:** The LDAP server that is the owner of the sysplex group is busy.

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

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** None.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1331E   The backend setting is incompatible with sysplex owner's.**

| **Explanation:** At least one of the transition server's backends has a setting that is not compatible with sysplex owner.
| Any changes on backend name, backend type, database location, and the suffix list might result in this situation.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

Administrator response: Ensure the changes to the LDAP server configuration file are correct. If necessary, start the transition server again with **DEBUG ERROR** active. The debug output might help locate and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1332W   The server's backend setting is different from sysplex owner's.

Explanation: At least one of the server's backends has a different setting from sysplex owner. The difference includes variation on backend name, backend type, database location, and the suffix list. The addition or removal of a backend is also treated as a different backend setting.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure the changes to the LDAP server configuration file are correct. If necessary, stop the server and restart it again with **DEBUG INFO** active. The debug output might help locate and correct the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1333W   Configuration options db2StartUpRetryLimit, db2Terminate, srvStartUpError, tcpTerminate, and fileTerminate for file based backends are overridden.

Explanation: The LDAP server is in transition mode. If an error occurs, a complete transition cannot be done, and the server must be terminated. The configuration option **db2StartUpRetryLimit** is set to 0. Configuration options **db2Terminate, srvStartUpError, tcpTerminate**, and **fileTerminate** for file based backends are set to **terminate**. The original settings are overridden.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

| **Automation:** Not applicable.

| **GLD1334W**   **Configuration options db2StartUpRetryLimit, db2Terminate, srvStartUpError, tcpTerminate, and**
| **fileTerminate for file based backends are restored.**

| **Explanation:** Configuration options **db2StartUpRetryLimit**, **db2Terminate**, **srvStartUpError**, **tcpTerminate**, and
| **fileTerminate** for file based backends are restored to the original setting in the LDAP server configuration file when
| transition is completed.

| **System action:** The program continues.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** None.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1335I**   **The LDAP server completed the transition phase and switched to normal mode.**

| **Explanation:** The LDAP server started with parameter **-t** completed the transition phase to dynamically update the
| sysplex shared compatibility level or backend settings and is in normal mode now.

| **System action:** The program continues.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** None.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1336E**   **The LDAP server failed to switch from transition mode to normal mode.**

| **Explanation:** The LDAP server running in transition mode failed to complete the transition phase and switch to
| normal mode.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Verify that the XCF service is available. If necessary, start the transition server again with
| **DEBUG ERROR** active. The debug output might help locate and correct the error. If the problem persists, contact the
| service representative.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1337E** **The value** *value1* **of configuration option** *option1* **conflicts with the value** *value2* **of configuration**
| **option** *option2***.**

| **Explanation:** The LDAP server or utility found an option in the LDAP server configuration file that has a value that
| conflicts with the value of another option.

| In the message text:

| *value1*
| Option value of the first option.

| *option1*
| Option name of the first option.

| *value2*
| Option value of the second option.

| *option2*
| Option name of the second option.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Correct the LDAP server configuration file. These two configuration options are related.
| The values must be consistent. See Customizing the LDAP server configuration, *Configuration file options*, in *z/OS IBM*
| *Tivoli Directory Server Administration and Use for z/OS* for more information.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1338E** **Unable to write logfile** *filename***:** *error_code*/*reason_code*- *error_text***(operation =** *operation***, Error code**
| **0x***io_error_code***, Abend code 0x***abend_code***, rc 0x***return_code***)**

| **Explanation:** The LDAP server is unable to write a log file. See the description of **fwrite()** or **fflush()** in *z/OS XL*
| *C/C++ Runtime Library Reference*, and *Using the __amrc structure* in *z/OS XL C/C++ Programming Guide* for more
| information about the error. For activity logging, the name of the file is specified by the **logfile** and
| **logFileRolloverDirectory** options in the LDAP server configuration file. The default log file name is
| /etc/ldap/gldlog.output, if the configuration option is not specified.

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GLD1339E

In the message text:

filename
> Log file file name.

error_code
> Error code from **fwrite()** or **fflush()**.

reason_code
> Reason code from **fwrite()** or **fflush()**.

error_text
> Error text corresponding to the error code.

operation
> Last I/O operation.

io_error_code
> I/O error code.

abend_code
> Abend code.

return_code
> I/O return code.

System action: The LDAP server continues. Activity logging is turned off automatically.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file is not full and can be written to by the LDAP server. Use the LDAP server **LOG** operator modify command to activate activity logging after the error is corrected.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1339E	**Unable to clear transition flag within sysplex user state value: Return code** *return_code*, **Reason code x'***reason_code***'.**

Explanation: The LDAP server is unable to clear the transition flag in XCF area. The return code value is:

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

In the message text:

return_code
> Return code.

reason_code
> Reason code.

System action: The program ends.

Operator response: None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

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

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1340E**   **Value** *value* **for configuration option** *option* **is out of range, must be** *min_value* **to** *max_value*.

| **Explanation:** The LDAP server or utility found an option in the LDAP server configuration file that has a value that
| is out of supported range.

| In the message text:

| *value*
| LDAP server configuration option value.

| *option*
| LDAP server configuration option.

| *min_value*
| The minimum value of the supported range.

| *max_value*
| The maximum value of the supported range.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Correct the LDAP server configuration file. If the option value looks correct, check that the
| option on the next line after this option line starts in column 1. A blank in column 1 of the next line indicates that it
| is a continuation line. The next line is then appended to the preceding option line and thus can result in a value that
| is not supported for the option. Then restart the program.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1341E**   **Unable to start a timer:** *error_code*

| **Explanation:** The LDAP server or utility detected an error while trying to start a timer. The return code is from the
| **STIMERM** macro. See *z/OS MVS Programming: Assembler Services Guide* for more information about the error.

| In the message text:

GLD1342E

| *error_code*
| Error code from **srv_util_start_timer()**.

| **System action:** The DB2-based backends are disabled, and all requests to those backends are rejected.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

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

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD1342E**   **Unwilling to open file or directory** *name*: **File or directory UID** *uid1*, **UID of program** *uid2*, **GID of**
| **file or directory** *gid*, **GIDs of program (***gidList***).**

| **Explanation:** The program, which can be the LDAP server or an LDAP utility, does not open the indicated file or
| directory. The user ID running the program does not own the file nor is it in the group that owns the file.

| In the message text:

| *name*
| Name of file or directory.

| *uid1*
| UID of file or directory.

| *uid2*
| UID of the LDAP server or utility.

| *gid*
| GID of file or directory.

| *gidList*
| GIDs of the LDAP server or utility.

| **System action:**
| • If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the
| LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and
| plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the
| configuration option is not specified), the program ends. The utility ends regardless of the option value.
| • If the error occurs when the database is being reloaded because a moddn operation failed, then the database is
| marked as disabled. The LDAP server continues, but requests to the affected backend fail.
| • Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the
| server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to
| **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but
| the backend is set to read-only mode.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Administrator response:** If the file or directory was created by an unauthorized user, do not use the file. If the file

or directory is legitimate, then see Setting up the user ID and security for the LDAP server to configure the correct
UID and GID values for the user ID running the program.

Problem determination: Not applicable.

Module: None.

Example: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1343E **Unable to get groups for user ID** *user_id*: *error_code*/*reason_code* - *error_text*.

Explanation: The program is unable to get the groups for a z/OS UNIX System Services user ID. See the description
of **getgroups()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

user_id
    User ID.

error_code
    Error code from **getgroups()**.

reason_code
    Reason code from **getgroups()**.

error_text
    Error text corresponding to the error code.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

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

Problem determination: Not applicable.

Module: None.

Example: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1344E **Unable to get status information for file or directory** *name*: *error_code*/*reason_code*- *error_text*

Explanation: The program is unable to get status information for a file or a directory. See the description of **stat()** in
z/OS XL C/C++ Runtime Library Reference for more information about the error.

In the message text:

name
    File or directory name.

error_code
    Error code from **stat()**.

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| *reason_code*
| Reason code from **stat()**.

| *error_text*
| Error text corresponding to the error code.

| **System action:** The program ends.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

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

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

ldif2ds utility messages

GLD1800E   **Command options** *option1* **and** *option2* **are mutually exclusive.**

Explanation: The two command-line parameters indicated in the message cannot both be specified at the same time.

In the message text:

option1
    Command-line parameter name

option2
    Command-line parameter name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove one or both of the parameters from the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1801E   **Option** *option* **is specified more than once with different values.**

Explanation: The command-line parameter indicated in the message can only have one value.

In the message text:

option
    Command-line parameter name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the duplicate parameter from the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1802E   **The summary message frequency must be a non-negative decimal integer.**

Explanation: The frequency value specified for the **-q** command-line parameter is not a positive integer.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid positive integer for the **-q** parameter on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1803E   **At least one phase option (-c, -p, -l) must be specified.**

Explanation: At least one phase command-line parameter must be specified for the **ldif2ds** utility.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify one or more phase parameters on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1804E **Unable to open** *name*: *error_code*/*reason_code* - *error_text*

Explanation: The file indicated in the message cannot be opened in the required way: read for an input file, write for an output file. The file can be a file system file or a data set. If the file name is `//DD:INTRDR`, the failure occurred while opening the internal reader to submit the load jobs. See the description of **fopen()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

name
    Data set name or file name

error_code
    Error code from **fopen()**

reason_code
    Reason code from **fopen()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: For an input file, ensure that the file exists and can be opened for read. For an output file, verify that the directory or data set containing the file exists and that the file can be written to that directory or data set. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1805E **Unable to read** *name*: *error_code*/*reason_code* - *error_text*

Explanation: The file indicated in the message cannot be read. The file can be a file system file or a data set. See the description of **fgets()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

name
    Data set name or file name

error_code
    Error code **fgets()**

reason_code
    Reason code **fgets()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1806E   **Unable to write** *name* **using** *routine*: *error_code*/*reason_code* - *error_text*

Explanation: An attempt to write to the file indicated in the message failed. The file can be a file system file or a data set. If the file name is `//DD:INTRDR`, the failure occurred while submitting a load job to the internal reader. The routine used to perform the write is also indicated in the message. See the description of the routine in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

name
    Data set name or file name

routine
    Routine that failed

error_code
    Error code from the routine

reason_code
    Reason code from the routine

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1807E   At least one LDIF file must be specified.

Explanation: The **-c** (check) or **-p** (prepare) parameter is specified on the **ldif2ds** command line but no LDIF files are specified with either the **-i** or **-e** command-line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add either the **-i** or **-e** parameter to the command line. Both of these parameters are not allowed to be specified together. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1808I   Preparing LDIF file *filename***.**

Explanation: The **ldif2ds** utility is starting the prepare phase for the directory entries in the indicated LDIF file.

In the message text:

filename
    LDIF file name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1810I   ldif2ds utility version *version.release*, **Service level** *level***.**

Explanation: The **ldif2ds** utility with version, release, and service level indicated in the message is running.

In the message text:

version
    Utility version

release
Utility release

level
Utility service level

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1811E   ldif2ds utility terminating due to error condition.

Explanation: The **ldif2ds** utility is ending due to an error. Previous messages indicate the reason for the failure.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier messages to correct the problem. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1812I   *name*: *number* entries have been processed. *error* of them encountered errors.

Explanation: The utility has processed the indicated number of entries. This message is issued when all of the directory entries have been processed for the check or prepare phase. It is also issued as an intermediate status message as determined by the **-q** command-line parameter. Note that the program might have encountered errors during this processing. If so, processing of some entries may not have completed successfully. Additional messages are issued to indicate these errors.

In the message text:

name
Program name

number
Number of entries

error
    Number of error entries

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1813E   Incorrect continuation at line *line_number* **of** *filename*.

Explanation: The **ldif2ds** utility has encountered a continuation line at the start of a directory entry definition in the input LDIF file indicated in the message. A directory entry cannot begin with a continuation line.

In the message text:

line_number
    Line number

filename
    LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the continuation line from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1814E   Syntax error at line *line_number* **of** *filename*.

Explanation: The **ldif2ds** utility has encountered a syntax error in the LDIF statement beginning at the indicated line of the LDIF file.

In the message text:

line_number
    Line number

filename
  LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the statement is within an entry, verify that it has the correct format for specifying an entry record (either *name*: *value* or *name*:: *value*). If the statement is not within an entry and is not a comment, then it must be a version or dn statement. See *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the format of LDIF statements. Correct the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1815E   **Unable to decode binary value at line** *line_number* **of** *filename*.

Explanation: The **ldif2ds** utility is unable to decode a base64-encoded value in the LDIF statement beginning at the indicated line of the LDIF file. The LDIF statement format is *name*:: *value*, indicating that the value must be base64-encoded.

In the message text:

line_number
  Line number

filename
  LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDIF file by base64-encoding the value or by changing the statement format to *name*: *value*. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1816E   **LDIF version is not supported.**

Explanation: The version directive in an LDIF file specifies a version number that is not supported by the **ldif2ds** utility. The utility only supports LDIF version 1. A previous message indicates the name of the LDIF file.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the version number in the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1817E   **Unsupported 'changetype' directive at line** *line_number* **of** *filename***.**

Explanation: An entry in the LDIF file at the indicated line contains a **changetype** directive that does not specify an add operation. Only `changetype: add` is supported by the **ldif2ds** utility. Note that the **changetype** directive is not required.

In the message text:

line_number
    Line number

filename
    LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either correct the **changetype** directive by specifying add or remove the directive from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1818E   **Zero-length distinguished name found at line** *line_number* **of** *filename***.**

Explanation: The **ldif2ds** utility found a zero-length distinguished name for a directory entry at the indicated line of the LDIF file. Every entry must have a distinguished name.

In the message text:

line_number
     Line number

filename
     LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a distinguished name for the entry in the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1819E   **Unable to normalize value at line** *line_number* **of** *filename*: *error_text***.**

Explanation: The **ldif2ds** utility cannot convert the value on the indicated line to normalized format. The value is either a distinguished name or an attribute value.

In the message text:

line_number
     Line number

filename
     LDIF file name

error_text
     Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the value in the LDIF file. Then restart the program.

Source: LDAP

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Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1820E   **Unable to resolve attribute type** *attribute*: *error_text*.

Explanation: The **ldif2ds** utility is unable to find the attribute indicated in the message in the LDAP server schema. Every attribute contained in the entry, including the attributes in the relative distinguished name (RDN) of the entry, must be already defined in the schema. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

attribute
     Attribute type

error_text
     Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either add the missing attribute to the LDAP server schema or remove the attribute from the LDIF file. Then restart the program. To add the attribute to the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the **ldif2ds** utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1821E   **Unable to resolve object class** *objectclass*: *error_text*.

Explanation: The **ldif2ds** utility is unable to find the object class indicated in the message in the LDAP server schema. Every object class contained in the entry, including any object classes in the relative distinguished name (RDN) of the entry, must be already defined in the schema. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

objectclass
     Object class

error_text
     Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either add the missing object class to the LDAP server schema or remove the object class from the LDIF file. Then restart the program. To add the object class to the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the **ldif2ds** utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1822E   No backend configured for DN '*name*'.

Explanation: The **ldif2ds** utility encountered an entry whose distinguished name (DN) does not belong to any suffix in the backends that are contained in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either add the appropriate **suffix** option in the backend section of the LDAP server configuration file or change the distinguished name of the entry in the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1823E   Entry '*name*' is not in the same backend as previous entries.

Explanation: The **ldif2ds** utility encountered an entry whose distinguished name (DN) belongs to a different backend in the LDAP server configuration file than the entries processed before this one. Each invocation of the **ldif2ds** utility can only load entries into one backend. All the entries in the LDIF files must belong to the same backend, using any of the suffixes listed for that backend in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either change the distinguished name of the entry so that it has one of the suffixes of the backend being loaded or remove the entry from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1824E   **Entry '*name*' is not in a TDBM backend.**

Explanation: The **ldif2ds** utility encountered an entry whose distinguished name (DN) belongs to a backend in the LDAP server configuration file that is not a TDBM backend. The **ldif2ds** utility can only load entries into a single TDBM backend, thus all entries in the LDIF files must belong to the same TDBM backend. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either change the distinguished name of the entry so that it has one of the suffixes of the TDBM backend being loaded or remove the entry from the LDIF file. Then restart the program. Other types of backends can only be loaded using an add operation while the LDAP server is running.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1825I   **Using TDBM backend** *name*.

Explanation: The **ldif2ds** utility is processing entries for the TDBM backend whose name is indicated in the message. This name is either the name specified in the **database** option for this TDBM backend in the LDAP server configuration file or, if no name is specified in the option, is a name generated by LDAP based on the position of the backend section in the LDAP server configuration file.

In the message text:

name
    Backend name

System action: The utility continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1826E   **Unable to encrypt** *attribute* **value for entry '***name***':** *error_text***.**

Explanation: The **ldif2ds** utility encountered an error while trying to encrypt or hash a value of an attribute that requires encryption or hashing: **userPassword**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw**. The type of encryption or hashing in use is determined by the values of the **pwEncryption** and **secretEncryption** options within the TDBM backend section in the LDAP server configuration file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

attribute
    Attribute type

name
    Entry distinguished name

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1828E   **An internal error has occurred.**

Explanation: An internal programming error has been detected by the utility.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Try running the utility again with **-d ERROR** specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1829E   Entry '*name*' already exists.

Explanation: The **ldif2ds** utility encountered an entry that already exists, either as a prior entry in this LDIF file or in an LDIF file processed before this file, or as an existing entry in the TDBM backend being loaded. The duplicate entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the entry is a duplicate of a previous entry in an LDIF file, remove one of these entries. If the entry is a duplicate of an entry in the TDBM directory, remove the entry from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1831I   ldif2ds utility is done.

Explanation: The **ldif2ds** utility has finished.

Note: If **-l** (load) was specified on the command line, then the load jobs have been successfully submitted, but this message does not indicate that the load jobs have ended successfully. The processing of the load jobs by DB2 is outside the scope of the **ldif2ds** utility. Review the output generated by each load job to determine if it is successful.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If appropriate, review the output of each load job to determine if it is successful. If a load job fails, use the information in the description of the **ldif2ds** utility to determine how to proceed.

Note: If a load job fails, do not run the **ldif2ds** utility again because this can add duplicate data to the database.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1832I   Checking LDIF file *filename*.

Explanation: The **ldif2ds** utility is starting the check phase for the directory entries in the indicated LDIF file. The check phase is performed when the **-c** or **-p** option is specified on the command line.

In the message text:

filename
    LDIF file name

System action: The utility continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1833E   Unable to get directory entry '*name***':** *error_text*.

Explanation: The **ldif2ds** utility has detected an entry whose parent entry cannot be retrieved from the TDBM database. The distinguished name of the parent entry is indicated in the message. A previous message indicates the name of the LDIF file containing the child entry.

In the message text:

name
    Parent entry distinguished name

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

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Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1834E   **The parent for entry '*name*' does not exist.**

Explanation: The **ldif2ds** utility encountered a non-suffix entry for which there is no parent. Every non-suffix entry must have a parent entry, either as a prior entry in this LDIF file or in an LDIF file processed before this file, or as an existing entry in the TDBM database being used. The entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
     Child entry distinguished name

System action: If the error occurs during the check phase, the utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded. If the error occurs during the prepare phase, the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: In the LDIF file, either remove the child entry, add an entry for the parent before the child entry, or change the distinguished name of the child entry to one for which the parent entry exists. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1835E   **Parent entry '*name*' is a referral or an alias.**

Explanation: The **ldif2ds** utility encountered an entry for which the parent entry is an alias entry or a referral entry. Alias and referral entries cannot have children. The parent entry can be a prior entry in this LDIF file or in an LDIF file processed before this file or it can be an existing entry in the TDBM backend being loaded. A previous message indicates the name of the LDIF file containing the child entry.

In the message text:

name
     Parent entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the child entry from the LDIF file or change the distinguished name of the child entry to one for which the parent is not an alias or referral entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1836E   DN '*name*' exceeds the maximum length of *length***.**

Explanation: The **ldif2ds** utility encountered an entry for which the normalized distinguished name (DN) is longer than the maximum length allowed. The maximum length of a DN is determined by the size of the DN column in the DIR_ENTRY table, set when creating the TDBM database tables. The normalized DN is stored in this column. The normalized DN may not be same as the DN specified for the entry in the LDIF file. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry normalized distinguished name

length
    Maximum DN length

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Shorten the distinguished name of the entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1837E   No base structural object class specified for '*name*'.

Explanation: The **ldif2ds** utility encountered an entry which does not contain a base structural object class. Every entry must have a single base structural object class, specified on the **objectclass** attribute within the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

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System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add a base structural object class to the entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1838E   **Multiple base structural object classes specified for '***name***'.**

Explanation: The **ldif2ds** utility encountered an entry which contains more than one base structural object class. Every entry must have a single base structural object class, specified on the **objectclass** attribute within the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the extra base structural object classes from the entry. Verify that all the attributes used in the entry and in the relative distinguished name (RDN) of the entry are included in the remaining object classes. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1839E   **Entry '***name***' contains obsolete attribute type '***attribute***'.**

Explanation: The **ldif2ds** utility encountered an entry which contains an attribute that is marked as obsolete in the LDAP server schema. Obsolete attribute types cannot be used in an entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

attribute
Obsolete attribute name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the obsolete attribute type from the entry in the LDIF file or modify the LDAP server schema to remove the obsolete specification from the attribute definition. Then restart the program. To modify the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the **ldif2ds** utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1840E   **Entry '***name***' contains abstract class '***objectclass***' as a base object class.**

Explanation: The **ldif2ds** utility encountered an entry which contains an abstract object class as one of it base object classes. An abstract class cannot be a base object class; it must be derived from another object class specified in the entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
Entry distinguished name

objectclass
Abstract object class name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the abstract object class from the entry. Verify that all the attributes used in the entry and in the relative distinguished name (RDN) of the entry are included in the remaining object classes. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1841E   Entry '*name*' contains restricted attribute type '*attribute*'.

Explanation: The **ldif2ds** utility encountered an entry which contains an attribute that cannot be set when adding an entry. The value for this attribute is instead generated by the LDAP server itself. Except for the **ibm-EntryUUID**, **creatorsName**, **createTimestamp**, **modifiersName**, and **modifyTimestamp** attribute types, an attribute type that is marked as NO-USER-MODIFICATION in its definition in the LDAP schema may not be used to create a new directory entry. A previous message indicates the name of LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

attribute
    Attribute type

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the restricted attribute from the entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1842E   Entry '*name*' contains obsolete object class '*objectclass*'.

Explanation: The **ldif2ds** utility encountered an entry which contains an object class that is marked as obsolete in the LDAP server schema. Obsolete object classes cannot be used in an entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

objectclass
    Obsolete object class name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the obsolete object class from the entry in the LDIF file or modify the LDAP server schema to remove the obsolete specification from the object class definition. Then restart the program. If the object class is removed, verify that all the attributes used in the entry and in the relative distinguished name (RDN)

of the entry are included in the remaining object classes. If modifying the schema, start the LDAP server and issue an appropriate modify operation to the schema entry. Make sure to stop the LDAP server before using the **ldif2ds** utility to load entries into the server. See LDAP directory schema for more information about modifying the LDAP server schema.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1843E   The userPassword attribute is not allowed for entry '_name_**'.**

Explanation: The **ldif2ds** utility encountered an entry which is set up for using native authentication but which also contains the **userPassword** attribute. This attribute cannot be included in an entry which is using native authentication. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
     Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the **userPassword** attribute from the entry in the LDIF file or change the entry so that it does not use native authentication. Then restart the program. Setting up an entry for native authentication involves including special attributes in the entry and specifying certain options in the TDBM backend section of the LDAP server configuration file. See Native authentication for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1844E   Entry '_name_**' cannot be both an alias and a referral.**

Explanation: The **ldif2ds** utility encountered an entry which is both an alias entry and a referral entry. This combination is not supported by the LDAP server. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
     Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

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Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Change the entry so that it is an alias entry or a referral entry but not both. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1845E   The aclPropagate attribute for entry '*name*' requires the aclEntry attribute.

Explanation: The **ldif2ds** utility encountered an entry which contains the **aclPropagate** attribute but does not contain the **aclEntry** attribute. **aclEntry** must be specified along with **aclPropagate**. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either add the **aclEntry** attribute to the entry or remove the **aclPropagate** attribute. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1846E   The ownerPropagate attribute for entry '*name*' requires the entryOwner attribute.

Explanation: The **ldif2ds** utility encountered an entry which contains the **ownerPropagate** attribute but does not contain the **entryOwner** attribute. **entryOwner** must be specified along with **ownerPropagate**. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either add the **entryOwner** attribute to the entry or remove the **ownerPropagate** attribute. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1847E   Schema check failed for entry '*name*': *error_text*.

Explanation: The **ldif2ds** utility encountered an entry whose attributes or object classes violate the LDAP server schema. The entry cannot be added to the directory. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

error_text
    Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the entry in the LDIF file. The error is usually that the entry contains an attribute that is not listed in any of the object classes specified in the entry or that the entry does not contain an attribute that is required by one of the object classes specified in the entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1848E   The -o option must be specified if -p or -l is specified.

Explanation: The **ldif2ds** utility cannot be invoked without the **-o** command-line parameter when either the **-p** (prepare) or **-l** (load) command-line parameter is specified. **-o** is required during the prepare and load phases to identify the prefix part of the name of the output data sets.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add the **-o** parameter to the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1849E   The output dataset name prefix is too long.

Explanation: The maximum length of the output data set name prefix is 22. The prefix is specified by the **-o** parameter on the **ldif2ds** utility command line.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a value that is at most 22 characters long for the **-o** parameter on the command line. Then restart the program,

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1850E   Unable to assign database attribute identifier: *error_text*.

Explanation: The **ldif2ds** utility could not assign an internal identifier for an attribute type that is not currently known to the TDBM backend being loaded.

In the message text:

error_text
   Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the problem. Then restart the program. If more information is needed, try running the utility again with **-d ERROR** specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1851E   Unable to assign database entry identifier: *error_text*.

Explanation: The **ldif2ds** utility could not assign an internal entry identifier for a new entry.

In the message text:

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the problem. Then restart the program. If more information is needed, try running the utility again with **-d ERROR** specified on the command line. The debug output may assist in locating and correcting the error. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1852E   Alias entry '*name***' points to itself.**

Explanation: The **ldif2ds** utility encountered an alias entry in which a value of the **aliasedObjectName** attribute is the same as the distinguished name of the alias entry. This would cause an infinite loop when dereferencing the entry, thus is not allowed. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Change the **aliasedObjectName** attribute value so that it is not the distinguished name of the entry or remove the alias entry from the LDIF file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1853E   The JCL dataset must contain fixed-length 80-byte records.

Explanation: The **ldif2ds** utility has determined that the format of the JCL data set is not correct. The JCL data set must be a PDS or PDSE with a record format of RECFM=F or RECFM=FB and with a logical record length of LRECL=80. The name of this data set is *dsprefix*.BULKLOAD.JCL, where *dsprefix* is the value of the **-o** command-line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Reallocate the JCL data set. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1854E   Unable to retrieve file information: *error_code*/*reason_code* **-** *error_text*

Explanation: The utility could not obtain file information for an open file. For the **ldif2ds** utility, the file is *dsprefix*.BULKLOAD.JCL, where *dsprefix* is the value of the **-o** command-line parameter. See the description of **fldata()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
    Error code from **fldata()**

reason_code
    Reason code from **fldata()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1855E   The SYSTEM member contains an unrecognized directive: *value***.**

Explanation: The **ldif2ds** utility has found a record that it does not support in the SYSTEM member of the JCL data set. The supported records begin with # (a comment), `HLQ`, or `JOBCARD`. The name of the JCL data set is *dsprefix*`.BULKLOAD.JCL`, where *dsprefix* is the value of the **-o** command-line parameter.

In the message text:

value
    Unrecognized directive

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the unsupported record from the SYSTEM member of the JCL data set. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1856E   The HLQ directive in the SYSTEM member is not valid.

Explanation: The **ldif2ds** utility has found a value that is not supported for the `HLQ` record in the SYSTEM member of the JCL data set. This value is the high-level-qualifier of the DB2 data sets, and must be at most 35 characters long. The name of the JCL data set is *dsprefix*`.BULKLOAD.JCL`, where *dsprefix* is the value of the **-o** command-line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the value specified on the `HLQ` record in the SYSTEM member of the JCL data set. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1857E • GLD1858E

GLD1857E   **No job name specified in the SYSTEM member.**

Explanation: The **ldif2ds** utility has not found a job name in the SYSTEM member of the JCL data set. The job name must appear on the first JOBNAME record. The value of this record must begin with *//job_name*. Either there are no JOBNAME records in the SYSTEM member or the first record does not have the required format. The name of the JCL data set is *dsprefix*.BULKLOAD.JCL, where *dsprefix* is the value of the **-o** command-line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the SYSTEM member of the JCL data set contains a JOBNAME record with the correct format. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1858E   **The load datasets are not in the correct state.**

Explanation: The **ldif2ds** utility has been invoked with the **-l** (load) command-line parameter to submit the database load jobs, but it has determined that the load data sets may not be valid. **ldif2ds** expects the load phase to be run after the new entries in the LDIF files have been prepared, by specifying the **-p** (prepare) command-line parameter. When the utility successfully completes the prepare phase, it sets the first record in the STATUS member of the JCL data set to STATUS P. When the utility begins the load phase, it checks that the first record of the STATUS member is STATUS P. The load phase fails if there is no record or if the value is not correct. If the status is correct and the load phase completes successfully, then the status is reset to STATUS L. This prevents the **ldif2ds** utility from being run again to load the same data, which can result in a corrupted DB2 database that is not usable by the LDAP server. The name of the JCL data set is *dsprefix*.BULKLOAD.JCL, where *dsprefix* is the value of the **-o** parameter.

Note: If the load phase is successful, then the load jobs have been successfully submitted, but this does not indicate that the load jobs have ended successfully. The processing of the load jobs by DB2 is outside the scope of the **ldif2ds** utility. Review the output generated by each load job to determine if it is successful.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the **ldif2ds** utility has not yet been run with the **-p** command-line parameter to prepare the entries for loading, do that before using the **-l** command-line parameter to load the data. Both parameters can also be specified at the same time. Otherwise, if it is certain that the load data sets contain valid load data, prepared using the current LDAP server schema and the current TDBM database to be loaded, and that the data has not already been loaded into the database, then edit the STATUS member of the JCL data set, set the first record to STATUS P, and then restart the program to load the entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1859E   Unable to allocate an internal reader: Error *error_code*, **Reason** *reason_code*.

Explanation: The **ldif2ds** utility has been unable to allocate an internal reader, needed to submit the load jobs. See the description of **dynalloc()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
    Error code from **dynalloc()**

reason_code
    Reason code from **dynalloc()**

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1860I   ldif2ds usage message.

Explanation: The **ldif2ds** utility help and usage menu.

In the message text:

utility_name
    Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

GLD1862E • GLD1863E

GLD1862E   **The following specified options are ignored when performing** *phase*: *options*.

Explanation: The **ldif2ds** utility has been invoked with one or more command-line parameters that do not apply to the requested phases of processing (check, prepare, and load). The extraneous parameters are ignored.

In the message text:

phase
> Processing phases

options
> Ignored command-line parameters

System action: The utility continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that only the parameters that pertain to the requested phases of processing are specified on the utility command line.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1863E   **The '***attribute***' attribute cannot be used in the entry distinguished name for entry** *name*.

Explanation: The **ldif2ds** utility encountered an entry which contains an attribute in its relative distinguished name (RDN) that is not allowed to be part of the RDN. The following attributes cannot be used in an entry RDN: **aclEntry**, **aclPropagate**, **entryOwner**, **ownerPropagate**, **ibm-EntryUUID**, **creatorsName**, **createTimestamp**, **modifiersName**, **modifyTimestamp**. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

attribute
> Attribute type

name
> Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the RDN of the entry so that all its attributes are allowed in an RDN. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1864E The dynamic group URL '*url*' on entry '*name*' is not valid.

Explanation: The **ldif2ds** utility encountered a dynamic group entry with a **memberURL** attribute value that is not supported. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. The format of a dynamic group URL is `ldap:///`*dn*`??`*scope*`?`*filter*, where *dn* is the distinguished name of the base entry for the search, *scope* is the search scope, and *filter* is the search filter. The valid values for the search scope are `base`, `one`, and `sub`. All of the attribute types specified in the search filter must be defined in the LDAP server schema and each assertion value must conform to the matching rule for the associated attribute type. BINARY attribute types cannot be specified in a search filter.

In the message text:

url
    Dynamic group URL

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the **memberURL** attribute contains valid values for the distinguished name, search scope, and search filter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1865E An unsupported value '*value*' is specified for attribute 'ref' in entry '*name*'.

Explanation: The **ldif2ds** utility encountered a referral entry with a **ref** attribute value that is not supported by the LDAP server. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. If the value is '', then a 0-length string was specified for the value. This could occur if the attribute is specified without a value.

In the message text:

value
    Unsupported attribute value

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

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System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the **ref** attribute contains non-blank values. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1866E Entry '*parent_name*' which is a parent of '*child_name*' failed objectclass checking: *error_text*.

Explanation: The **ldif2ds** utility encountered a child entry with an objectclass that is not allowed based on the objectclass attribute values in the parent entry. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

parent_name
    Parent entry distinguished name

child_name
    Child entry distinguished name

error_text
    Error message text

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the error text in the message to ensure that the indicated parent entry contains the correct objectclasses for the indicated child entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1867E Entry 'cn=localhost' is not allowed an objectclass value of 'ibm-replicationContext'.

Explanation: The **ldif2ds** utility encountered a `cn=localhost` entry with the **ibm-replicationContext objectclass** attribute value. The `cn=localhost` entry is not allowed to be the root of a replication context. A previous message indicates the name of the LDIF file containing the entry.

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the objectclass value **ibm-replicationContext** from the `cn=localhost` entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1868E   Entry '*name*' must be a master server if it has both 'ibm-replicaSubEntry' and 'ibm-replicaGateway' objectclass values.

Explanation: The **ldif2ds** utility encountered an entry with **objectclass** attribute values of **ibm-replicaSubEntry** and **ibm-replicaGateway** and the **ibm-replicaServerIsMaster** attribute value is not set to **TRUE**. A previous message indicates the name of the LDIF file containing the entry.

In the message text:

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove either the **ibm-replicaSubEntry** or **ibm-replicaGateway objectclass** attribute value or set the **ibm-replicaServerIsMaster** attribute value to **TRUE** to designate this server as a master server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1869W   A mismatch is detected between the serverCompatLevel (*value*) and the database version value (*major*) in the *name* backend. The utility checks entries based on the serverCompatLevel setting.

Explanation: The **ldif2ds** utility detected a mismatch between the **serverCompatLevel** value in the server configuration file and the database version for the backend identified in the message. The **ldif2ds** utility does entry checking based on the **serverCompatLevel** setting which indicates the entries that are supported in the backend.

In the message text:

value
    serverCompatLevel option value

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major
    Database version number

name
    Backend name

System action: The utility continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the correct LDAP server configuration file is being used by the **ldif2ds** utility. Also, verify that the **serverCompatLevel** option is set to the correct value in the configuration file. See the description of the **serverCompatLevel** configuration option in Customizing the LDAP server configuration for more information about the entries that are supported at each compatibility level.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1870E   **Entry '***name***' requires password policy entry '***pwdname***'. The password policy entry was not found.**

Explanation: The **ldif2ds** utility encountered an error processing the entry specified in the message. If the entry has an **ibm-pwdIndividualPolicyDN** or an **ibm-pwdGroupPolicyDN** attribute value, the password policy entry specified must exist under the `cn=ibmpolicies` subtree in the CDBM backend.

In the message text:

name
    Entry distinguished name

pwdname
    Password policy entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add the specified password policy entry to the CDBM backend under the `cn=ibmpolicies` subtree or update the **ibm-pwdIndividualPolicyDN** or **ibm-pwdGroupPolicyDN** attribute values in the entry to specify a valid password policy. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1871E   **Entry '*name*' has a duplicate replication consumer URL '*url*'.**

Explanation: The **ldif2ds** utility encountered an entry with an **objectclass** attribute value of **ibm-replicationAgreement** that contains a value for **ibm-replicaURL** that already exists for the replication context. The values for the **ibm-replicaURL** attribute type under an advanced replication context must all be unique.

In the message text:

name
    Entry distinguished name

url
    Replication consumer URL

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the **ibm-replicaURL** attribute contains a unique value within the scope of the replication context. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1872E   **The replication filter '*value*' on entry '*name*' is not valid.**

Explanation: The **ldif2ds** utility encountered a replication filter entry with an **ibm-replicationFilterAttr** attribute value that is not supported. The value is indicated in the message. A previous message indicates the name of the LDIF file containing the entry. The format of a replication filter is: `(objectclass=`*objclass*`):[!](`*attr1*`[,`*attr2*`...])` where *objclass* is an objectclass attribute value and *attr1*, *attr2*, and so on, is a list of attribute values to filter separated by a comma. The *objclass* and any attribute values specified in the replication filter entry must be defined in the LDAP server schema.

In the message text:

value
    Filter value

name
    Entry distinguished name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the **ibm-replicationFilterAttr** attribute value in the replication filter entry is in the correct format. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1873E   Unable to decode the 'replicateOperationalAttributes' control found at line *line_number* **of** *filename*.

Explanation: The **ldif2ds** utility encountered an error decoding the **replicateOperationalAttributes** control. The **replicateOperationalAttributes** control contains base64 encoded values for the **creatorsName**, **createTimestamp**, **modifiersName**, and **modifyTimestamp** operational attribute values.

In the message text:

line_number
   Line Number

filename
   LDIF file name

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the **replicateOperationalAttributes** control is properly encoded. Then restart the program. If the problem persists, remove the **replicateOperationalAttributes** control from the LDIF file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD1874E   Replication context entry '*name***' missing explicit propagating** *type* **specification.**

Explanation: The **ldif2ds** utility encountered an error processing the entry specified in the message. If a replication context entry is not a suffix level entry, an **aclEntry** and **entryOwner** attribute value must be defined explicitly in that entry.

In the message text:

name
   Entry distinguished name

type
   Attribute type

System action: The utility skips the rest of this entry and continues the check phase with the next complete entry. No entries are prepared or loaded.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add the specified attribute type to the entry. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 2. Utility messages (2000)

This section lists the messages issued by the utility programs.

GLD2001I   No Directory Server service has been configured.

Explanation: No LDAP server backends have been configured.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Configure appropriate backends as needed in the configuration profile. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2002I   Directory Server configuration utility has started.

Explanation: The **dsconfig** utility has started.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2003I   Directory Server configuration utility has ended.

Explanation: The **dsconfig** utility has ended.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2004D **The output data set** *name* **has been previously used. Existing members may be overwritten and data lost. Do you wish to continue? (yes/no)**

Explanation: The output data set specified on the **dsconfig** command already contains output from a previous run. This prompt is asking the user if they want to overwrite existing members in the output data set. If the output data set is currently being used for an LDAP server, a different output data set should be used for this invocation of the **dsconfig** utility.

In the message text:

name
    Output data set name

System action: The utility continues after a **yes** response has been entered. The utility ends if the response is **no**.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Respond by entering either **yes** or **no**.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2005I **Terminating upon user request.**

Explanation: The **dsconfig** utility is terminating upon user request.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2006I   dsconfig usage message.

Explanation: The **dsconfig** utility help and usage menu.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2007E   A blank option was found in file *filename* **and is not allowed.**

Explanation: The **dsconfig** utility has detected a blank option in the input profile.

In the message text:

filename
    File that contains the blank option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the blank option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2008E   The value for option *name* **contains non-printable characters.**

Explanation: The **dsconfig** utility has detected that the value of the indicated option contains characters that cannot be printed.

In the message text:

name
    Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the value. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2009E   An option was specified for a database backend (*type* **) that is not configured.**

Explanation: A database backend option is specified but the corresponding database backend is not configured.

In the message text:

type
    Backend type

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the database backend option or configure the corresponding database backend. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2016E   ADDRMODE ' *value* **' must be either 31 or 64.**

Explanation: The **ADDRMODE** option must have a value of **31** or **64**.

In the message text:

value
>   **ADDRMODE** option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Change the **ADDRMODE** value to either **31** or **64**. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2017E   *option* **with value '***current_value***' in file** *filename* **was previously set to '***original_value***'.**

Explanation: An option is specified more than once in the file. This option can only be specified once.

In the message text:

option
>   Option name

current_value
>   Current option value

filename
>   File that contains the duplicate options

original_value
>   Original option value

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove all but one of the duplicate options. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2018E   **File** *filename***:** *error_text*

Explanation: An error occurred while processing a file or data set.

In the message text:

filename
    File or data set associated with the error

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2019E   *option* **is not allowed in file** *filename***.**

Explanation: The indicated option is not allowed in the indicated profile.

In the message text:

option
    Option name not allowed

filename
    File containing the incorrect option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2020E   **Unable to allocate storage.**

Explanation: An attempt to allocate storage was unsuccessful.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Increase the storage available for use by the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2021E   **The configuration profile has not been specified.**

Explanation: The configuration profile name was not specified in the **dsconfig** command.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Reissue the **dsconfig** command and specify the configuration profile using the **-i** command-line parameter.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2022E   **No network interface has been configured.**

Explanation: No **LISTEN** option was found in the configuration profile.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add one or more appropriate **LISTEN** options to the configuration profile. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2023E   *option* **in file** *filename* **has no input value.**

Explanation: A required option is missing.

In the message text:

option
    Option name having no input value

filename
    File in which option value must be included

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add the required option to the indicated profile. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2024E   **The value for** *option1* **must be different from the value for** *option2*.

Explanation: Values for the indicated options must be unique.

In the message text:

option1
    Option name

option2
    Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: Database directory names cannot be the same for LDBM, CDBM, and file-based GDBM backends. DB2 database user IDs cannot be the same for TDBM and DB2-based GDBM backends. Similarly, DB2 database names must be unique.

Administrator response: Change one of the option values so that the two option values are different. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2025E   Operand missing for command parameter '*parameter*'.

Explanation: No value was specified for the indicated **dsconfig** command-line parameter. This parameter must have a value.

In the message text:

parameter
    Command-line parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Reissue the **dsconfig** command and either specify a value for the parameter or remove the parameter from the command (if it is optional).

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2026E   Value '*value*' for option *option* is too long. It must be *number* characters or less.

Explanation: The **dsconfig** utility has detected that an option value is longer than the maximum characters allowed for that option.

In the message text:

value
    Option value

option
    Option name

number
    Maximum option length

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Edit the option value such that its length does not exceed the maximum allowed. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2027E   Command input '*value*', is not valid.

Explanation: The **dsconfig** utility detected an incorrect command-line parameter. Either the parameter is not known or the value specified for the parameter is not supported. See dsconfig utility for more information about the **dsconfig** utility.

In the message text:

value
    Incorrect command input

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Reissue the **dsconfig** command and either specify a valid value for the parameter or remove the parameter from the command (if it is optional).

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2028E   An internal program error occurred.

Explanation: The **dsconfig** utility detected an internal program error.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2029E   A required option has no input value.

Explanation: The **dsconfig** utility detected an option with no value. A previous message indicates the name of the option.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Review earlier messages to determine which option has no value. Provide a correct value for the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2030E   Value '*value*' for option *option* is not valid.

Explanation: The **dsconfig** utility has detected that an option value is not valid.

In the message text:

value
    Option value

option
    Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid value for the option. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2031E   **The SERVERCOMPATLEVEL option must be** *value* **or greater when the** *option* **option is specified.**

Explanation: The usage of the configuration option indicated in the message text requires a minimum setting for the SERVERCOMPATLEVEL configuration option.

In the message text:

value
    Option value

option
    Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove the specified option or update the SERVERCOMPATLEVEL option to the minimum level specified. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2032E   **The value (***value1***) specified for option** *option1* **and the value (***value2***) specified for option** *option2* **are not compatible.**

Explanation: The values indicated in the message cannot be specified at the same time in the **dsconfig** utility input profile(s).

In the message text:

value1
    Option value of the first option

option1
    Option name of the first option

value2
    Option value of the second option

option2
    Option name of the second option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify one or both of the options values in the input profiles. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2256I *utility_name*: *number* **entries have been processed.**

Explanation: The utility has processed the number of entries indicated in the message. If errors are encountered during processing, additional messages are issued to indicate these errors. The number of entries processed may not match the number of entries present in the output LDIF file if errors are encountered during processing.

In the message text:

utility_name
   Utility name

number
   Number of entries processed

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2257I *utility_name* **has completed successfully.**

Explanation: The utility has successfully completed.

In the message text:

utility_name
   Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2258A *utility_name* **has failed.**

Explanation: The utility has ended after encountering a severe error. Previous messages issued by the utility indicate the actual problem.

In the message text:

utility_name
    Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information provided by the previous error messages to correct the error. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2259I *utility_name* **has terminated because there are no entries to process.**

Explanation: The utility found no entries in the LDBM, TDBM, or CDBM backend to unload.

In the message text:

utility_name
    Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the backend that is to be unloaded contains entries. If necessary, correct the value specified for either the **-s** or the **-n** command line options. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2260I   ds2ldif usage message.

Explanation: The utility help and usage menu.

In the message text:

utility_name
    Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2262A   There are no TDBM, LDBM, CDBM, or schema backends which contain a subtree or filter DN entry for *name***.**

Explanation: The **ds2ldif** utility or the LDAP server is unable to find the subtree entry in a TDBM, LDBM, CDBM, or schema backend or the filter entry cannot be found within a TDBM, LDBM, or CDBM backend. The DN is the subtree or filter DN value specified on the **-s** (subtree DN) or the **-q** (filter DN) command-line parameter of the utility.

In the message text:

name
    Distinguished name of entry

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the LDAP server configuration file used by the **ds2ldif** utility includes the subtree or filter entry within a TDBM, LDBM, CDBM, or schema backend. Verify that the TDBM, LDBM, CDBM, or schema backend is configured correctly and that the syntax of the DN specified on the **-s** (subtree DN) or the **-q** (filter DN) command-line parameter of the **ds2ldif** utility is correct. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2263E   *utility_name* **found more than one backend section. Either use the -s or -n option to specify which TDBM, LDBM, or CDBM section to process or remove all but one of the database sections from the configuration file.**

Explanation: If there are more than one TDBM, LDBM, or CDBM backends present in the LDAP server configuration file, it is necessary to specify which backend needs to be unloaded by using the **-n** or **-s** command-line parameter on the **ds2ldif** utility. The utility is unable to determine which TDBM, LDBM, or CDBM backend needs to be unloaded if there are multiple TDBM, LDBM, or CDBM backends in the LDAP server configuration file.

In the message text:

utility_name
> Utility name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The **ds2ldif** utility provides two command-line parameters that are used to specify which TDBM, LDBM, or CDBM backend to process. These two parameters cannot be specified at the same time.

- The **-s** parameter specifies a subtree DN (distinguished name) whose entries are to be unloaded. The **ds2ldif** utility selects the TDBM, LDBM, or CDBM backend database section which contains this subtree from the LDAP server configuration file.

- The **-n** parameter indicates the name of a TDBM, LDBM, or CDBM backend whose entries are to be unloaded. This name is the optional fourth parameter that can be specified on the **database** option in the LDAP server configuration file. The **ds2ldif** utility selects the TDBM, LDBM, or CDBM database section with this name from the LDAP server configuration file.

Alternatively, modify the LDAP server configuration file and remove all TDBM, LDBM, or CDBM database sections except the one that needs to be unloaded.

Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2264E   **Unable to write record to output file** *filename***:** *error_code*/*reason_code* **-** *error_text*

Explanation: The **ds2ldif** utility or the LDAP server encountered an error while attempting to write a record to the output file. The output file is either a z/OS UNIX System Services file, a partitioned data set, or a sequential data set that is specified on **-o** command-line parameter of the **ds2ldif** utility. The error code, reason code, and error text are returned from one of the following: **fputs()**, **fflush()**, or **fclose()**. See the descriptions of these routines in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

filename
> Output file name

error_code
> Error code from function

reason_code
> Reason code from function

error_text
> Text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2265A   **There are no TDBM, LDBM, or CDBM backends with name '***name***'.**

Explanation: The **ds2ldif** utility is unable to find a TDBM, LDBM, or CDBM backend in the LDAP server configuration file with the backend name indicated in the message. This backend name is the value specified on the **-n** command-line parameter of the **ds2ldif** utility.

In the message text:

name
> Backend name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the LDAP server configuration file used by the **ds2ldif** utility has a **database** option for a TDBM, LDBM, or CDBM backend that includes the backend name indicated in the message. The backend name is the optional fourth parameter on the **database** configuration option. Verify that the TDBM, LDBM, or CDBM backend that is to be unloaded is correctly configured. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2266I   **Unloading directory data from backend named** *backend_name* **under subtree DN:** *entry_name*.

Explanation: The **ds2ldif** utility is unloading the entries under the indicated subtree DN (distinguished name) in the TDBM, LDBM, or CDBM backend with the indicated name.

In the message text:

backend_name
    Backend name

entry_name
    Distinguished name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2267I   **Unloading the cn=schema entry.**

Explanation: The **ds2ldif** utility is unloading the LDAP server schema entry.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2268E   **Unable to open file** *filename*: *error_code*/*reason_code* **-** *error_text*

Explanation: The **ds2ldif** utility encountered an error while attempting to open the indicated file for writing. See the description of **fopen()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

filename
    File name

error_code
  Error code from **fopen()**

reason_code
  Reason code from **fopen()**

error_text
  Text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2269I   **ds2ldif utility is starting.**

Explanation: The **ds2ldif** utility has started.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2270E   **Option '*option*' is specified more than once with different values.**

Explanation: The **ds2ldif** utility encountered an error because it detected multiple specifications of the same command-line parameter with different values. The utility is not able to determine which value to use for the parameter.

In the message text:

option
  Command-line parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the command line of the **ds2ldif** utility to ensure that a parameter is only specified one time. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2271E   **Do not specify both of the following options: '***option1***' and '***option2***'.**

Explanation: The **ds2ldif** utility encountered an error because it detected that the two indicated parameters are both specified on the utility command line, but they are mutually exclusive. These two command-line parameters cannot be specified at the same time. See ds2ldif utility for more information about the **ds2ldif** utility.

In the message text:

option1
> Command-line parameter

option2
> Command-line parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove one of the mutually exclusive parameters from the command line of the **ds2ldif** utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2272I   **ds2ldif version** *version.release*, **Service level** *level*.

Explanation: The **ds2ldif** utility with version, release, and service level indicated in the message is running.

In the message text:

version
> Utility version

release
> Utility release

level
> Utility service level

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2273D   Enter the LDAP administrator password to unload the directory:

Explanation: The **ds2ldif** utility has determined that it is necessary to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62), either because the LDAP server is already running or because the **-r** parameter is specified on the **ds2ldif** command line. When the utility uses the **unloadRequest** extended operation, it must first bind to the targeted LDAP server using the LDAP root administrator distinguished name, specified in the **adminDN** option in the LDAP server configuration file. The password used for the bind can be specified by the **-w** parameter on the **ds2ldif** command line, else by the **adminPW** option in the LDAP server configuration file. If neither of these are set, this prompt is displayed to obtain the password.

System action: The utility waits for a response from the user.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Enter the LDAP root administrator password.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2274I   Connecting to the LDAP server with the backend to unload.

Explanation: The **ds2ldif** utility has determined that it is necessary to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the wanted data. This is either because the **-r** parameter is specified on the **ds2ldif** command line or because the backend to be unloaded cannot successfully be started by the **ds2ldif** utility. Before attempting the **unloadRequest** extended operation, a connection must be established with the targeted LDAP server. This ensures that the LDAP server with the backend that is to be unloaded is running.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2275I   Unloading directory data by using the unloadRequest extended operation.

Explanation: The **ds2ldif** utility is sending the **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to the LDAP server that is running to directly unload the wanted directory data. The utility sends the necessary information, including the values of the subtree DN (**-s** utility command-line parameter), the backend name (**-n** parameter), and the LDIF output file name (**-o** parameter) on the **unloadRequest** extended operation to the LDAP server.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2276A   The unloadRequest extended operation encountered an error: *error_code* - *error_message*.

Explanation: The **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) encountered an error on the targeted LDAP server while attempting to unload the wanted directory data.

In the message text:

error_code
    unloadRequest server error code

error_message
    unloadRequest server error message

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information returned from the targeted LDAP server in the message to correct the error. The error code is a standard LDAP protocol return code defined in RFC 2251 or in the `/usr/lpp/ldapclient/include/ldap.h` file. The information provided in the error message should be sufficient for determining the exact problem that was encountered on the LDAP server while attempting to perform the **unloadRequest** extended operation. It might be necessary to correct the LDAP server configuration file, restart the LDAP server, and then restart the **ds2ldif** utility with different command line options. If the problem persists, contact the service representative and provide the LDAP server configuration file and the **ds2ldif** command that was attempted.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2277A   **Unexpected error** *error_code* **occurred while encoding the unloadRequest extended operation.**

Explanation: An unexpected error was encountered while attempting to BER encode the **unloadRequest** extended operation (OID 1.3.18.0.2.12.62).

In the message text:

error_code
    unloadRequest encode error

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Examine the **ds2ldif** command line options and verify that all values are printable characters. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the utility. The error code is an internal error code that occurred during the encoding of the **unloadRequest** extended operation. If the problem persists, contact the service representative and provide the **ds2ldif** debug trace, the LDAP server configuration file, and the **ds2ldif** command that was attempted.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2278A   **Unexpected error** *error_code* **occurred while decoding the unloadResponse extended operation.**

Explanation: An unexpected error was encountered while attempting to BER decode the **unloadResponse** extended operation (OID 1.3.18.0.2.12.63) that was received from the targeted LDAP server. The **unloadResponse** extended operation is not valid.

In the message text:

error_code
    unloadResponse decode error

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

GLD2279A

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The error code is an internal return code. To determine why the LDAP server constructed an **unloadResponse** extended operation that is not valid, turn on LDAP debug tracing by specifying **-d ALL** on both the **ds2ldif** utility and the LDAP server command lines (or use the LDAP server **DEBUG** operator modify command). Then restart the utility and the LDAP server if it is not running. If the problem persists, contact the service representative and provide the LDAP server and **ds2ldif** debug traces, the LDAP server configuration file, and the **ds2ldif** command that was attempted.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2279A   Error encountered in getpass(): *error_code/reason_code* **-** *error_text*

Explanation: An error was encountered while attempting to obtain the password for the LDAP root administrator so that an **unloadRequest** extended operation can be attempted. See the description of **getpass()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
    Error code from **getpass()**

reason_code
    Reason code from **getpass()**

error_text
    Text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: **getpass()** is not supported in a TSO or batch environment. If the **ds2ldif** utility is run in those environments, you must specify the LDAP root administrator password using either the **adminPW** option in the LDAP server configuration file or the **-w** parameter on the **ds2ldif** utility command line. If you do not want to specify the LDAP root administrator's password in the clear, then run the **ds2ldif** utility from OMVS so that **getpass()** works correctly. If a problem with **getpass()** is encountered in an OMVS environment, verify that a password is entered. If the problem persists in an OMVS environment, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2280A   A fully qualified LDIF output filename must be specified on the -o option.

Explanation: The **ds2ldif** utility encountered an error in the LDIF output file name specified on the **-o** parameter on the utility command line. The **ds2ldif** utility requires a fully qualified file name on the **-o** parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDIF output file name that is specified on the **-o** command-line parameter is in one of the following formats:

Fully qualified z/OS UNIX System Services file name
    Example: `/var/ldap/output.ldif`

Fully qualified file in a sequential data set
    Example: `//USER.OUTPUT.LDIF`

Fully qualified file in a partitioned data set
    Example: `//USER.OUTPUT(LDIF)`

Fully qualified file specified as a DD card in JCL
    Example: `DD:OUTNAME`

The fully qualified UNIX System Services file names must start with an / and represent the path name from the root directory. The fully qualified sequential and partitioned data set names must start with the following two characters: `//`. When **ds2ldif** is invoked from the shell, quotation marks must be used around the data set name. For example, the sequential data set name above would be specified as `"//'USER.OUTPUT.LDIF'"`. The DD card specified in JCL must start with the following three characters: `DD:`. However, a DD card cannot be used to specify the LDIF output file name if an **unloadRequest** extended operation is to be performed. Correct the **-o** parameter on the command line of the **ds2ldif** utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2281A   Error *return_code* reported by **ldap_extended_operation()**.

Explanation: The **ds2ldif** utility encountered an error in **ldap_extended_operation()** while sending the **unloadRequest** extended operation to the targeted LDAP server.

In the message text:

return_code
    Return code from **ldap_extended_operation()**

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: An error occurred in the **ldap_extended_operation()** routine. The following are the common client errors:

81   The network connection to the targeted LDAP server failed.

89   A parameter that is specified on **ldap_extended_operation** is not valid.

90   Insufficient storage is available.

92   The LDAP protocol version must be V3 to initiate the **unloadRequest** extended operation.

252   An unbind request is issued for the LDAP handle.

The following are the common server errors that are returned on the **ldap_extended_operation()** routine:

2   The server does not support the **unloadRequest** extended operation.

12   A critical server control is either not recognized or is not supported for the **unloadRequest** extended operation.

53   The server is unable to perform the requested **unloadRequest** extended operation.

Depending upon the return code from **ldap_extended_operation()**, it might be necessary to correct the LDAP server configuration file, restart the LDAP server, and restart the **ds2ldif** utility. To obtain more debug information, turn on LDAP debug tracing by specifying **-d ALL** on both the **ds2ldif** utility and the LDAP server command lines (or use the LDAP server **DEBUG** operator modify command). Then restart the utility and the LDAP server if it is not running. If the problem persists, contact the service representative and provide the LDAP server and **ds2ldif** debug traces, the LDAP server configuration file, and the **ds2ldif** command that was attempted.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2282A   An unexpected error occurred during the running of ds2ldif.

Explanation: The **ds2ldif** utility encountered an unexpected error during its processing.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program. Analyze the debug trace output and correct the error. If the problem persists, contact the service representative and provide the **ds2ldif** debug trace, the LDAP server configuration file, and the **ds2ldif** command that was attempted.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2283A   A DD card is not allowed to be specified when performing an unloadRequest extended operation.

Explanation: The **ds2ldif** utility does not allow a DD: card to be specified on the **-o** option when performing an **unloadRequest** extended operation. The **ds2ldif** utility performs an **unloadRequest** extended operation when the LDAP server is already running or the **-r** option is specified on the **ds2ldif** command line.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the **-o** parameter on the command line of the **ds2ldif** utility to no longer specify the DD: card. To use the same LDIF output file name that is specified on the DD card, update the **-o** option to specify that file name. If the **unloadRequest** extended operation is not wanted, stop the LDAP server and do not specify the **-r** option on the **ds2ldif** command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2284A   There is no TDBM, LDBM, or CDBM backend present in the LDAP server configuration file to unload.

Explanation: When the **ds2ldif** utility is invoked without the **-n** or **-s** option, the utility searches for a TDBM, LDBM, or CDBM backend in the LDAP server configuration file. The utility was unable to find a TDBM, LDBM, or CDBM backend to unload.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the correct LDAP server configuration file has been specified on the **-f** option or the CONFIG DD card in JCL. The only backends that can be unloaded with the **ds2ldif** utility are the schema, LDBM, TDBM, and CDBM backends. If the schema backend is to be unloaded, specify the **-s** option with a value of cn=schema. If a TDBM, LDBM, or CDBM backend is to be unloaded, either make sure that there is only a single TDBM, LDBM, or CDBM backend in the LDAP server configuration file or use the **-n** or **-s** option to indicate which one of the TDBM, LDBM, or CDBM backends to unload. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2285E   **The '***option1***' option requires the '***option2***' option.**

Explanation: The **ds2ldif** utility encountered an error because it detected that *option1* was missing required *option2*. If *option1* is specified then *option2* must be specified. See ds2ldif utility for more information about the **ds2ldif** utility.

In the message text:

option1
    Command-line parameter

option2
    Command-line parameter

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either remove *option1* from the **ds2ldif** command line or specify both *option1* and *option2* on the **ds2ldif** command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2286I   **Filtering directory data being unloaded using filters in filter DN:** *name*.

Explanation: The **ds2ldif** utility is using filters that are specified in the **ibm-replicationfilterattr** attribute values contained in the indicated filter DN (distinguished name). These filters may prevent some entries from being unloaded or may remove some attribute types and values from some unloaded directory entries.

In the message text:

name
    Entry distinguished name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2287E   **Unable to format the** *type* **attribute value in entry** *name*.

Explanation: The **ds2ldif** utility is unable to unload the entry because the attribute type and value for the entry could not be formatted into LDIF format. This formatted data is written to an internal buffer before it is written to the output LDIF file.

In the message text:

type
    Attribute type

name
    Entry distinguished name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the attribute values for the entry contain appropriate data so that they can be properly formatted to the output LDIF file. If necessary, perform an LDAP search request to retrieve the entry and the attribute values to verify them. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2288E   **Unable to decrypt the** *attribute* **attribute value in entry** *name* **- '***error_text***'.**

Explanation: The **ds2ldif** utility is unable to unload the entry because the encrypted attribute value cannot be decrypted. The **ds2ldif** utility decrypts AES or DES encrypted attribute values when unloading them so that they are portable to other servers. The decrypted attribute values are base64 encoded to better protect them.

In the message text:

attribute
    Attribute type

name
    Entry distinguished name

error_text
    Error message text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the attribute value is encrypted in AES or DES and the key label resides in the ICSF

CKDS, verify that ICSF is started and the user invoking the **ds2ldif** utility is able to access that key label. If the attribute value is encrypted in AES or DES and the key label resides in the LDAPKEYS data set, verify that the **-k** option for the **ds2ldif** utility specifies the correct location of the key labels. The error message text in this message may also provide additional information about why the decryption failed. See "LDAP server reason codes" on page 424 for more information. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2401E   Encrypt all passwords that are presently unencrypted, AES encrypted, or DES encrypted (yes/no)?

Explanation: The **db2pwden** utility replaces any clear text (unencrypted), AES encrypted, or DES encrypted **userPassword** attribute values that exist in the directory with encrypted or hashed **userPassword** values based upon the setting of the **pwEncryption** option in the LDAP server configuration file. This message prompts the user of the **db2pwden** utility to ensure that encryption or hashing of the **userPassword** attribute values is really wanted.

System action: If the response is **yes**, **y**, or **Y**, the utility continues. Otherwise, the utility ends without encrypting or hashing **userPassword** attribute values.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If clear text (unencrypted), AES encrypted, or DES encrypted **userPassword** attribute values in the directory are to be encrypted or hashed in the directory, enter **yes**, **y**, or **Y**. Otherwise, enter any other response to end the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2402A   No base is defined

Explanation: The utility encountered an error because a base DN (distinguished name) is not specified for the utility. The base DN can be specified on the **-b** command-line parameter of the utility or set on the **LDAP_BASEDN** environment variable. If set both ways, the command line value is used.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify the base DN (distinguished name) either by using the **-b** command-line parameter of the utility or by setting it on the **LDAP_BASEDN** environment variable. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2403A   db2pwden ends without encrypting passwords.

Explanation: The **db2pwden** utility has ended and no passwords have been encrypted or hashed. Either the user responded to the utility prompt to end the utility or an error occurred during utility processing.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the utility ended due to an error, refer to any previous error messages and correct any errors that are identified. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2410A   Memory allocation failed.

Explanation: An attempt to allocate storage was unsuccessful.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Increase the storage available for use by the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2411A   The only supported mechanisms are EXTERNAL, GSSAPI, CRAM-MD5, and DIGEST-MD5.

Explanation: The utility encountered an error because an incorrect authentication mechanism is specified on the **-m** or **-S** command-line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the **-m** or **-S** command-line parameter by specifying a valid authentication mechanism. The only supported authentication mechanisms are **EXTERNAL**, **GSSAPI**, **CRAM-MD5**, or **DIGEST-MD5**. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2414A   Error reported by LDAP client initialization.

Explanation: The **ds2ldif** utility encountered an error while attempting to complete the necessary initialization required for connecting to the targeted LDAP server. This occurred when the **ds2ldif** utility was attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62).

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the targeted LDAP server is running before starting the **ds2ldif** utility and performing an **unloadRequest** extended operation. Verify that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2417A   Error *return_code* reported parsing LDAP results.

Explanation: The **ds2ldif** utility encountered an error while attempting to parse LDAP results from the targeted LDAP server when performing the **unloadRequest** extended operation. The return code is from the **ldap_result()** routine. See the description of this routine in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

return_code
　　Return code from parsing results

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running. To obtain additional debug information, specify **-d ALL** on the command line of the program. Then restart the utility. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2425A   A user name is required when doing a DIGEST-MD5 bind.

Explanation: When the **-m DIGEST-MD5** or **-S DIGEST-MD5** command-line parameter of the **db2pwden** utility is specified, the **-U** (user name) command-line option must also be specified.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify the user name on the **-U** command-line parameter of the **db2pwden** utility or change the **-m** or **-S** command-line parameter. Then restart the utility.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2426A   Debug value is not valid.

Explanation: The utility encountered an error with the debug value that is specified on the **-d** command-line parameter of the utility. See the documentation for the utility for more information about valid debug values.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid debug value on the **-d** command-line parameter of the utility or remove the parameter. Then restart the program.

Source: LDAP

Routing code: None.

GLD2429A • GLD2435E

Descriptor code: None.

Automation: Not applicable.

GLD2429A   Credentials are not valid for the specified LDAP server.

Explanation: The **ds2ldif** utility encountered an error while attempting to perform the LDAP root administrator authentication for the **unloadRequext** extended operation. The credentials specified on the **-w** command-line parameter are not valid for the **adminDN** configuration option.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify the correct credentials for the **adminDN** in the LDAP server configuration file on the **-w** command-line parameter of the **ds2ldif** utility. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2435E   Unable to retrieve LDAP results: *error_code* **- '**error_text**'**

Explanation: The utility encountered an error while retrieving results from the targeted LDAP server. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of **ldap_result()** in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

error_code
Error code from **ldap_result()**

error_text
Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running when the request is sent and that TCP/IP is working properly between the utility and the LDAP server. To obtain additional debug information, specify **-d ALL** on the command line of the program. Then restart the utility. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2436E   **Unable to parse LDAP server results:** *error_code* **-** **'***error_text***'.**

Explanation: The utility encountered an error while attempting to parse results from the targeted LDAP server. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of **ldap_parse_result()** in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

error_code
    Error code from **ldap_parse_result()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running and that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2437E   **Unable to authenticate with targeted LDAP server:** *error_code* **-** **'***error_text***'.**

Explanation: The utility encountered an error while attempting to authenticate to the targeted LDAP server. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_code
    Error code from targeted LDAP server

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

GLD2438E • GLD2439E

Administrator response: If running the **ds2ldif** utility, verify that the correct LDAP administrator password is specified in the LDAP server configuration file or on the **-w** command line parameter of the **ds2ldif** utility. Verify that the correct **adminDN** is specified in the LDAP server configuration file used by the **ds2ldif** utility. Ensure that the LDAP administrator's account is not locked and the LDAP administrator's password is not expired. If the LDAP administrator's account is locked or the password has expired, the account must be unlocked or the password must be changed. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2438E   Additional error information: *error_text*

Explanation: The targeted LDAP server returned an additional reason code message to the utility indicating a more specific reason for the request error. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_text
    Error text from **ldap_parse_result()**

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If running the **ds2ldif** utility, verify that the correct LDAP root administrator password is specified in the LDAP server configuration file or on the **-w** command line parameter of the **ds2ldif** utility. Verify that the correct **adminDN** is specified in the LDAP server configuration file used by the **ds2ldif** utility. Ensure that the LDAP root administrator's account is not locked and the LDAP root administrator's password is not expired. If the LDAP root administrator's account is locked or the password has expired, the account must be unlocked or the password must be changed. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2439E   Unable to parse password policy control response: *error_code* - '*error_text*'.

Explanation: The utility encountered an error while parsing the password policy control response from the targeted LDAP server. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of **ldap_parse_pwdpolicy_response()** in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

error_code
    Error code from **ldap_parse_pwdpolicy_response()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the password policy response control is returned correctly from the targeted LDAP server and it is encoded properly. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2440E   Password policy control error response: *error_text*

Explanation: The targeted LDAP server returned a password policy control error message to the utility. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

error_text
     Password policy control error text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password policy control error message indicates the reason why authentication may have failed on the targeted LDAP server. If running the **ds2ldif** utility, verify that the password for the LDAP root administrator is valid and the account is not locked. After the LDAP root administrator's password is reset and the account is unlocked, restart the utility.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2441W   Password policy control warning response: *warning_text*

Explanation: The targeted LDAP server returned a password policy control warning message to the utility. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

GLD2442W

warning_text
    Password policy control warning text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password policy control warning message indicates an informational message returned by the targeted LDAP server. If running the **ds2ldif** utility, this occurred while authenticating as the LDAP root administrator to the targeted LDAP server. The LDAP root administrator's password should be changed to allow continued access to the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2442W   **Time before password expiration is** *num_days* **days and** *num_hours***:***num_minutes***:***num_seconds***.**

Explanation: The targeted LDAP server returned a password policy control warning message to the utility indicating that the password is set to expire in the amount of time indicated in the message. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree.

In the message text:

num_days
    Number of days

num_hours
    Number of hours

num_minutes
    Number of minutes

num_seconds
    Number of seconds

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The authenticated user's password should be changed within the time indicated in this message to allow continued access to the targeted LDAP server. If the password is not changed within the time indicated in the message, the user's account could be locked or exceed the configured grace login limit on the LDAP server. If running the **ds2ldif** utility, the authenticated user is the LDAP root administrator.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD2443E   Unable to connect to targeted LDAP server: *error_code* **- '***error_text***'**

Explanation: The utility encountered an error while attempting to connect to the targeted LDAP server during authentication. If running the **ds2ldif** utility, this occurred while attempting to perform an **unloadRequest** extended operation (OID 1.3.18.0.2.12.62) to unload the requested backend or subtree. See the description of **ldap_sasl_bind()** in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

error_code
    Error code from **ldap_sasl_bind()**

error_text
    Error text corresponding to the error code

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the targeted LDAP server is still running and that TCP/IP communication is working properly between the utility and the LDAP server. To obtain additional debug information, specify **-d ALL** on the command line of the utility. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 3. TDBM messages (3000)

This section lists the messages issued by the TDBM backend.

GLD3301E   **Unable to load** *type* **backend named** *name* **because attribute type** *attribute* **is not defined.**

Explanation: The LDAP server or utility found an attribute type used by an entry in the indicated backend is not defined in the LDAP schema.

In the message text:

type
　　Backend type

name
　　Backend name

attribute
　　Undefined attribute type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server or utility without the backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then restore the backend section and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3302E   **Unable to load** *type* **backend named** *name* **because object class** *objectclass* **is not defined.**

Explanation: The LDAP server or utility found an object class used by an entry in the indicated backend is not defined in the LDAP schema.

In the message text:

type
　　Backend type

name
　　Backend name

objectclass
　　Undefined object class

System action: The backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the

srvStartUpError option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server or utility without the backend section in the LDAP server configuration file and add the missing object class to the LDAP server schema. Then restore the backend section and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3303E   **TDBM backend specified for a non-TDBM database.**

Explanation: The LDAP server or utility found that the TDBM backend DLL, `GLDBTD31/GLDBTD64`, is specified on a **database** option in the LDAP server configuration file but the *type* parameter on the option is not `TDBM`.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3304E   *type* **initialization terminated because DB2 is not available.**

Explanation: The LDAP server or utility cannot initialize the indicated backend because DB2 is not available.

In the message text:

type
    Backend type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the DB2 problem and ensure that DB2 is active. Restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3305E   **Native return code** *code*, **SQL state** *state*, **SQL message:** *text*

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

In the message text:

code
    Native return code

state
    SQL state

text
    SQL message text

System action: If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. Contact your DB2 database administrator if you are unable to resolve the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3306E • GLD3307E

GLD3306E   **Error code** *code* **received for ODBC function** *name*.

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

In the message text:

code
    ODBC error code

name
    ODBC function that returned the error code

System action: If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. Contact your DB2 database administrator if you are unable to resolve the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3307E   **Unable to create key identifier:** *error_code/reason_code* **-** *error_text*

Explanation: The LDAP server or utility encountered an error when creating a key identifier. See the description of **pthread_key_create()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
    Error code from **pthread_key_create()**

reason_code
    Reason code from **pthread_key_create()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3308E   An internal *type* **backend error has occurred.**

Explanation: The LDAP server or utility has detected an internal programming error.

In the message text:

type
    Backend type

System action: If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3309E   Unable to get thread-specific value: *error_code*/*reason_code* **-** *error_text*

Explanation: The LDAP server or utility is unable to retrieve a thread-specific value. See the description of **pthread_getspecific()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
    Error code from **pthread_getspecific()**

reason_code
    Reason code from **pthread_getspecific()**

error_text
    Error text corresponding to the error code

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

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configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3310E   **Unable to set thread-specific value:** *error_code/reason_code* **-** *error_text*

Explanation: The LDAP server or utility is unable to set a thread-specific value. See the description of **pthread_setspecific()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
> Error code from **pthread_setspecific()**

reason_code
> Reason code from **pthread_setspecific()**

error_text
> Error text corresponding to the error code

System action: If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. If the error occurs while processing a client request, the LDAP server continues but the client request fails. The utility ends in all cases.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then retry the client operation or restart the program if it stopped or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3311E   Database access unavailable for *type* **backend named** *name* **because DB2 is terminating.**

Explanation: The DB2 database manager is terminating and the **db2Terminate** option in the LDAP server configuration file is set to **recover** or **restore** (this is the default value).

In the message text:

type
    Backend type

name
    Backend name

System action: The LDAP server continues to run but access to the indicated backend is not available until the DB2 database is available. Client requests to that backend are rejected.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the DB2 database manager.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3312I   Database access available for *type* **backend named** *name* **because DB2 has restarted.**

Explanation: The DB2 database manager is restarting and the LDAP server can once more access the indicated backend.

In the message text:

type
    Backend type

name
    Backend name

System action: The LDAP server continues. Client requests to that backend are now processed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3313E   Column *name* **is not defined for the** *owner*.*table* **table.**

Explanation: The LDAP server or utility found that a required column is not defined for the indicated DB2 table.

In the message text:

name
    Column name

owner
    Database owner

table
    Database table

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Review the SPUFI script used to create the DB2 database and ensure that all tables and columns used by the IBM Tivoli Directory Server for z/OS are defined. A DB2 database created using the SPUFI script shipped in the Integrated Security Services LDAP server must be migrated before it can be used by the IBM Tivoli Directory Server for z/OS. Correct or migrate the DB2 database. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3314E   Column *name* **in the** *owner*.*table* **table is not defined correctly.**

Explanation: The LDAP server or utility has found that a required column in the indicated DB2 table is not defined correctly. Either a non-modifiable column has the wrong length or a modifiable column has a length less than 8.

In the message text:

name
    Column name

owner
    Database owner

table
    Database table

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Review the SPUFI script used to create the DB2 database and ensure that the column sizes are acceptable for the IBM Tivoli Directory Server for z/OS. A DB2 database created using the SPUFI script shipped in the Integrated Security Services LDAP server may not have acceptable column sizes for the IBM Tivoli Directory Server for z/OS. Correct the DB2 database. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3315E *type* **database version** *major.minor* **is not supported.**

Explanation: The DB_VERSION value in the DB2 DIR_MISC table for this backend is set to an unsupported database version for this level of the LDAP server. The **serverCompatLevel** configuration option sets the DB_VERSION value in the DB2 DIR_MISC table.

In the message text:

type
    Backend type

major
    Database version number

minor
    Database version number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The DB_VERSION value in the DB2 DIR_MISC table is not correct for this release of the z/OS LDAP server. The DB_VERSION value may have been updated when running this DB2-based backend on a later release of the z/OS LDAP server because the **serverCompatLevel** value was set or allowed to default to the incorrect value. See the **serverCompatLevel** option in Customizing the LDAP server configuration in *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for information about the server compatibility levels supported at each z/OS LDAP server release. Also, see Fallback from a TDBM or DB2-based GDBM backend in z/OS IBM TDS to an earlier z/OS IBM TDS version for fallback procedures to run on the later release. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3316E   Attribute type identifier '*name*' is too long.

Explanation: The LDAP server or utility found an attribute type in the schema whose identifier is too long. The TDBM database limits the maximum length of attribute type identifiers to 200 characters.

In the message text:

name
    Attribute type identifier

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the program ended or if the backend is needed, restart the LDAP server without the TDBM backend section in the LDAP server configuration file and modify the LDAP server schema to specify a shorter name for the attribute type. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3317E   Object class identifier '*name*' is too long.

Explanation: The LDAP server or utility found an object class in the schema whose identifier is too long. The TDBM database limits the maximum length of object class identifiers to 200 characters.

In the message text:

name
    Object class name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the program ended or if the backend is needed, restart the LDAP server without the TDBM backend section in the LDAP server configuration file and modify the LDAP server schema to specify a shorter name for the object class. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3318W **Database suffix '***suffix***' is not configured.**

Explanation: A backend directory contains a suffix entry that is not in the list of suffixes specified by the **suffix** options for this backend in the LDAP server configuration file.

In the message text:

suffix
    Database suffix distinguished name

System action: Backend initialization continues, but directory entries under this suffix are not accessible.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If access to the entries using this suffix is needed, add a **suffix** option specifying this suffix to the backend section of the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3319E **Database suffix '***directory_suffix***' overlaps configured suffix '***configured_suffix***'.**

Explanation: The LDAP server or utility found that a backend directory contains a suffix entry that is an ancestor or descendant of a suffix in the list of suffixes for this backend. The list of suffixes is specified by the **suffix** options for this backend in the LDAP server configuration file.

In the message text:

directory_suffix
    Distinguished name of existing suffix in directory

configured_suffix
    Configured suffix distinguished name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the LDAP server configuration file either by removing the **suffix** option for the

suffix that is overlapped or by changing it to match the suffix that exists in the directory. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3320E *type* **backend named** *name* **database XCF data record is not valid.**

Explanation: The LDAP server cannot decode a cross-system notification containing information about a change to a database.

In the message text:

type
> Backend type

name
> Backend name

System action: The LDAP server continues, but the backend is not notified of the change. As a result, the backend database on this LDAP server may be out of sync with the other LDAP servers in the cross-system group. Thus, this server may return different results for an LDAP request than the other servers. There are two additional consequences for a TDBM backend. A persistent search is not notified if the database change is within the scope of the search. Also, no replication of the change to replica servers for this backend is performed if this server is the database owner in the cross-system group.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: For a TDBM database, restart the LDAP server to resynchronize the TDBM backend with the other servers in the cross-system group. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3321E **The DIR_REPENTRY.CHNGDN column is smaller than the DIR_ENTRY.DN column.**

Explanation: The LDAP server or utility found that a column in a DB2 table is too small. The size of the CHNGDN column in the DIR_REPENTRY table must be at least as large as the size of the DN column in the DIR_ENTRY table in the DB2 database for this backend.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Increase the size of the CHNGDN column in the DIR_REPENTRY table or decrease the size of the DN column in the DIR_ENTRY table so that the DN column size is not greater than the CHNGDN column size. Then restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3322E   The *attribute* **attribute for replication entry '***name***' is not valid.**

Explanation: A replica entry contains an attribute whose value is not supported. Basic replication is not performed for the replica identified by this entry until the value is corrected.

In the message text:

attribute
   Attribute type

name
   Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the attribute value in the replica entry to correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3323E   Unable to add '*name***' to the replication list.**

Explanation: The LDAP server is unable to add the indicated replica entry to the replica list. Basic replication is not performed for the replica identified by this entry until the error is corrected. A previous message may indicate the cause of the failure.

In the message text:

name
   Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. If there is no earlier message, use the LDAP server **DEBUG** operator modify command to turn on the **ERROR** debug level and then reissue the operation. The output may assist in locating and correcting the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3324E   Unable to wait for network event: *error_code/reason_code* **-** *error_text*

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

In the message text:

error_code
    Error code from **selectex()**

reason_code
    Reason code from **selectex()**

error_text
    Error text corresponding to the error code

System action: The LDAP server continues, however, TDBM basic replication is not available.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3325E   Replication entry '*name***' requires SSL but SSL support is not configured.**

Explanation: The **replicaUseSSL** attribute is set to **TRUE** in the replica entry but SSL support is not configured in the LDAP server configuration file. Basic replication is not performed for the replica identified by this entry until the error is corrected.

In the message text:

name
    Replica entry distinguished name

System action: The LDAP server continues. Directory updates are not replicated to the replica identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either configure SSL support for the LDAP server in the LDAP server configuration file and then restart the LDAP server or modify the replica entry to specify **FALSE** for the **replicaUseSSL** attribute.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3326E   **Replication failed with** *host***:***port***: Error** *error_code* **-** *error_text***.**

Explanation: The LDAP server is unable to replicate a directory modification to the indicated replica.

In the message text:

host
    Replica server host name

port
    Replica server port number

error_code
    Error code

error_text
    Error text corresponding to the error code

System action: The LDAP server continues. The failing replication request is periodically tried again until basic replication is successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. The associated replica entry should be deleted from the directory if replication is no longer wanted for the failing replica. Deleting and then adding the replica entry resets the replication status so that only future directory modifications are replicated to the replica.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3327E   **Unable to create LDAP handle for replication with** *host***:***port***.**

Explanation: The LDAP server is unable to create an LDAP handle for use with the indicated replica. This indicates the **ldap_init()** or **ldap_ssl_init()** routine failed.

In the message text:

host
  Replica server host name

port
  Replica server port number

System action: The LDAP server continues. Basic replication does not occur for that replica.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replica host name and port are correct. If not, modify them in the associated replica entry. If SSL is being used, verify that SSL is configured in the LDAP server configuration file and is available.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3328E   **Additional information:** *text*

Explanation: This message provides additional information for a replication error. The text is the error message returned by the replica server.

In the message text:

text
  Additional text

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to help correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3329E   Group owner for *type* **backend named** *name* **cannot be contacted.**

Explanation: The LDAP server is unable to contact the LDAP server that owns the indicated database in the LDAP cross-system group in the sysplex.

In the message text:

type
  Backend type

name
  Backend name

System action: The LDAP server continues. Changes to the backend database may not be replicated to the replica servers for the backend.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3330E   Unable to decrypt change request: *Error_text*.

Explanation: The LDAP server encrypts pending replication requests when the request contains attributes subject to encryption or hashing based on the **pwEncryption** or the **secretEncryption** option settings (for example, **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw** attribute values) and the **secretEncryption** option is specified in the LDAP server configuration file. The request must then be decrypted before it is sent to a replica server. This error indicates the LDAP server is unable to decrypt the request.

In the message text:

Error_text
  Error text

System action: The LDAP server continues, however, TDBM basic replication may stall because this replication request cannot be processed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the encryption key label specified in the **secretEncryption** option in the LDAP

server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3331E   **Unable to decrypt replica credentials:** *error_text*.

Explanation: The LDAP server encrypts the password specified by the **replicaCredentials** attribute in a replica entry if the **secretEncryption** option is specified in the LDAP server configuration file. The password must then be decrypted before the LDAP server can bind to the replica server. This error indicates the LDAP server is unable to decrypt the replica password.

In the message text:

error_text
    Error text

System action: The LDAP server continues. Basic replication does not occur for that replica.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the encryption key label specified in the **secretEncryption** option in the LDAP server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3332I   *type* **backend named** *name* **schema migration has started.**

Explanation: A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. The LDAP server has begun to merge the TDBM backend schema into the LDAP server schema.

In the message text:

type
    Backend type

name
    Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3333I   *type* **backend named** *name* **schema migration has ended.**

Explanation: A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. The LDAP server has completed merging the TDBM backend schema into the LDAP server schema.

In the message text:

type
> Backend type

name
> Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3334E   **Schema migration has failed.** *error_text*.

Explanation: A TDBM backend was initially created by an Integrated Security Services LDAP server and the schema used for the TDBM backend is contained in an entry in the TDBM backend. In the IBM Tivoli Directory Server for z/OS, there is a single LDAP server schema for all backends. An error occurred while the LDAP server was merging the TDBM backend schema into the LDAP server schema.

In the message text:

error_text
> Error text

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

Operator response: None.

System programmer response: None.

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User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Then restart the program if it stopped or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3335I The *option* **option is not supported in multi-server mode with DB_VERSION less than 4. The option is ignored.**

Explanation: The option indicated in the message is specified in the LDAP server configuration file. However, the database for this backend is running in multi-server mode and has a DB_VERSION less than 4. This indicates that the TDBM database is being shared with an earlier version of the LDAP server. The configuration option is not supported in this environment.

In the message text:

option
    LDAP server configuration option

System action: The LDAP server continues. The option is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the option from the LDAP server configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3336E **Unable to decode a** *type* **entry (***name***) for persistent search, rc=***code***.**

Explanation: The LDAP server is unable to decode an entry passed in a notification from another LDAP server in the sysplex group.

In the message text:

type
    Backend type

name
    Entry distinguished name

code
    LDAP return code

System action: The LDAP server continues. Any persistent searches do not receive this notification and thus the

entry is not returned if it would have matched the persistent search.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Extract the entry contents and apply the contents to whichever application requested the persistent search. Make sure that the server has enough storage.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3337E   **Backend** *backend_name* **on LDAP server** *server_name* **in the sysplex group has different persistent search settings than this server.**

Explanation: This LDAP server does not have persistent search enabled but another server in the sysplex group does have persistent search enabled. All LDAP servers in a sysplex group must have the same persistent search settings.

In the message text:

backend_name
    Backend name

server_name
    LDAP server name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: To disable persistent search on the server named in the message, set the **persistentSearch** option to **off** in the LDAP server configuration file on that server. To enable persistent search on this server, set the **persistentSearch** option to **on** in the LDAP server configuration file on this server. The LDAP server containing the configuration file that is changed must be restarted to put the change into effect.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3338E   **The** *option* **option is not supported in multi-server mode with DB_VERSION less than 4.**

Explanation: The option indicated in the message is specified in the LDAP server configuration file. However, the TDBM database for this backend is running in multi-server mode and has a DB_VERSION less than 4. This indicates that the TDBM database is being shared with an earlier version of the LDAP server. The configuration option or its value is not supported in this environment. If the option is:

GLD3339W

- **pwEncryption** - AES encryption cannot be used. DES encryption can be used if the DES keys are stored in ICSF. All other encryption methods are supported.
- **secretEncryption** - cannot be used. Even when this option is not specified, there can be problems using the **secretKey** and **replicaCredentials** attributes in this environment.
- **pwCryptCompat** - cannot be set to **no**. The earlier LDAP server only supports the EBCDIC version of the crypt() algorithm.

In the message text:

option
    LDAP server configuration option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Remove the option or change its value in the LDAP server configuration file. Restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3339W   No DB2 statistics gathered on table '*owner*.*table*'.

Explanation: The LDAP server did not find statistics for the specified TDBM table. This may be an indication that the DB2 RUNSTATS utility has not been successfully run.

In the message text:

owner
    Database owner

table
    Database table

System action: The LDAP server continues, however, database queries may not have optimal performance.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the DB2 RUNSTATS utility has been successfully run. See Performance tuning for more information about running the RUNSTATS utility for the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3340I   **Found** *num_values* **frequent values for column** *column* **of table** *owner*.*table*. **Table cardinality is** *cardinality* **and least frequent value has a frequency of** *frequency*.

Explanation: The LDAP server has successfully found RUNSTATS information in the DB2 catalog for the indicated TDBM database. The number of frequent values found is governed by the options given to the RUNSTATS utility. The table cardinality indicates the number of rows in the table. The frequency of the least frequent value indicates how many times that value appears in the table. If the frequency is a large percentage of the table cardinality, it may indicate that there are more frequent values to be gathered. In this case the DB2 RUNSTATS utility can be rerun, with updated options to gather more frequent values for the column indicated above. See Performance tuning for more information about running the RUNSTATS utility for the LDAP server.

In the message text:

num_values
    Number of frequent values

column
    Database column

owner
    Database owner

table
    Database table

cardinality
    Database table cardinality

frequency
    Lowest frequency

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The information in this message may be useful for tailoring the use of the RUNSTATS utility for improved performance in the DB2-based backend.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3341W   **Insufficient row statistics gathered on column** *column* **of table** *owner*.*table*.

Explanation: The LDAP server did not find any row statistics for the specified columns in the DB2 catalog. This may indicate that the DB2 RUNSTATS utility was run without the options suggested to gather statistics for the indicated table and columns.

In the message text:

GLD3342I

column
    Database column

owner
    Database owner

table
    Database table

System action: The LDAP server continues, however database queries may not have optimal performance.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Review the DB2 RUNSTATS utility input. If necessary, update the utility input to include the options to gather statistics for the indicated table and columns. See Performance tuning for more information about running the RUNSTATS utility for the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3342I   *type* **backend named** *name* **is enabled for partition based key assignment.**

Explanation: The specified backend of the LDAP server or utility assigns keys to new directory entries using the partition based key assignment algorithm.

In the message text:

type
    Backend type

name
    Backend name

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3343E **The partitioning information stored in** *type* **backend named** *name* **is no longer consistent with the information stored in the DB2 database for this backend.**

Explanation: The partitioning information of the DIR_SEARCH table space stored in memory by the specified backend is no longer consistent with the information stored in the DIR_EID table by that backend. The user must have repartitioned the DIR_SEARCH table space and then started another LDAP server that is sharing the same DB2 database.

In the message text:

type
　　Backend type

name
　　Backend name

System action: The program continues. The request fails. Future entries added to this backend are not guaranteed to succeed until the program is restarted.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restarting the LDAP server or utility updates the partition control blocks for the specified backend, making them consistent with the information stored in the DIR_EID table. If the DIR_SEARCH table space has indeed been repartitioned by the user, you should unload the data from the specified backend using the **ds2ldif** utility, recreate the database belonging to this backend, and reload the data back using the **ldif2ds** utility. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3344E **Unable to add new entries to the DB2 database in** *type* **backend named** *name* **because all unique keys have been exhausted.**

Explanation: The LDAP server or utility is unable to accept new entries because there are no unique keys available.

In the message text:

type
　　Backend type

name
　　Backend name

System action: The program continues, but the request fails. Future entries added to this backend do not succeed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

GLD3345E

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3345E   **Unable to process the DB2 database belonging to** *type* **backend named** *name*: **error code** *error_code*.

Explanation: The LDAP server or utility is unable to process the DB2 database belonging to the specified backend. The error code has the following values:

1   The DIR_EID table is required by the partitioned entry identifier assignment algorithm, but it is not defined in the DB2 database belonging to the specified backend. This scenario should never happen. If it does happen, this is most likely the result of someone dropping the DIR_EID table from the DB2 database manually. Important entry identifier information is lost if the DIR_EID table is dropped.

2   The value detected for the PARTITIONED_EID column of the DIR_MISC table in the DB2 database belonging to the specified backend is not valid. The PARTITIONED_EID column, besides being a NULL column, only allows values 'T' or 'F'.

3   The number of entry identifiers that have been assigned and recorded in the DB2 database belonging to the specified backend has exceeded the maximum number of entry identifiers allowed by the LDAP server.

In the message text:

type
    Backend type

name
    Backend name

error_code
    Error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the problem. For error codes 1 and 3, consider unloading the data from the specified backend using the **ds2ldif** utility, rebuilding the DB2 database belonging to this backend, and reloading the data back using the **ldif2ds** utility. Restart the program if it did not start or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3346E   Unable to initialize the entry identifier assignment algorithm for *type* **backend named** *name***.**

Explanation: The LDAP server or utility is unable to initialize the entry identifier assignment algorithm. A previous message indicates the reason for the failure.

In the message text:

type
    Backend type

name
    Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the problem. Restart the program if it did not start or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3347W   Group owner for *type* **backend named** *name* **is busy, retrying.**

Explanation: A request was sent from this LDAP server to the LDAP server that owns the indicated database in the LDAP cross-system group in the sysplex. The database owner is either too busy to respond to the request or it is waiting for a DB2 connection.

In the message text:

type
    Backend type

name
    Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Determine the owning system by issuing the LDAP server **DISPLAY XCF** operator modify command for the LDAP server reporting the error. The command output indicates which LDAP server is the group owner. Then issue the **DISPLAY XCF** operator modify command for the owning LDAP server and verify that this server is really the group owner. Either fix the DB2 connection problem on the owning server or restart the owning

GLD3350E • GLD3351E

LDAP server if there is no response to the **DISPLAY XCF** command. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3350E   **The** *name* **backend requires that the serverCompatLevel (***value***) match the database version value (***major***).**

Explanation: The TDBM backend has detected that it is a sysplex replica server and that the **serverCompatLevel** value in the server configuration file for this server does not match the database version for the backend identified in the message.

In the message text:

name
    Backend name

value
    serverCompatLevel option value

major
    database version number

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the **serverCompatLevel** configuration option value is the same for all servers sharing the backend. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD3351E   **The '***type***' backend named '***name***' requires an EBCDIC encoding scheme. Encoding Scheme '***codeset***' was found for table '***owner***.***table***'.**

Explanation: The LDAP server has detected that a DB2 database table for a TDBM or GDBM backend was created with a non-EBCDIC encoding scheme. The LDAP server only supports DB2 database tables that are created with an EBCDIC encoding scheme.

In the message text:

type
    Backend type

name
    Backend name

codeset
  Encoding scheme code set

owner
  Database owner

table
  Database table

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The DB2 database must be re-created with an EBCDIC encoding scheme.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 4. LDBM messages (6000)

This section lists the messages issued by the LDBM backend.

GLD6001E   **Insufficient storage available for database control block.**

Explanation: The LDAP server or utility is unable to allocate storage.

System action: Depending on where the error occurs, the LDAP server might end. If the server does not end, the LDBM backend might not start or some LDBM function might not be available.

Operator response: Increase the storage available for use by the LDAP server or utility and restart the program. If the problem persists, contact the service representative.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If you are running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6004E   **Unable to get status for database file** *filename*: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

filename
    Database file name

error_code
    Error code from **fstat()**

reason_code
    Reason code from **fstat()**

error_text
    Error text corresponding to the error code

System action:
- If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

GLD6005E • GLD6006E

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server **BACKEND** operator modify command. Then retry the request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6005E   *type* **backend named** *name* **disabled.**

Explanation: The LDAP server is unable to load the database for a backend and has put the backend in disabled state. A previous message indicates the reason for the failure.

In the message text:

type
   Backend type

name
   Backend name

System action: The LDAP server continues, however, the backend can no longer process requests.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. Restart the LDAP server if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6006E   **Unable to load** *type* **backend named** *name* **because attribute type** *attribute* **is not defined.**

Explanation: The LDAP server or utility found an attribute type used by an entry in the indicated backend is not defined in the LDAP server schema.

In the message text:

type
   Backend type

name
   Backend name

attribute
    Undefined attribute type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server without the backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6007E   Unable to load *type* **backend named** *name* **because object class** *objectclass* **is not defined.**

Explanation: The LDAP server or utility found an object class used by an entry in the indicated backend is not defined in the LDAP server schema.

In the message text:

type
    Backend type

name
    Backend name

objectclass
    Undefined object class

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restart the LDAP server without the backend section in the LDAP server configuration file and add the missing object class to the LDAP server schema. Then restore the backend section in the configuration file and restart the program.

Source: LDAP

Routing code: None.

GLD6008E • GLD6009E

Descriptor code: None.

Automation: Not applicable.

GLD6008E   Unable to load *type* backend named *name* because database file *filename* is not valid.

Explanation: The LDAP server or utility is unable to decode an entry in the indicated database file. This indicates that the database file has been modified and is no longer usable.

In the message text:

type
  Backend type

name
  Backend name

filename
  Database file name

System action:
- If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is marked as disabled and requests to the affected backend fail.
- Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed, restore the indicated database file from a backup. Then restart the program. If you need to determine which entry in the database file is not valid, restart the LDAP server with **-d ERROR** specified on the command line.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6009E   Unable to open directory *path*: *error_code*/*reason_code* - *error_text*

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

In the message text:

path
  LDBM database directory path

error_code
    Error code from **opendir()**

reason_code
    Reason code from **opendir()**

error_text
    Error text corresponding to the error code

System action:

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

• If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the directory exists and can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6010E   **Unable to read directory** *path***:** *error_code*/*reason_code* **-** *error_text*

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

In the message text:

path
    LDBM database directory path

error_code
    Error code from **readdir_r()**

reason_code
    Reason code from **readdir_r()**

error_text
    Error text corresponding to the error code

System action:

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

• If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

GLD6011E

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the directory exists and can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6011E   Unable to delete database file *filename*: *error_code*/*reason_code* - *error_text*

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

In the message text:

filename
    LDBM database file name

error_code
    Error code from **remove()**

reason_code
    Reason code from **remove()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file can be accessed by the LDAP server. Restart the program if it stopped or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6012E   **Unable to open database file** *filename*: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

filename
  Database file name

error_code
  Error code from **open()**

reason_code
  Reason code from **open()**

error_text
  Error text corresponding to the error code

System action:
- If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server **BACKEND** operator modify command. Then retry the request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6013E   **Unable to read database file** *filename*: *error_code*/*reason_code* **-** *error_text*

Explanation: The LDAP server is unable to read the indicated database file. The error occurred in the **read()** or **readv()** routine. See the description of these routines in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

filename
  Database file name

error_code
  Error code from routine

GLD6014E

reason_code
    Reason code from routine

error_text
    Error text corresponding to the error code

System action:

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

- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.

- Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file exists and can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server **BACKEND** operator modify command. Then retry the request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6014E   **Unable to write database file** *filename*: *error_code*/*reason_code* **-** *error_text*

Explanation: The LDAP server is unable to write the indicated database file. The error occurred in the **write()**, **writev()**, or **close()** routine. See the description of these routines in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

filename
    Database file name

error_code
    Error code from routine

reason_code
    Reason code from routine

error_text
    Error text corresponding to the error code

System action:

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

- If the error occurs when the database is being reloaded because a moddn operation failed, then the database is marked as disabled. The LDAP server continues, but requests to the affected backend fail.
- Otherwise, the **fileTerminate** option in the backend section of the LDAP server configuration determines what the server does. If the **fileTerminate** option is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the message to correct the error. Verify that the file can be accessed by the LDAP server. Restart the LDAP server if it ended or if the backend is needed. To change the backend to read/write mode, use the LDAP server **BACKEND** operator modify command. Then retry the request.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6015E   *type* **version** *number file_type* **files are not supported.**

Explanation: The indicated file format is not supported by the current level of the LDAP server.

In the message text:

type
    Backend type

number
    File version number

file_type
    File type

System action:

- If the error occurs during initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends. The utility ends regardless of the option value.
- If the error occurs after initialization, the program continues but replication is not performed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either restore the LDAP server to the level used to create the database file or remove the indicated backend from the LDAP server configuration file. Restart the LDAP server if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

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Descriptor code: None.

Automation: Not applicable.

GLD6016I   Suffix *suffix* **in database file** *filename* **is not configured and will be ignored.**

Explanation: A backend directory contains a suffix entry that is not in the list of suffixes specified by the **suffix** options for this backend in the LDAP server configuration file.

In the message text:

suffix
    Database suffix distinguished name

filename
    Database file name

System action: Backend initialization continues, but directory entries under this suffix are not accessible.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If access to the entries using this suffix is needed, add a **suffix** option specifying this suffix to the backend section of the LDAP server configuration file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6020E   Suffix *suffix* **is not configured but the checkpoint file is not empty.**

Explanation: A suffix has been removed from the LDBM backend section of the LDAP server configuration file, but there are one or more checkpoint records to be processed for that suffix.

In the message text:

suffix
    Database suffix distinguished name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Add a **suffix** option with the indicated value to the LDBM backend section of the LDAP server configuration file. Then restart the LDAP server. After LDAP server initialization is complete and the checkpoint records have been processed, you can stop the LDAP server and remove the added **suffix** option if you

do not need that suffix. The LDAP server can now be started without the indicated suffix in the LDAP server configuration file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6021W   Group '*name*' contains an incorrect memberURL attribute value.

Explanation: The dynamic group membership URL cannot be evaluated. The format of a dynamic group URL is `ldap:///`*dn*`??`*scope*`?`*filter*, where *dn* is the distinguished name of the base entry for the search, *scope* is the search scope, and *filter* is the search filter. The valid values for the search scope are `base`, `one`, and `sub`. All of the attribute types specified in the search filter must be defined in the LDAP server schema and each assertion value must conform to the matching rule for the associated attribute type. BINARY attribute types cannot be specified in a search filter.

In the message text:

name
    Dynamic group distinguished name

System action: The LDAP server continues. The dynamic group is not used in determining group memberships.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the dynamic group URL to contain valid values for the base distinguished name, search scope, and search filter.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6022E   Time limit exceeded while loading *type* backend named *name* from group owner.

Explanation: The LDAP server waits a maximum of 60 seconds after requesting a copy of the indicated backend database from the LDAP server that owns the database in the cross-system group. This message indicates that the owning LDAP server is not responding to the request.

In the message text:

type
    Backend type

name
    Backend name

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

Operator response: None.

System programmer response: None.

GLD6023E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6023E   Database owner for *type* **backend named** *name* **cannot be contacted rc=**_return_code_**.**

Explanation: The LDAP server is unable to obtain a current copy of the database indicated in the message from the LDAP server that owns the database in the cross-system group. The return code displayed in the message is either from the attempt to send an XCF message to the database owner or from the reply from the owner if it could not send back the database.

In the message text:

type
    Backend type

name
    Backend name

return_code
    LDAP return code

System action:
- If the error occurs during initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
- If the error occurs after initialization, the program continues. Update operations to the LDAP server probably fail. Search operations may succeed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6024E   *type* **backend named** *name* **database XCF data record is not valid.**

Explanation: A cross-system database record received by the indicated backend is not valid.

In the message text:

type
    Backend type

name
    Backend name

System action:
• If the error occurs during initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
• If the error occurs after initialization, the program continues but some operations may fail. A follow-on message indicates the effect on the program.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the follow-on message to resolve the problem. Restart the program if it ended or if the backend is needed. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6025E   **Suffix list for** *type* **backend named** *name* **does not match owner suffix list.**

Explanation: The suffix list defined for the indicated backend in the LDAP server configuration file is not the same as the suffix list defined in the LDAP server configuration file of the LDAP server that owns the cross-system group resources.

In the message text:

type
    Backend type

name
    Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the same suffixes are specified in the **suffix** option in the backend section of the LDAP server configuration file of each LDAP server in the cross-system group. Restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6026E   Unable to send *type* **backend named** *name* **database update to group members.**

Explanation: The LDAP server is unable to send a database update to the other members of the cross-system group. The indicated backend directory is successfully updated on this LDAP server, but the other members in the group do not have the updated database entry. A previous message indicates the reason for the failure.

In the message text:

type
> Backend type

name
> Backend name

System action: The LDAP server continues, but an LDAP operation for the indicated backend may return different results depending on if it is processed by this LDAP server or by another LDAP server in the cross-system group.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the error. Then restart the LDAP server on each of the other systems to refresh its copy of the directory.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6028E   *type* **directory** *path* **does not match group owner directory** *owner_path*.

Explanation: The directory path specified by the **databaseDirectory** option in the backend section of the LDAP server configuration file is not correct. When multi-server mode is active, the directory path must be the same for this backend in each LDAP server in the cross-system group.

In the message text:

type
> Backend type

path
> Directory path in the LDAP server

owner_path
> Directory path in the owning LDAP server

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the **databaseDirectory** option in the backend section of the LDAP server configuration file to specify the same directory path for each LDAP server in the cross-system group. Restart the program if it ended or if the backend is needed.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6029E   **LDBM backend specified for a non-LDBM database.**

Explanation: The LDAP server or utility found that the LDBM backend DLL, `GLDBLD31` or `GLDBLD64`, is specified on a **database** option in the LDAP server configuration file but the *type* parameter on the option is not LDBM.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6030E   **Unable to truncate database file** *filename*: *error_code*/*reason_code* **-** *error_text*

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

In the message text:

filename
    Database file name

GLD6031E

error_code
    Error code from **ftruncate()**

reason_code
    Reason code from **ftruncate()**

error_text
    Error text corresponding to the error code

System action: If the **fileTerminate** option in the backend section of the LDAP server configuration file is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the file system problem. Verify that the file can be accessed by the LDAP server. Then restart the program if it has ended or change the backend to read/write mode using the LDAP server **BACKEND** operator modify command.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6031E   **Setting backend named** *name* **to read-only because fileTerminate option is set to 'recover'.**

Explanation: A write error is encountered while an LDAP server file-based backend is writing to the file system. Since the **fileTerminate** option in the backend section of the LDAP server configuration file is set to **recover** or the option is not specified at all, the LDAP server forces the backend directory into read-only mode.

In the message text:

name
    Backend name

System action: The LDAP server continues to run. The backend contents cannot be modified.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions to the database directory and files. A previous message indicates the reason for the failure.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the file system error. Then issue the LDAP server **BACKEND** operator modify command to change the backend to read/write mode.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6032A   **Terminating LDAP server because fileTerminate option is set to 'terminate' in backend named** *name***.**

Explanation: A write error is encountered while an LDAP server file-based backend is writing to the file system. Since the **fileTerminate** option in the backend section of the LDAP server configuration file is set to **terminate**, the program is ending. A previous message indicates the reason for the failure.

In the message text:

name
    Backend name

System action: The program ends.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions on the database directory and files.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6033I   **Committing changes to database for** *type* **backend named** *name***.**

Explanation: The indicated LDAP server backend is going to commit changes in its checkpoint file to its database files. This can occur periodically during normal processing or when the server is shutting down. See Database commit processing for more information about file-based backend committing.

In the message text:

type
    Backend type

name
    Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6034I   **Completed committing changes to database for** *type* **backend named** *name*.

Explanation: The indicated LDAP server backend committed changes in its checkpoint file to its database files. This can occur periodically during normal processing or when the server is shutting down. See Database commit processing for more information about file-based backend committing.

In the message text:

type
   Backend type

name
   Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6035E   **Unable to commit changes to database for** *type* **backend named** *name*, **rc=***code*.

Explanation: The indicated LDAP server file-based backend failed to commit changes in its checkpoint file to its database files. A previous message indicates the reason for the failure. The contents of the backend are still there but the changes present in the checkpoint file were not successfully added to the appropriate database files. See Database commit processing for more information about file-based backend committing.

In the message text:

type
   Backend type

name
   Backend name

code
   LDAP return code

System action: If the **fileTerminate** option in the backend section of the LDAP server configuration file is set to **terminate**, the program ends. If the **fileTerminate** option is set to **recover** (this is the default if the configuration option is not specified), the LDAP server continues processing, but the backend is set to read-only mode.

Operator response: Verify that there is enough free space on the file system. Also, verify that the LDAP server has read and write permissions on the database directory and files.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the earlier message to correct the file system error. Then restart the program if it has ended or change the backend to read/write mode using the LDAP server **BACKEND** operator modify command.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6036W   *type* **backend named** *name* **database owner is busy, retrying.**

Explanation: A request was sent from this LDAP server to the LDAP server that owns the database in the cross-system group. The database owner is either too busy to respond to the request or it is waiting for a DB2 connection.

In the message text:

type
>   backend type

name
>   Backend name

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the database owner is waiting for a DB2 connection, either fix the DB2 connection problem or shut down the LDAP server that owns the database.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6037E   **Value** *value* **for attribute** *type* **in replication entry '**name**' is not valid.**

Explanation: The replica entry contains an attribute value that is not supported. See Basic replication for more information about the attribute and its values.

In the message text:

value
>   Attribute value

type
>   Attribute type that contains value

name
>   Replica entry distinguished name

System action: The LDAP server continues to run. Basic replication is not performed to the replica server identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Modify the replica entry to correct the error.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6038E   Unable to add '*name*' to the replication list.

Explanation: The LDAP server is unable to synchronize the directory tree with the replication progress file.

In the message text:

name
    Entry distinguished name

System action: The LDAP server continues. Basic replication is not performed to the replica server identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Resynchronize the replica server. See Recovering from basic replication out-of-sync conditions for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6039E   Unable to wait for network event: *error_code*/*reason_code* - *error_text*

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

In the message text:

error_code
    Error code from **selectex()**

reason_code
    Reason code from **selectex()**

error_text
    Error text corresponding to the error code

System action: The LDAP server continues, but basic replication is not performed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6040E **Replication entry '*name*' requires SSL but SSL support is not configured.**

Explanation: The indicated replica entry specifies **TRUE** for the **replicaUseSSL** attribute but SSL support is not configured in the LDAP server configuration file.

In the message text:

name
    Replica entry distinguished name

System action: The LDAP server continues. Basic replication is not performed to the replica server identified by this entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Either configure SSL support in the LDAP server configuration file and then restart the LDAP server, or modify the value of the **replicaUseSSL** attribute to **FALSE**.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6041E **Replication failed with *host*:*port*: Error *error_code* - *error_text*.**

Explanation: The LDAP server is unable to replicate a directory modification to the indicated replica server.

In the message text:

host
    Replica server host name

port
    Replica server port number

error_code
    Error code

error_text
    Error text corresponding to the error code

System action: The LDAP server periodically retries the failing replication request until replication is successful.

GLD6042E

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response:
- If the replica server is down, then restart the replica server.
- If the replica credentials are not valid, then correct either the LDAP server configuration file on the replica server or the replica entry on this LDAP server. The distinguished name and password specified in the replica entry must match the values specified in the backend section of the LDAP server configuration file on the replica server. See Basic replication for more information about replica credentials.
- If the operation cannot take place because the replica server is missing updates, then resynchronize the replica server. See the **Recovering from basic replication out-of-sync conditions** section in the **Basic replication** chapter of *z/OS IBM Tivoli Directory Server Administration and Use for z/OS* for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6042E   **Unable to create LDAP handle for replication with** *host***:***port***.**

Explanation: The LDAP server is unable to create an LDAP handle for use with the indicated replica server. Either the **ldap_init()** or the **ldap_ssl_init()** routine failed. See the descriptions of **ldap_init()** or **ldap_ssl_init()** in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

host
    Replica server host name

port
    Replica server port number

System action: The LDAP server continues. Basic replication does not occur for the indicated replica server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replica host name and port are correct. If not, modify the replica entry to correct the values. If SSL is being used, verify that SSL is configured in the LDAP server configuration file and is available.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6043E   **Additional information:** *error_text*

Explanation: This message provides additional information for a replication error. The text is the error message returned by the replica server.

In the message text:

error_text
    Additional error text

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6044E   **Unable to decrypt replica credentials:** *text*.

Explanation: The LDAP server encrypts the password specified by the **replicaCredentials** attribute in a replica entry if the **secretEncryption** option is specified in the LDAP server configuration file. The password must then be decrypted before the LDAP server can bind to the replica server. The LDAP server is unable to decrypt the replica password.

In the message text:

text
    Error text

System action: The LDAP server continues. Basic replication does not occur to this replica server. If the error occurs while adding or modifying a replica entry, the operation fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the encryption key label specified in the **secretEncryption** option in the LDAP server configuration file has not been changed. If it has been changed, ensure that the previous encryption key label is still defined.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6045E   **Replica object** *name* **does not have corresponding progress table entry.**

Explanation: The LDAP server has found a replica entry for which there is no replication progress information in the replica progress file.

In the message text:

name
    Replica entry distinguished name

System action: The LDAP server continues. Basic replication does not occur to the replica server identified by this replica entry.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Resynchronize the replica server. See Recovering from basic replication out-of-sync conditions for more information.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6046E   **Progress table entry** *uuid* **does not have corresponding Replica object.**

Explanation: The LDAP server detected data for a replica in the progress file that does not have a corresponding replica entry in the directory for this backend. The **ibm-entryUUID** of each replica entry is kept in the progress file to associate the progress data with the replica to which it pertains.

In the message text:

uuid
    Replica entry ibm-entryUUID

System action: The LDAP server continues. The data for the replica is deleted from the progress file and replication to that replica server does not occur.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Search the backend for the specified **ibm-entryUUID** value to locate the replica entry for the replica. Delete and add the replica entry to restart basic replication to the replica.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6047E   **Unexpected state of replica** *type* **file, attempting recovery.**

Explanation: The LDBM backend maintains several types of files containing replication information. When one of these files is changed, the current version of the file is renamed and eventually deleted when the new version of the file is created. The backend has found an old version of the file when it is not expected.

In the message text:

type
    Type of replica file

System action: The LDAP server tries to correct the error and continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6048E   **Partial record read from file** *filename* **length=***amount***.**

Explanation: The LDAP server is not able to read an entire record from the replication operations progress file.

In the message text:

filename
    Replication operations progress file

amount
    The amount of the record that was read

System action:
- If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
- If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed with basic replication, the replica servers for this backend need to be resynchronized. See Recovering from basic replication out-of-sync conditions for more information. You might need to first delete the file displayed in the message. If basic replication is not needed, then stop the LDAP server if it is running, delete the indicated file, and restart the server.

Source: LDAP

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GLD6050E   File *filename* **missing.**

Explanation: The replication progress file is not present when the replication queue file is present. Both files are needed for basic replication processing.

In the message text:

filename
   Missing file name

System action:

- If the error occurs during backend initialization, the backend does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
- If the error occurs during an attempt to become the sysplex group owner, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the backend is needed with basic replication, the replica servers for this backend need to be resynchronized. See Recovering from basic replication out-of-sync conditions for more information. You might need to first delete the replication queue file. If basic replication is not needed, then stop the LDAP server if it is running, delete the replication queue file, and restart the server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6051I   **No database changes to commit for** *type* **backend named** *name***.**

Explanation: The indicated backend has no changes to commit in its checkpoint file. See Database commit processing for more information about file-based backend committing.

In the message text:

type
   Backend type

name
   Backend name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6052E   **Unable to unload data from LDBM backend named** *name* **because** *file* **cannot be found.**

Explanation: The **ds2ldif** utility found a `.new` or `.old` version of the LDBM database file indicated in the message, but not the `.db` version of the file. This indicates that part of the directory in the backend to be unloaded may be missing. The unload cannot proceed. The `.new` and `.old` files are temporary versions of the database file created during checkpoint replay processing, when the database is updated using the contents of the checkpoint file. The temporary files are removed when the final updated `.db` database file is created. For some reason, this process must not have completed the last time it occurred.

In the message text:

name
    Backend name

file
    Database file name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has write access to the file directory specified by the **databaseDirectory** option in the named LDBM backend section of the LDAP server configuration file. Start the LDAP server, which attempts to fix the problems in the database files. Then restart **ds2ldif** using the **-r** option to force **ds2ldif** to use an **unloadRequest** extended operation to unload the requested entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD6053E   **Unable to load directory data for** *type* **backend named** *name* **because of an inconsistent commit state.**

Explanation: The utility found that the checkpoint file was committed while processing the LDBM or CDBM database files. This might result in a partial load of the updates committed in the checkpoint file resulting in an inconsistent state. See Database commit processing for more information about file-based backend committing.

In the message text:

type
    Backend type

name
    Backend name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the LDAP server is running, issue the **COMMIT** operator modify command to force a commit of all file-based backends. This merges all updates in the file-based checkpoint files into

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 5. GDBM, advanced replication, and ldapdiff messages (8000)

This section lists the messages issued by the GDBM backend ("GDBM backend messages"), advanced replication ("Advanced replication messages" on page 312), and the **ldapdiff** utility ("ldapdiff utility messages" on page 372).

GDBM backend messages

GLD8001E   Unable to load the GDBM database because attribute type '*attribute*' is not defined.

Explanation: An attribute type that is used by an entry in the GDBM directory is not defined in the LDAP server schema.

In the message text:

attribute
    Undefined attribute type

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the GDBM backend is needed, restart the LDAP server without the GDBM backend section in the LDAP server configuration file and add the missing attribute type to the LDAP server schema. Then, restore the GDBM backend section in the configuration file and restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8002E   Unable to load the GDBM database because object class '*objectclass*' is not defined.

Explanation: An object class that is used by an entry in the GDBM directory is not defined in the LDAP server schema.

In the message text:

objectclass
    Undefined object class

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the GDBM backend is needed, restart the LDAP server without the GDBM backend section in the LDAP server configuration file and add the missing object class to the LDAP server schema. Then, restore the GDBM backend section in the configuration file and restart the LDAP server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8003E   GDBM backend specified for a non-GDBM database.

Explanation: The GDBM backend DLL, `GLDBGD31`, or `GLDBGD64`, is specified on a **database** option in the LDAP server configuration file but the *type* parameter on the option is not `GDBM`.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Advanced replication messages

GLD8501E   Unable to connect to replica '*host_name*' on port *port_number*. Verify that the replica is started.

Explanation: The LDAP server is unable to establish a connection to the consumer server and port number that is specified in the message.

In the message text:

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the consumer server is started or contact the operator to start the consumer server. Ensure that the consumer server information in the **ibm-replicaURL** attribute value of the replication agreement entry is correct.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8502I   **Replication context** *context_name***replica type:** *repl_type***context state:** *repl_state***ibm-serverID:** *repl_serverId***ibm-subentryDN:** *repl_subentry_name***agreements:** *num_agreements* **agreements definedreferrals:** *referral_list*

Explanation: The current status of the specified replication context entry is displayed in this message.

In the message text:

context_name
    Replication context entry distinguished name

repl_type
    Replication type

repl_state
    Replication state

repl_serverId
    Replication server ID

repl_subentry_name
    Replica subentry distinguished name

num_agreements
    Number of replication agreements under replication context

referral_list
    Replication referral list

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication context entry is configured properly and is working as expected.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8503W **The DN of the credential entry '***credential_name***' defined for the replication agreement '***agreement_name***' cannot be found.**

Explanation: The supplier server credentials entry that contains authentication information that is used to bind with the consumer server cannot be found. The supplier server credentials entry is specified in the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry.

In the message text:

credential_name
   Credentials entry distinguished name

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry distinguished name that is specified in the replication agreement entry by the **ibm-replicaCredentialsDN** attribute value is correct and the entry exists. See Credentials entries for information about the supplier server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8504E **The credential entry '***credential_name***' defined for the replication agreement '***agreement_name***' is not valid.**

Explanation: The object class of the supplier server credentials entry defined in the **ibm-replicaCredentialsDN** attribute value for the replication agreement entry is not valid. The only supported object class values for supplier server credential entries are **ibm-replicationCredentialsSimple** and **ibm-replicationCredentialsExternal**.

In the message text:

credential_name
   Credentials entry distinguished name

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the correct entry is specified in the **ibm-replicationCredentialsDN** attribute value of the replication agreement entry. Verify that the object class for the supplier server credentials entry is **ibm-replicationCredentialsSimple** or **ibm-replicationCredentialsExternal**. See Credentials entries for more information about the supplier server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8505E   **The credential entry '***credential_name***' is in use and cannot be deleted.**

Explanation: The supplier server credentials entry specified in the message cannot be deleted because it is referenced by a replication agreement entry in the **ibm-replicaCredentialsDN** attribute value.

In the message text:

credential_name
    Credentials entry distinguished name

System action: The LDAP server continues however the requested delete client operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the entry being deleted is not already referenced in the **ibm-replicaCredentialsDN** attribute value of any replication agreement entries. Either delete the replication agreement entry or modify the **ibm-replicaCredentialsDN** attribute value so that there are no longer any references to the entry that is being deleted. Then retry the delete client operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8506I   **Replication agreement** *agreement_name***context DN:** *context_name***state:** *repl_state***ibm-replicaURL:** *repl_url***ibm-replicaCredentialsDN:** *credentials_name***ibm-replicationFilterDN:** *filter_name***ibm-replicaScheduleDN:** *schedule_name***bind-info: bind_dn="***bind_name***", method=***bind_type***connection-status: connected=***conn_state***, connection type=***conn_type***agreement-status: last changeID sent=***changeId***, errors logged=***error_count***, on hold=***on_hold***pending change count:** *pending_count*

Explanation: The status of the specified replication agreement entry is displayed in this message.

In the message text:

agreement_name
    Replication agreement entry distinguished name

context_name
    Replication context entry distinguished name

GLD8507E

repl_state
Replication state

repl_url
Consumer server URL

credentials_name
Replica credentials distinguished name

filter_name
Replication filter distinguished name

schedule_name
Replication schedule distinguished name

bind_name
Replica bind distinguished name

bind_type
Bind authentication method

conn_state
Replica connection state

conn_type
Replica connection type

changeId
Last replicated changeId

error_count
Number of replication errors

on_hold
On hold state

pending_count
Number of pending replication updates

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication agreement entry is configured properly and is working as expected.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD8507E** **Replication context entry '***context_name***' missing ibm-replicaReferralUrl attribute for password policy replication.**

| **Explanation:** There is no **ibm-replicaReferralUrl** attribute in the replication context, but the **ibm-slapdReplicateSecurityAttributes** has a value of TRUE in the `cn=Replication, cn=configuration` entry. The **ibm-replicaReferralUrl** attribute is necessary for password policy operational attribute updates to be propagated from the read-only replica to the master.

In the message text:

context_name
    Replication context distinguished name.

System action: The LDAP server continues. Generated updates to user password policy attributes during authentication on the read-only replica do not propagate to the master server nor to other servers throughout the advanced replication topology for the specified replication context.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: To allow replication of password policy operational attributes for future binds, complete the configuration settings by adding the **ibm-replicaReferralUrl** to the replication context with a URL of a working supplier server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8508E   LDAP server cannot connect to supplier server '*referral_url***' for context '***context_name***'.**

Explanation: The LDAP server cannot connect to the supplier server specified by the referral URL.

In the message text:

referral_url
    The referral URL.

context_name
    Replication context distinguished name.

System action: The LDAP server continues. The LDAP server attempts to contact other supplier servers that are listed in the **ibm-replicaReferralUrl** attribute in the replication context. This message is issued for each server in the list that cannot be contacted. If none are contacted successfully, propagation of generated updates of user password policy attributes during authentication on the read-only replica is suspended for the specified replication context. This suspension of update propagation is indicated by message GLD8509E. If a server in the list becomes available later, message GLD8511I is issued indicating a successful connection. Updates occurring while replication is suspended are not propagated when the connection is reestablished.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Check the referral URL and ensure that the supplier server is active.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD8509E**   **LDAP server cannot contact any supplier servers for replication context '***context_name***'. Replication of password policy attributes is suspended.**

| **Explanation:** The LDAP server cannot contact any of the supplier servers that are specified in the
| **ibm-replicaReferralURL** attribute for the specified context.

| In the message text:

| *context_name*
| Replication context distinguished name.

| **System action:** The LDAP server continues. Propagation of generated updates of user password policy attributes
| during authentication on the read-only replica is suspended for the specified replication context. If a supplier server
| listed in the **ibm-replicaReferralUrl** attribute for the specified context becomes available, message GLD8511I is issued
| indicating a successful connection. Updates occurring while replication is suspended are not propagated when the
| connection is reestablished.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Check that one of the supplier servers that are listed in the **ibm-replicaReferralURL**
| attribute for the specified context is active and reachable. Use the **ldapdiff** utility to synchronize the supplier and
| consumer directories for updates that are not propagated.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

GLD8510E   **The consumer URL defined in replication agreement entry '***agreement_name***' is a duplicate.**

Explanation: In this replication context, the supplier server already has a replication agreement entry that has the
same consumer server URL defined in the **ibm-replicaURL** attribute value. Within a replication context, each
replication agreement entry must have a unique **ibm-replicaURL** attribute value. A supplier server is only allowed
one connection to the same consumer server URL.

In the message text:

agreement_name
    Replication agreement entry distinguished name.

System action: The LDAP server continues however the requested client add or modify operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: In the replication agreement entry that is being added or modified, verify that the
consumer server URL in the **ibm-replicaURL** attribute value is correct and does not have the same value as any
existing replication agreement entry within this replication context. Then, retry the requested client add or modify
operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

| **GLD8511I**   **Replication of password policy attributes is resumed for replication context '***context_name***'.**

| **Explanation:** The LDAP server successfully contacted one of the supplier servers that are specified in the **ibm-replicaReferralURL** attribute for the specified context.

| In the message text:

| *context_name*
| Replication context distinguished name.

| **System action:** The LDAP server continues. Propagation of generated updates of user password policy attributes during authentication on the read-only replica is active again for the specified replication context. Updates that occurred before this message, while replication was suspended, are not propagated.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** Use the **ldapdiff** utility to synchronize the supplier and consumer directories for the updates that were not propagated.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

| **GLD8512I**   **LDAP server connected to supplier server '***referral_url***' for context '***context_name***'.**

| **Explanation:** The LDAP server successfully connected to the supplier server specified by the referral URL.

| In the message text:

| *referral_url*
| The referral URL.

| *context_name*
| Replication context distinguished name.

| **System action:** The LDAP server continues. Generated updates of user password policy attributes during authentication on the read-only replica are propagated to the specified supplier server.

| **Operator response:** None.

| **System programmer response:** None.

| **User response:** None.

| **Problem determination:** Not applicable.

| **Module:** None.

| **Example:** None.

| **Administrator response:** None.

| **Source:** LDAP

| **Routing code:** None.

| **Descriptor code:** None.

| **Automation:** Not applicable.

GLD8516E   Internal processing error in server; replication thread cannot start.

Explanation: An internal error occurred while attempting to initialize the thread for advanced replication. A previously issued message specifies the replication agreement entry that had problems initializing.

System action: The LDAP server continues however advanced replication does not initialize.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: This is an internal processing error that occurred while initializing the advanced replication thread. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8517I   Replication starting for replica '*agreement_name*'.

Explanation: Replication to the consumer server identified by the replication agreement entry is initializing.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8518I   Replication terminating for replica '*agreement_name***'.**

Explanation: Replication to the consumer server identified by the replication agreement entry is ending.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: If there are additional replication agreements active, the LDAP server continues however replication to the consumer server identified by the replication agreement is ending. If there are no active replication agreements active, the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8519E   Unable to create schedule for replica '*agreement_name***'; all changes will be replicated immediately.**

Explanation: An internal error occurred while attempting to initialize the replication schedule for the replication agreement entry specified in the message.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: This is an internal processing error that occurred while initializing the replication scheduling support for the replication agreement entry. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8520E   Unable to locate schedule entry with DN '*schedule_name***'.**

Explanation: The replication schedule entry which contains scheduling information for the replication agreement cannot be found. The replication schedule entry is specified in the **ibm-replicaScheduleDN** attribute value in the replication agreement entry which is specified in a previously issued message.

In the message text:

schedule_name
     Replication schedule entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **ibm-replicaScheduleDN** attribute value is correct for the replication agreement entry and that the replication schedule entry exists. Either add the replication schedule entry to the directory or remove the **ibm-replicaScheduleDN** attribute value from the replication agreement entry. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8521E   Error on schedule entry with DN '*schedule_name***' attribute *attribute_name* value '***attribute_value***'. Value ignored.**

Explanation: The daily replication schedule entry does not have the correct time format for the attribute type and value specified in the message. The attribute type and value are ignored in the daily replication entry.

In the message text:

schedule_name
     Replication schedule entry distinguished name

attribute_name
     Attribute type

attribute_value
     Attribute value

System action: The LDAP server continues however the specified time in the daily replication schedule entry is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the time format for the daily replication schedule entry attribute type and value is the following: **Thhmmss** where time is based on a 24-hour clock. Modify the attribute value in the daily schedule

replication entry specified in the message to have the correct time format. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8522W   Replica '*agreement_name*' missing schedule DN; all changes will be replicated immediately.

Explanation: The replication agreement entry does not have a replication schedule entry specified in the **ibm-replicaScheduleDN** attribute so the replication agreement defaults to replicating all updates immediately.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues with replication updates to the consumer server identified by the replication agreement immediately occurring.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the consumer server defined by the replication agreement entry should not immediately receive replication updates, modify the replication agreement entry to add an **ibm-replicaScheduleDN** attribute value. The **ibm-replicaScheduleDN** attribute value must be a weekly replication schedule entry with an object class value of **ibm-replicationWeeklySchedule**. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8523E   Error retrieving pending changes for replica '*agreement_name*'. Will try again.

Explanation: An internal search error occurred while retrieving the pending replication changes from the backend where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues however the pending replication changes cannot be retrieved from the backend where the replication agreement entry resides.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8524E   **Error retrieving data for replica '***agreement_name***' change ID** *changeID* **entry '***name***'. Will try again.**

Explanation: An internal search error occurred while retrieving the replication change ID from the backend replication table where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

changeID
    Replication change identifier

name
    Entry distinguished name

System action: The LDAP server continues however the change ID cannot be retrieved from the backend replication table where the replication agreement entry resides.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8525E   **Error while removing status entry for replica '***agreement_name***'.**

Explanation: An internal error occurred while deleting the replication agreement entry from the backend replication status table where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues however the replication agreement cannot be deleted from the backend replication status table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8526E   Error while updating status for replica '*agreement_name***' to last change ID** *changeID***.**

Explanation: An internal error occurred while updating the last change ID in the backend replication status table where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

changeID
    Replication change identifier

System action: The LDAP server continues however the replication agreement status cannot be updated in the backend replication status table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8527W   Error while parsing data for change ID *changeID* **for replica '***agreement_name***'. Will try again.**

Explanation: An internal error occurred while parsing the replication change ID data from the backend replication table where the replication agreement entry resides.

In the message text:

changeID
    Replication change identifier

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues however the change ID cannot be retrieved from the backend replication table where the replication agreement entry resides.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8528I   Dropping connection to replica '*agreement_name***' on host '***host_name***' port** *port_number*.

Explanation: The LDAP server is no longer connected to the consumer server and port number identified by the replication agreement entry in the **ibm-replicaURL** attribute value.

In the message text:

agreement_name
    Replication agreement entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues. However, replication to the consumer server identified by the replication agreement no longer occurs.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the consumer server for the replication agreement entry is still running and that this server can still successfully connect to it.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8529I   Established connection for replica '*agreement_name***' on host '***host_name***' port** *port_number*.

Explanation: The LDAP server has successfully established a non-secure connection to the replica server and port number identified by the replication agreement entry. The replica server and port number are specified in LDAP URL format in the **ibm-replicaURL** attribute value of the replication agreement entry.

In the message text:

agreement_name
    Replication agreement entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8530I   **Established secure connection for replica '***agreement_name***' on host '***host_name***' port** *port_number***.**

Explanation: The LDAP server has successfully established a secure connection to the replica server and port number identified by the replication agreement entry. The replica server and port number are specified in LDAP URL format in the **ibm-replicaURL** attribute value of the replication agreement entry.

In the message text:

agreement_name
    Replication agreement entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8531I   **Replicating all pending changes for replica '***agreement_name***'.**

Explanation: The replication schedule entry identified by the **ibm-replicaScheduleDN** in the replication agreement entry indicates that all pending replication changes are now allowed to be replicated to the consumer server identified by the replication agreement.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues with scheduled replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8532E   **Error '***error_text***' occurred for replica '***agreement_name***': add failed for entry '***name***' change ID** *changeID***.**

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, an add operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
    Error message text

agreement_name
    Replication agreement entry distinguished name

name
    Entry distinguished name

changeID
    Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8533E   **Error '***error_text***' occurred for replica '***agreement_name***': modify failed for entry '***name***' change ID** ***changeID***.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a modify operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
> Error message text

agreement_name
> Replication agreement entry distinguished name

name
> Entry distinguished name

changeID
> Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8534E   **Error '***error_text***' occurred for replica '***agreement_name***': rename failed for entry '***name***' change ID** ***changeID***.

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a rename operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
> Error message text

agreement_name
> Replication agreement entry distinguished name

name
> Entry distinguished name

GLD8535E

changeID
    Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8535E   **Error '***error_text***' occurred for replica '***agreement_name***': delete failed for entry '***name***' change ID** *changeID***.**

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a delete operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
    Error message text

agreement_name
    Replication agreement entry distinguished name

name
    Entry distinguished name

changeID
    Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8536E   **Error '*error_text*' occurred for replica '*agreement_name*': bind failed using masterDn '*master_name*'.**

Explanation: The supplier server was unable to successfully perform a simple bind to the consumer server. The supplier server credentials entry specified by the **ibm-masterServerDN** attribute value in the replication agreement entry contains the master server distinguished name and password that is used to authenticate with the consumer server.

In the message text:

error_text
    Error message text

agreement_name
    Replication agreement entry distinguished name

master_name
    Master server entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry has correct values for the **replicaBindDN** and **replicaCredentials**. See Credentials entries for more information about the supplier server credentials entry.

If the consumer server is an IBM Tivoli Directory Server with advanced replication, the **replicaBindDN** attribute value must have the same value as the **ibm-slapdMasterDN** attribute value in the consumer server credentials entry used by the replication context. The **replicaCredentials** must have the same value as the **ibm-slapdMasterPW** attribute value in the consumer server credentials entry used by the replication context. See Consumer server entries for more information about the consumer server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8538E   **Error '*error_text*' occurred for replica '*agreement_name*': EXTERNAL bind failed.**

Explanation: The supplier server was unable to successfully perform a SASL EXTERNAL bind to the consumer server. The supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry contains optionally attribute values for the SSL key database file, RACF key ring, PKCS #11 token, certificate label, and SSL key database file password.

In the message text:

error_text
    Error message text

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

GLD8539W

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: that the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry is using the correct SSL certificate label to perform a SASL EXTERNAL bind to the consumer server. See Credentials entries for more information about the supplier server credentials entry.

If the consumer server is an IBM Tivoli Directory Server with advanced replication configured, ensure that it is properly configured to accept SASL EXTERNAL binds. Verify that the consumer server credentials entry is using the correct distinguished name for the **ibm-slapdMasterDN** attribute value. See Consumer server entries for more information about the consumer server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8539W   **Replication agreement '***agreement_name***' has consumer server ID '***consumerID***', but connected to server with ID '***serverID***'.**

Explanation: The consumer server ID defined in the replication agreement entry by the **ibm-replicaConsumerID** attribute value has a different value than the ID of the connected consumer server.

In the message text:

agreement_name
     Replication agreement entry distinguished name

consumerID
     Replication consumer server identifier

serverID
     Replication server identifier

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication agreement on the supplier server is connected to the correct consumer server. If the consumer server is an IBM Tivoli Directory Server with advanced replication, ensure that the **ibm-replicaConsumerID** attribute value in the replication agreement entry has the same value as the **ibm-slapdServerID** attribute defined in the **cn=configuration** entry on the consumer server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8540W **Replication for replica '**_agreement_name_**' will continue to retry the same update after receiving an error.**

Explanation: The current replication change failed to replicate to the consumer server so the supplier server retries the failed replication change every minute until it is successful. This error might cause replication from this replication agreement to be stalled until it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles. The **ibm-replicationState** operational attribute in the replication agreement entry is set to **retrying** to indicate the current replication status.

In the message text:

_agreement_name_
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8541W **Replication for replica '**_agreement_entry_**' will continue to the next update after receiving an error.**

Explanation: The current change failed to replicate to the consumer server so the supplier server continues to the next replication change after receiving this error. This failure might cause replication from this agreement to be stalled unless it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles.

In the message text:

_agreement_name_
    Replication agreement entry distinguished name

System action: The LDAP server continues, however replication, to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that replication between the supplier and consumer servers is successfully occurring by querying the replication agreement entry operational attribute values which provide replication status. If the **ibm-replicationState** operational attribute is set to **retrying** or the number of **ibm-replicationFailedChanges** attribute

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values is near the maximum number of replication failures allowed per backend (as specified by the **ibm-slapdReplMaxErrors** attribute value in the **cn=Replication,cn=configuration** entry), it might be necessary to compare and resynchronize the replication context on both servers. See Monitoring and diagnosing advanced replication problems for information about the replication agreement entry operational attributes.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8542W **Replication continuing for replica '***agreement_name***' after logging** *update_type* **for entry '***name***' ignoring error:** *return_code* **'***error_text***' '***additional_error_text***'.**

Explanation: This change failed to replicate to the consumer server for the reason specified so the supplier server continues to the next replication change after receiving this error. This failure might cause replication from this agreement to be stalled unless it is corrected by the LDAP root administrator or an administrative group member with the root or replication administrator roles.

In the message text:

agreement_name
  Replication agreement entry distinguished name

update_type
  Operation type

name
  Entry distinguished name

return_code
  LDAP return code

error_text
  Error text for LDAP return code

additional_error_text
  error text

System action: The LDAP server continues, however, replication from this replication agreement might be stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that replication between the supplier and consumer servers is successfully occurring by querying the replication agreement entry operational attribute values which provide replication status from the replication agreement. If the **ibm-replicationState** operational attribute is set to **retrying** or the number of **ibm-replicationFailedChanges** attribute values is near the maximum number of replication failures allowed per backend (as specified by the **ibm-slapdReplMaxErrors** attribute value in the **cn=Replication,cn=configuration** entry), it might be necessary to compare and resynchronize the replication context on both servers. See Monitoring and diagnosing advanced replication problems for information about the replication agreement entry operational attributes.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8543W **Replication continuing for replica '***agreement_entry***' after skipping** *update_type* **for entry '***name***' because of error:** *return_code* **'***error_text***' '***additional_error_text***'.**

Explanation: After successfully skipping (deleting) the failed replication change, replication to the consumer server identified by the replication agreement is now continuing.

In the message text:

agreement_name
     Replication agreement entry distinguished name

update_type
     Operation type

name
     Entry distinguished name

return_code
     LDAP return code

error_text
     Error text for LDAP return code

additional_error_text
     Additional error text

System action: The LDAP server continues with replication to the consumer server identified by the replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the entry on the supplier and consumer servers is the same by using the **ldapdiff** utility.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8545E **Unable to connect to replica '***host_name***' on port** *port_number***. Verify that the replica is started.**

Explanation: The supplier server was unable to connect with the consumer server host and port number identified in the replication agreement entry.

In the message text:

host_name
     LDAP host name

port_number
     LDAP port number

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

GLD8546W

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the consumer server for the replication agreement is running and the replication agreement has the correct **ibm-replicaURL** attribute value specified.

Verify that the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry is using correct bind information. Credentials entries for more information about the supplier server credentials entry.

If the consumer server is an IBM Tivoli Directory Server with advanced replication configured, ensure it is properly configured to accept the supplier server bind credentials. Verify that the consumer server credentials entry is using the correct distinguished name for the **ibm-slapdMasterDN** attribute value. See Consumer server entries for more information about the consumer server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8546W **The DN of the credential entry '***credential_name***' defined for the replication agreement '***agreement_name***' cannot be found.**

Explanation: The supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute in the replication agreement entry cannot be found. This entry contains the bind information necessary for the supplier server to authenticate with the consumer server.

In the message text:

credential_name
   Credentials entry distinguished name

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement is correct and exists in the directory. Either add the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value or modify the **ibm-replicaCredentialsDN** attribute value to specify a valid supplier server credentials entry. See Credentials entries for more information about the supplier server credentials entry.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8547E **The DN of the credential entry '**credential_name**' defined for the replication agreement '**agreement_name**' cannot be found.**

Explanation: An internal search error occurred while attempting to retrieve the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry. This entry contains the bind information necessary for the supplier server to authenticate with the consumer server.

In the message text:

credential_name
    Credentials entry distinguished name

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value in the replication agreement is correct and exists in the directory. Either add the supplier server credentials entry specified by the **ibm-replicaCredentialsDN** attribute value or modify the **ibm-replicaCredentialsDN** attribute value to specify a valid supplier server credentials entry. See Credentials entries for more information about the supplier server credentials entry. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8551E **Error '**error_text**' occurred for replica '**agreement_name**': delete failed for entry '**name**' change ID** changeID**.**

Explanation: During replication from this supplier server to the consumer server defined in the replication agreement, a delete operation failed. The error string shows the reason why the operation failed. The change ID is used to record the replication change in the backend where the replication agreement entry resides.

In the message text:

error_text
    Error text

agreement_name
    Replication agreement entry distinguished name

name
    Entry distinguished name

changeID
    Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement might be stalled.

Operator response: None.

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System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8553E   Error retrieving pending change count for replica '*agreement_name*'.

Explanation: An internal error occurred while attempting to retrieve the number of pending replication changes from the backend where the replication agreement entry resides. The current number of pending replication changes are returned in the **ibm-replicationPendingChanges** operational attribute in the replication agreement entry.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues however the search of the replication agreement entry is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8556E   The weekly schedule DN object '*schedule_name*' specified in the replication agreement cannot be found or is not a weekly schedule entry.

Explanation: The weekly schedule entry which contains replication scheduling information for the replication agreement entry cannot be found or is not a valid weekly schedule entry. A valid weekly schedule entry has an object class value of **ibm-replicationWeeklySchedule**. The weekly schedule entry is specified in the **ibm-replicaScheduleDN** attribute value of the replication agreement entry.

In the message text:

schedule_name
    Replication schedule entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the object class value of the weekly schedule entry specified in the **ibm-replicaScheduleDN** attribute value in the replication agreement entry is **ibm-replicationWeeklySchedule** and that the entry exists. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8559E   The daily schedule DN object '*schedule_name*' specified in the weekly schedule entry cannot be found or is not a daily schedule entry.

Explanation: The weekly schedule entry contains a daily replication schedule entry that cannot be found or is not a valid daily schedule entry. The weekly schedule entry uses the **ibm-scheduleSunday**, **ibm-scheduleMonday**, **ibm-scheduleTuesday**, **ibm-scheduleWednesday**, **ibm-scheduleThursday**, **ibm-scheduleFriday**, and **ibm-scheduleSaturday** attribute values to point to daily replication schedule entries.

In the message text:

schedule_name
    Replication schedule entry distinguished name

System action: The LDAP server continues, however, replication updates to the consumer server identified by the replication agreement are immediately replicated.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the object class value of the daily schedule entry specified in the weekly schedule entry is **ibm-replicationDailySchedule** and that the entry exists. See Schedule entries for information about replication schedule entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8560E   Error while updating status for replica '*agreement_name*' to last change ID *changeID*.

Explanation: An internal error occurred while updating the last change ID in the backend replication status table where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

changeID
　　Replication change identifier

System action: The LDAP server continues however the replication agreement status cannot be updated in the backend replication status table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8563E　　Cannot move '*name*' from one replication context to another.

Explanation: An entry is not allowed to be moved into or out of a replication context using the modify DN operation. When a replication context is configured, a modify dn operation is only allowed to occur within the same replication context.

In the message text:

name
　　Entry distinguished name

System action: The LDAP server continues however the requested client modify dn operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If an entry needs to be moved from one replication context to another, retrieve the entry by performing a search operation and then delete the entry from the replication context. Then, add the entry again with the new distinguished name to the wanted replication context.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8564E　　The replication configuration could not be read.

Explanation: An internal error occurred while performing a search for the advanced replication configuration entries in the CDBM backend.

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the CDBM backend is configured correctly and that the server has access to the CDBM backend. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8565E   The replication configuration DN object '*name*' cannot be found.

Explanation: An internal error occurred while performing a search for an advanced replication configuration entry in the CDBM backend.

In the message text:

name
    Entry distinguished name

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the CDBM backend is configured correctly, the server has access to the CDBM backend, and that the specified advanced replication configuration entry exists in the CDBM backend. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8566E   Error on configuration entry with DN '*name*'; required attribute *attribute_name* is missing.

Explanation: An advanced replication configuration entry in the CDBM backend is missing a required attribute.

In the message text:

name
    Entry distinguished name

attribute_name
    Attribute type

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the specified replication advanced configuration entry has the required attributes and the attribute value data is correct. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8567E   **Error on configuration entry with DN '***name***' attribute** *attribute_name* **value '***attribute_value***'. Value ignored.**

Explanation: An advanced replication configuration entry in the CDBM backend has an attribute value that is not correct. The attribute value in the configuration entry is ignored.

In the message text:

name
    Entry distinguished name

attribute_name
    Attribute type

attribute_value
    Attribute value

System action: The LDAP server continues however advanced replication configuration is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the specified replication advanced configuration entry has the correct attribute value data. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8568E   **Error initializing the backend replication table used for replication failures.**

Explanation: An internal error occurred while initializing the backend replication table used for storing replication failures. The backend replication table is used by all replication agreements within the backend.

System action: The LDAP server continues however replication failures are not stored in the backend replication table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entries reside is functioning and handling requests correctly. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8569I   Propagation of replication topology entries to host '_host_name_**' port** _port_number_ **finished successfully.**

Explanation: The **Replication topology** extended operation has successfully synchronized replication topology entries on the specified consumer server.

In the message text:

_host_name_
    LDAP host name

_port_number_
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8570E   Propagation of replication topology entries to host '_host_name_**' port** _port_number_ **failed with error code** _return_code_**.**

Explanation: An error occurred while using the **Replication topology** extended operation to synchronize the replication topology entries on the specified consumer server.

In the message text:

_host_name_
    LDAP host name

_port_number_
    LDAP port number

_return_code_
    LDAP return code

System action: The LDAP server continues however the replication topology entries are not successfully synchronized on the specified consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: A previously issued message indicates the reason for the **Replication topology** extended operation error. Correct the error on the targeted consumer server and then retry the **Replication topology** extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8571I   Propagation of replication topology entries will continue with the next target server.

Explanation: The **Replication topology** extended operation is continuing to synchronize replication topology entries on the next targeted consumer server.

System action: The LDAP server continues with the **Replication topology** extended operation on the next targeted consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8572I   Propagation of replication topology entries is complete.

Explanation: The **Replication topology** extended operation has successfully synchronized replication topology entries on all consumer servers defined within the replication context.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8578W   The extended operation cannot replicate to target server '*host_name*' port *port_number* because the target server does not support replication topology entries.

Explanation: An error occurred while using the **Replication topology** extended operation against a consumer server that is not configured for synchronizing replication topology entries. The **Replication topology** extended operation cannot synchronize replication topology entries on the specified consumer server.

In the message text:

host_name
     LDAP host name

port_number
     LDAP port number

System action: The LDAP server continues, however, the replication topology entries are not successfully synchronized on the specified consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the targeted consumer server supports the **Replication topology** extended operation. If the targeted consumer server does not support the **Replication topology** extended operation, exclude that server as a target of the extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8579E   The extended operation cannot replicate entries to the target server '*host_name*' port *port_number* because the target server does not have the suffix '*name*'.

Explanation: An error occurred while using the **Replication topology** extended operation against a consumer server that does not have the appropriate **suffix** configured in its server configuration file. Since the consumer server does not have the appropriate **suffix** configured, the replication topology entries are not allowed to be added.

In the message text:

host_name
     LDAP host name

port_number
     LDAP port number

name
     Entry distinguished name

System action: The LDAP server continues however the replication topology entries are not successfully synchronized on the specified consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the consumer server is an z/OS IBM Tivoli Directory Server with advanced replication, update the consumer server configuration file to add an appropriate **suffix** option for the replication topology entries that are sent by the supplier server. Restart the consumer server and then retry the **Replication topology** extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8580I **Replication conflict: a conflict has been detected on host '*host_name*' port *port_number*. A request to re-add the entry of DN '*name*' has been received.**

Explanation: A replication conflict occurred between the supplier and the targeted consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, a request has been received by the supplier server from the consumer server to resend the conflicted entry back to the consumer server.

In the message text:

host_name
    LDAP host name

port_number
    LDAP port number

name
    Entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8581I **Replication conflict: re-add DN '*name*' to solve a replication conflict on host '*host_name*' port *port_number*.**

Explanation: A replication conflict occurred between the supplier and the targeted consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, the

conflicted entry has been resent to the consumer server. The intention is to resynchronize the entry on the supplier and consumer servers.

In the message text:

name
    Entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8582I   **Replication conflict: re-add of DN '***name***' to host '***host_name***' port** *port_number* **succeeded.**

Explanation: The replication conflict that occurred with the specified entry between the supplier and consumer servers has been resolved successfully. The entry is now synchronized between the supplier and consumer servers.

In the message text:

name
    Entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

GLD8583W • GLD8584E

Automation: Not applicable.

GLD8583W **Replication conflict: re-add of DN '*name*' to host '*host_name*' port *port_number* failed.**

Explanation: The replication conflict that occurred with the specified entry between the supplier and consumer servers has not been resolved successfully. The entry is not synchronized between the supplier and consumer servers. The supplier server does not attempt to resynchronize the conflicted entry on the consumer server.

In the message text:

name
  Entry distinguished name

host_name
  LDAP host name

port_number
  LDAP port number

System action: The LDAP server continues however the specified entry is not synchronized between the supplier and consumer servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Since the entry is not synchronized between the supplier and consumer servers, future replication conflicts might occur with this entry. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8584E **Replication conflict: re-add of DN '*name*' to resolve a conflict will not continue because the entry is too large.**

Explanation: A replication conflict occurred between the supplier and the consumer server with the specified entry. Since the consumer server supports replication conflict resolution within this replication context, this supplier server has been requested to resend the conflicted entry to the consumer server however the size of the conflicted entry exceeds the maximum size allowed. The maximum conflicted entry size that a supplier server can resend to the consumer server is specified by the **ibm-slapdReplConflictMaxEntrySize** attribute value in the **cn=Replication,cn=configuration** configuration entry.

In the message text:

name
  Entry distinguished name

System action: The LDAP server continues however the specified entry is not synchronized between the supplier and consumer servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Since the entry is not synchronized between the supplier and consumer servers, future replication conflicts might occur with this entry. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8586E   Attribute '*attribute_name*' is missing from entry '*name*'.

Explanation: If a replication context is created with an entry that is not a suffix level entry, ACLs must be defined explicitly in that entry. The following ACL attribute values must be added to the replication context entry for non-suffix level entries: **aclEntry**, **aclPropogate**, **entryOwner**, and **ownerPropogate**.

In the message text:

attribute_name
    Attribute type

name
    Entry distinguished name

System action: The LDAP server continues however the requested client add operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the specified attribute is added to the entry and then retry the client add operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8587E   The Replication Topology extended operation failed to quiesce the context '*context_name*' on host '*host_name*' port *port_number*. The operation will not continue with this server.

Explanation: An error occurred while using the **Replication topology** extended operation to quiesce a replication context on the specified consumer server. The **Replication topology** extended operation continues to the next targeted consumer server.

In the message text:

context_name
    Replication context entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

GLD8588I

System action: The LDAP server continues, however, the replication context on the consumer server identified by the replication agreement is not quiesced.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication context entry on the specified consumer server is not already quiesced and is a valid entry. Then retry the **Replication topology** extended operation. See Monitoring and diagnosing advanced replication problems for information about searching the replication context operational attribute values to obtain the current replication status.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8588I   **The Replication Topology extended operation successfully quiesced the context '***context_name***' on host '***host_name***' port** ***port_number***.**

Explanation: The **Replication topology** extended operation has successfully quiesced the replication context on the specified consumer server.

In the message text:

context_name
> Replication context entry distinguished name

host_name
> LDAP host name

port_number
> LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8589E   **The Replication Topology extended operation failed to unquiesce the context '*context_name*' on host '*host_name*' port *port_number*. The operation will not continue with this server.**

Explanation: An error occurred while using the **Replication topology** extended operation to unquiesce the replication context on the targeted consumer server.

In the message text:

context_name
     Replication context entry distinguished name

host_name
     LDAP host name

port_number
     LDAP port number

System action: The LDAP server continues however the **Replication topology** extended operation on the consumer server identified by the replication agreement is still quiesced.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the replication context entry on the specified consumer server is quiesced and is a valid entry. Then retry the **Replication topology** extended operation. See Monitoring and diagnosing advanced replication problems for information about searching the replication context operational attribute values to obtain the current replication status.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8590I   **The Replication Topology extended operation successfully unquiesced the context '*context_name*' on host '*host_name*' port *port_number*.**

Explanation: The **Replication topology** extended operation has successfully unquiesced the replication context on the specified consumer server.

In the message text:

context_name
     Replication context entry distinguished name

host_name
     LDAP host name

port_number
     LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8591E **The Replication Topology extended operation failed to add a suffix '*name*' to the configuration file of target host '*host_name*' port *port_number*. The operation will not continue with this server.**

Explanation: An error occurred while using the **Replication topology** extended operation to add replication topology entries on the targeted consumer server.

In the message text:

name
   Entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues however the **Replication topology** extended operation on the consumer server identified by the replication agreement is not successful.

If the consumer server is a non-z/OS IBM TDS, the addition of an **ibm-slapdSuffix** attribute value to the **cn=Directory, cn=RDBM Backends, cn=IBM Directory, cn=Schemas, cn=Configuration** entry was not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the **Replication topology** extended operation was targeted against a non-z/OS IBM Tivoli Directory Server, manually add the suffix on the consumer server.

If the **Replication topology** extended operation was targeted against a z/OS IBM Tivoli Directory Server, update the server configuration file on the targeted consumer server to add an appropriate **suffix** option. Then restart the consumer server and retry the **Replication topology** extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8592I **The Replication Topology extended operation successfully added a suffix '*name*' to the configuration file of target host '*host_name*' port *port_number*.**

Explanation: If the **Replication topology** extended operation was targeted against a non-z/OS IBM Tivoli Directory Server, it has successfully added an **ibm-slapdSuffix** attribute value to the rootDSE entry. This allows the **Replication topology** extended operation to synchronize replication topology entries on the consumer server identified by the replication agreement.

In the message text:

name
    Entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8593E   **The Replication Topology extended operation failed to purge the queue that is associated with the replication agreement '***agreement_name***' on host '***host_name***' port** *port_number*.

Explanation: An error occurred while purging the replication queue for the specified replication agreement entry when using the **Replication topology** extended operation. The replication queue on the supplier server is purged when the replication agreement entry already exists on the consumer server.

In the message text:

agreement_name
    Replication agreement entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues however the **Replication topology** extended operation on the consumer server identified by the replication agreement is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the problem by purging the replication queue or by deleting the replication agreement entry on the consumer server. The replication queue for the agreement can be purged by using the **Control replication queue** extended operation in the **ldapexop** utility. Then retry the **Replication topology** extended operation. See Recovering from advanced replication errors for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8594I **There is no replication queue that is associated with the replication agreement '***agreement_name***' on host '***host_name***' port** *port_number***. Or the Replication Topology extended operation successfully purged the queue.**

Explanation: The **Replication topology** extended operation has successfully purged the replication queue associated with the specified replication agreement entry.

In the message text:

agreement_name
   Replication agreement entry distinguished name

host_name
   LDAP host name

port_number
   LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8595E **The supplier of the Replication Topology extended operation failed to contact target host '***host_name***' port** *port_number* **using replication agreement '***agreement_name***'.**

Explanation: An error occurred while using the **Replication topology** extended operation to contact the consumer server identified by the replication agreement.

In the message text:

host_name
   LDAP host name

port_number
   LDAP port number

agreement_name
   Replication agreement entry distinguished name

System action: The LDAP server continues however the **Replication topology** extended operation on the consumer server identified by the replication agreement is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the consumer server for the replication agreement is running and the replication agreement has the correct **ibm-replicaURL** attribute value specified. Then retry the **Replication topology** extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8596I   **Topology successfully replicated to** *number* **of** *maximum_number* **servers.**

Explanation: The **Replication topology** extended operation has successfully synchronized the replication topology entries on the number of consumer servers specified.

In the message text:

number
  Number of consumer servers successfully replicated

maximum_number
  Total number of consumer servers

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8598E   **The Replication Topology extended operation timed out.**

Explanation: A timeout error occurred while using the **Replication topology** extended operation. The time limit specified on the **Replication topology** extended operation has been exceeded.

System action: The LDAP server continues however the **Replication topology** extended operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the timeout specified on the **Replication topology** extended operation is

enough time to run the operation on all consumer servers within a replication context. Increase the timeout value and then retry the **Replication topology** extended operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8601I **The update logged as a failure with failure ID** *failureID* **for replication agreement DN '***agreement_name***' has been removed from the backend replication failure table.**

Explanation: The **Control replication error log** extended operation has successfully removed the specified replication failure ID from the backend replication table.

In the message text:

failureID
    Replication failure change identifier

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8602I **All updates logged as failures for replication agreement DN '***agreement_name***' have been removed from the backend replication failure table.**

Explanation: The **Control replication error log** extended operation has successfully removed all replication failures from the backend replication table.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8603E **Unable to log failure in the backend replication failure table for replication agreement DN '**_agreement_name_**' for entry with change ID** _changeID_**.**

Explanation: An internal error occurred while adding the replication failure ID in the backend replication table.

In the message text:

_agreement_name_
  Replication agreement entry distinguished name

changeID
  Replication change identifier

System action: The LDAP server continues, however, the replication failure cannot be added to the backend replication table.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the backend where the replication agreement entry resides is functioning and handling requests correctly. The supplier and consumer servers might no longer be synchronized. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8604W **Reached or exceeded the limit** _max_replication_errors_ **for the backend replication failure table for replication agreement DN '**_agreement_name_**'.**

Explanation: The supplier server has reached or exceeded the maximum number of replication errors allowed for all replication agreement entries within this backend. The maximum number of replication errors allowed is controlled by the **ibm-slapdReplMaxErrors** attribute value in the **cn=Replication,cn=configuration** entry.

In the message text:

_max_replication_error_
  Maximum number of advanced replication errors allowed

_agreement_name_
  Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8608I   Replication for DN '*agreement_name*' will use the single threaded, synchronous method.

Explanation: Replication to the consumer server identified by the replication agreement is using the synchronous, single threaded method. The synchronous method is the only supported replication method on the IBM Tivoli Directory Server for z/OS.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8610E   Replication for DN '*agreement_name*' terminated because of an unsupported replication method.
**   *method*.**

Explanation: Replication to the consumer server identified by the replication agreement is using a replication method that is not supported. The synchronous, single threaded method is the only supported replication method on the IBM Tivoli Directory Server for z/OS.

In the message text:

agreement_name
    Replication agreement entry distinguished name

method
    Replication method

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **ibm-replicaMethod** attribute value in the replication agreement entry is set to **1**, which indicates the synchronous, single threaded method. Update the **ibm-replicaMethod** attribute value and then restart the server.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8618E **Replication for replica '***agreement_name***' will continue to retry the same failed update with change ID** *changeID* **until it is successful.**

Explanation: An error occurred while replicating the update with the specified change ID to the consumer server identified by the replication agreement entry. The failed change gets retried every minute until it succeeds or the failed change is removed from the replication queue by the LDAP root administrator or an administrative group member with the root or replication administrator roles. When this failed change occupies the lead position in the pending replication queue, all other replication updates are blocked and replication is stalled.

In the message text:

agreement_name
    Replication agreement entry distinguished name

changeID
    Replication change identifier

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is stalled.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: See Monitoring and diagnosing advanced replication problems for information about recovering from advanced replication problems.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8620E **Error occurred processing the replica URL for replication agreement '***agreement_name***'.**

Explanation: An error occurred while parsing the **ibm-replicaURL** attribute value in the replication agreement entry. The value specified is not a valid LDAP URL or is empty.

In the message text:

GLD8628I

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the **ibm-replicaURL** attribute value in the replication agreement entry so a valid LDAP URL is specified. Verify that the consumer server's host name and optional port number are correct.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8628I   **Creating surrogate entry '***name***' on partial replica '***host_name***' port** *port_number***.**

Explanation: The specified entry is being created on the consumer server because this parent entry is missing. If the **ibm-replicationCreateMissingEntries** optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

name
    Entry distinguished name

host_name
    LDAP host name

port_number
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8629E   **Creation of surrogate entry '***name***' on partial replica '***host_name***' port** *port_number* **failed.**

Explanation: An error occurred while attempting to automatically create the specified entry on the consumer server. This parent entry was probably missing because the replication filter excluded it from being replicated to the consumer server. If the **ibm-replicationCreateMissingEntries** optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

name
  Entry distinguished name

host_name
  LDAP host name

port_number
  LDAP port number

System action: The LDAP server continues, however, the add operation on the consumer server identified by the replication agreement is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the specified entry is not present on the consumer server and it is required for children entries, the entry must be manually added to the consumer server. The entries on the supplier and consumer servers might need to be synchronized. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8630I   **Creation of a surrogate entry '***name***' on partial replica '***host_name***' port** *port_number* **succeeded.**

Explanation: The specified entry has successfully been created because this parent entry was originally missing on the consumer server. If the **ibm-replicationCreateMissingEntries** optional attribute in the replication agreement is set to true, then missing parent entries on the consumer server are automatically created.

In the message text:

name
  Entry distinguished name

host_name
  LDAP host name

port_number
  LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

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Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8632E   **The replication filter entry '***filter_name***' defined for the replication agreement '***agreement_name***' cannot be found.**

Explanation: An internal search error occurred while querying the replication filter entry specified in the **ibm-replicationFilterDN** attribute value of the replication agreement entry. The replication filter entry specified in the replication agreement cannot be found or the entry specified does not have an object class value of **ibm-replicationFilter**.

In the message text:

filter_name
    Replication filter entry distinguished name

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **ibm-replicationFilterDN** attribute value in the replication agreement entry exists and has an object class value of **ibm-replicationFilter**. If the replication filter entry does not exist, add the entry to the directory. See Partial replication for information about replication filter entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8633W   **The operational attribute** *attribute_name* **specified as part of the replication filter inclusion/exclusion list is not allowed.**

Explanation: An error occurred while attempting to add or modify a replication filter that had an operational attribute specified. Operational attributes cannot be specified as part of the filter inclusion or exclusion list. Replication filters are specified in the **ibm-replicationFilterAttr** attribute value in the replication filter entry.

In the message text:

attribute_name
    Attribute type

System action: The LDAP server continues however the add or modify operation of the replication filter entry is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the add or modify of the **ibm-replicationFilterAttr** attribute value in the replication filter entry to only specify non-operational attributes as part of the inclusion or exclusion list in a replication filter. See Partial replication for information about replication filter entries.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8634I   **Modifications to only the ACL attributes of an entry will not be filtered.**

Explanation: Partial replication is configured for the replication agreement. However, replication filtering is bypassed since only the ACL attribute values of an entry are modified. Updates to ACL attribute values are always replicated to a consumer server.

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8635I   **The Replication Topology extended operation is performed against the server at host '**_host_name_**' port '**_port_number_**' that does not support filtered replication. Hence, the filtered replication related attributes will not be sent to this server.**

Explanation: The consumer server identified by the replication agreement entry does not support filtered replication. However, the replication agreement has a replication filter entry specified in the **ibm-replicationFilterDN** attribute value. Although the consumer server does not support partial replication, filtered entries are still replicated to the consumer server.

In the message text:

_host_name_
    LDAP host name

_port_number_
    LDAP port number

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8637I   Restricted Access to the replication topology is set to *value***.**

Explanation: The **ibm-slapdReplRestrictedAccess** attribute value in the **cn=Replication,cn=configuration** entry has been set to the value specified in this message. If set to true, only the LDAP root administrator or an administrative group member with the root or replication administrator roles and the master server DN have access to replication topology entries. If set to false, other users with the proper ACL authority can access the replication topology entries.

In the message text:

value
    True or false

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8639E   The filter entry '*filter_name***' is in use and cannot be deleted.**

Explanation: The replication filter entry cannot be deleted because a replication agreement entry has a reference to this entry in an **ibm-replicationFilterDN** attribute value.

In the message text:

filter_name
    Replication filter entry distinguished name

System action: The LDAP server continues however the requested delete client operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Perform a search on all replication agreement entries in the directory to find the entry that has an **ibm-replicationFilterDN** attribute value with the distinguished name (DN) of the entry being deleted. Modify the **ibm-replicationFilterDN** attribute value in the replication agreement entry to remove the reference to the entry that is being deleted. Then retry the delete client operation.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8640I   Replication error logging for replication agreement DN '*agreement_name*' is unlimited.

Explanation: The number of replication failures stored for the specified replication agreement is unlimited. When the **ibm-slapdReplMaxErrors** attribute value in the **cn=Replication,cn=configuration** entry is set to -1, there is no limit on the number of replication failures stored in the backend where the replication agreement entry resides.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the limit needs to be decreased, modify the **ibm-slapdReplMaxErrors** attribute value in the **cn=Replication,cn=configuration** entry and specify a small positive number. The **ibm-slapdReplMaxErrors** attribute value applies to all replication agreements within the backend.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8642W   Internal search for the parent entry '*name*' failed.

Explanation: An internal server error occurred while searching for the specified parent entry in this server. This entry is a missing parent entry on the consumer server and is needed for replication to the consumer server to continue.

In the message text:

name
    Entry distinguished name

System action: The LDAP server continues however the missing parent entry is not added to the consumer server.

Operator response: None.

System programmer response: None.

GLD8643E • GLD8644E

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the missing parent entry exists on this supplier server by performing a search operation. If the entry does not exist, add the entry to the supplier server. The supplier and consumer servers may need to be synchronized. See Recovering from advanced replication errors for information about synchronizing the supplier and consumer servers.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8643E   The attribute *attribute_name* specified in the replication filter is not found in the schema.

Explanation: The specified attribute type in the replication filter was not found in the schema. A replication filter was specified in the **ibm-replicationFilterAttr** attribute value in the replication filter entry. Another message identifies the replication filter entry and value that is in error.

In the message text:

attribute_name
    Attribute type

System action: The LDAP server continues however the requested replication filter update client operation is not successful. If the replication filter is an existing replication filter entry, the filter is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the attribute type specified in the replication filter exists in the schema. Modify the replication filter to use an attribute type that exists in the schema or update the schema to add the missing attribute type.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8644E   The objectclass *value* specified in the replication filter is not found in the schema.

Explanation: The specified object class value in the replication filter was not found in the schema. A replication filter was specified in the **ibm-replicationFilterAttr** attribute value in the replication filter entry. Another message identifies the replication filter entry and value that is in error.

In the message text:

value
    Objectclass value

System action: The LDAP server continues however the requested replication filter update client operation is not successful. If the replication filter is an existing replication filter entry, the filter is ignored.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the object class value specified in the replication filter exists in the schema. Modify the replication filter to use an object class value that exists in the schema or update the schema to add the missing object class value.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8645E **A replication filter '*attribute_value*' that is not valid is specified in entry '*name*'.**

Explanation: The specified filter in the replication filter entry that was added or modified was not valid. There is a specific format required for replication filters that are specified in the **ibm-replicationFilterAttr** attribute value.

In the message text:

attribute_value
    Attribute value

System action: The LDAP server continues however the requested replication filter update client operation is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the **ibm-replicationFilterAttr** attribute value in the replication filter entry so that it is in the correct format. See Partial replication for information about the replication filter format.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8647E **Kerberos authentication is specified for the replication agreement '*agreement_name*'. Kerberos authentication is not supported on this platform.**

Explanation: The object class of the supplier server credentials entry defined in the **ibm-replicaCredentialsDN** attribute value for the replication agreement entry is not valid. The only supported object class values for supplier server credential entries are **ibm-replicationCredentialsSimple** and **ibm-replicationCredentialsExternal**. The IBM Tivoli Directory Server for z/OS does not support a supplier server credentials entry that has an object class value of **ibm-replicationCredentialsKerberos**.

In the message text:

agreement_name
    Replication agreement entry distinguished name

GLD8648E

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is not started.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry does not reference a supplier server credentials entry with an **ibm-replicationCredentialsKerberos** object class value. Modify the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry to reference a supplier server credentials entry with an object class value of **ibm-replicationCredentialsSimple** or **ibm-replicationCredentialsExternal**.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8648E   **Unable to open lost and found log file '***filename***'.**

Explanation: The lost and found log file that is specified by the **ibm-slapdLog** attribute value in the **cn=Replication,cn=Log Management,cn=Configuration** entry cannot be opened. The lost and found log file is created by the consumer server any time a replication conflict occurs. Any entries that are deleted on the consumer server because of a replication conflict are stored in LDIF format in this file.

In the message text:

filename
    Replication lost and found log file

System action: The LDAP server continues, however, replication conflicts are not written to the lost and found log file.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the LDAP server has the appropriate access to the directories and to the file itself. Modify the **ibm-slapdLog** attribute value in the **cn=Replication,cn=Log Management,cn=Configuration** entry to specify a fully qualified z/OS UNIX System Services file name and directory location where the LDAP server can create the lost and found log file.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8649E   **Replication agreement '***agreement_name***' is now suspended because '***filter_name***' is not a valid filter entry.**

Explanation: The replication agreement is now suspended because the replication filter entry specified in the **ibm-replicationFilterDN** attribute value does not exist or there are no valid **ibm-replicationFilterAttr** attribute values specified in the entry. The **ibm-replicationOnHold** attribute value has been automatically set to true in the replication agreement until the problems can be corrected.

In the message text:

agreement_name
    Replication agreement entry distinguished name

filter_name
    Replication filter entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is suspended. Replication updates are queued until replication is resumed for this replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the **ibm-replicationFilterDN** attribute value in the replication agreement specifies an entry that exists in the directory. If a valid replication filter entry is specified, verify that each of the **ibm-replicationFilterAttr** attribute values in the replication filter entry is in an acceptable format. See Partial replication in for information about replication filter entries.

When the problems are corrected, use the **Control replication** extended operation on the **ldapexop** utility to resume replication. If the extended operation is successful, the **ibm-replicationOnHold** attribute in the replication agreement entry is changed from true to false.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8650I   **Replication agreement '***agreement_name***' is active.**

Explanation: Replication to the consumer server identified by the replication agreement is active because the **ibm-replicationOnHold** attribute is set to false or is not present.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8651I   Replication agreement '*agreement_name*' is suspended.

Explanation: Replication to the consumer server identified by the replication agreement is suspended because the **ibm-replicationOnHold** attribute is set to true.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues, however, replication to the consumer server identified by the replication agreement is suspended. Replication updates are queued until replication is resumed for this replication agreement.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Replication to the consumer server identified by the replication agreement can be resumed by using the **Control replication** extended operation on the **ldapexop** utility. If the extended operation is successful, the **ibm-replicationOnHold** attribute in the replication agreement entry is changed from true to false.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8652I   Replication agreement '*agreement_name*' is suspended. The Cascading control replication extended operation will skip this agreement.

Explanation: The **Cascading control replication** extended operation was attempted for a replication context that has one or more suspended replication agreements. The extended operation skips this agreement and continues to the next replication agreement. The replication agreement is suspended because the **ibm-replicationOnHold** attribute for the agreement entry is set to true.

In the message text:

agreement_name
    Replication agreement entry distinguished name

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8653W Duplicate ibm-replicaServerId value '*replicaServerId*' defined in subentry '*name*' for replication context '*context_name*'.

Explanation: The **ibm-replicaServerID** value defined in a replica subentry is already in use by another replica subentry that is defined under the replication context indicated in the message. All replica subentries in the same replication context should have unique **ibm-replicaServerID** values defined. Specifications for the **ibm-replicationServerIsMaster** and **ibm-replicaGateway** attribute values are derived from the last replica subentry processed that matches this server's **ibm-slapdServerID**. The replication configuration might change when the server is restarted based on the internal processing order of the replica subentries.

In the message text:

replicaServerId
    Value of duplicate serverID

name
    Entry distinguished name containing duplicate serverID

context_name
    Replication context distinguished name related to the subentry

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that a unique **ibm-replicaServerID** attribute value has been assigned to each replica subentry under the replication context indicated in the message.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8654I Advanced replication initialization failed.

Explanation: An internal error occurred while attempting to initialize advanced replication support.

System action: If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends that successfully start however advanced replication does not start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the LDAP server ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the LDAP server with ERROR debug level set. The LDAP trace debug output might help locate and correct the problem.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8797E   Internal processing error in the server; return code *return_code* **from pthread library.**

Explanation: An error occurred in one of the following LE pthread library functions:
- **pthread_mutex_lock()**
- **pthread_mutex_unlock()**
- **pthread_cond_timedwait()**
- **pthread_setspecific()**
- **pthread_cond_broadcast()**

The name of the pthread routine is in an LDAP ERROR trace. See the description of the LE pthread routines in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

return_code
> Return code from pthread library

System action: The LDAP server continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Restart the LDAP server with ERROR debug level set to determine the failing LE pthread library routine. Use the information in the message to correct the error. Then retry the request. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

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ldapdiff utility messages

GLD8801I   This tool synchronizes a replica server with its master.

Explanation: The **ldapdiff** utility help and usage menu.

System action: The program ends.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8802I   Only operational attributes differ for this entry.

Explanation: The **ldapdiff** utility has detected a difference in the operational attributes for the entry. The **ldapdiff** utility is using the **ibm-entryCheckSumOp** attribute, which contains a checksum value of the operational attribute values, to quickly detect entry differences.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8803I   Schema compare is complete.

Explanation: The **ldapdiff** utility has completed schema comparison on both LDAP servers.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8804I   **Schema compare is in progress. This might take a few minutes.**

Explanation: The **ldapdiff** utility is performing schema comparison on both LDAP servers.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8805I   **Successfully connected to both servers.**

Explanation: The **ldapdiff** utility has successfully connected to both LDAP servers that are to be compared.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8806E   **Error occurred while connecting to server:** *exception_text*.

Explanation: The **ldapdiff** utility encountered an error while attempting to connect to the LDAP server. The exception occurred while attempting to connect to the LDAP server that is indicated in the exception.

In the message text:

exception_text
    Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the targeted LDAP servers are running before starting the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8807E   Incorrect SSL options specified for server "*server_host*:*server_port*".

Explanation: The **ldapdiff** utility detected missing or incorrect SSL command line parameters while attempting to initialize the SSL connection to the LDAP server and port number indicated in the message. Either the parameter is not known, the value specified for the parameter is not supported, or a parameter is missing.

In the message text:

server_host
    Server host name

server_port
    Server port number

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the command line of the **ldapdiff** utility to ensure that the correct SSL parameters are specified. See ldapdiff utility for the correct **ldapdiff** utility syntax for the SSL options. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8808I   Traversing the tree on both the servers.

Explanation: The **ldapdiff** utility is retrieving and comparing entries on both LDAP servers residing under the baseDn specified on the **-b** command line parameter.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8809I   **Successfully finished traversing the tree on both the servers.**

Explanation: The **ldapdiff** utility has successfully retrieved and compared entries on both LDAP servers that reside under the baseDn specified on the **-b** command line parameter.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8810I   **Either normal or operational attributes or both differ for this entry.**

Explanation: The **ldapdiff** utility has detected a difference in the non-operational or operational attributes for the entry. The **ldapdiff** utility is using the **ibm-entryCheckSum** and **ibm-entryCheckSumOp** attribute values, to quickly detect entry differences. The **ibm-entryCheckSum** attribute value is a checksum value of non-operational attribute values while the **ibm-entryCheckSumOp** attribute value is a checksum value of the operational attribute values.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8811E   Unable to start subtree comparison.

Explanation: The **ldapdiff** utility is unable to start subtree comparison on both LDAP servers for one of the following reasons:

- The baseDn specified on the **-b** command line parameter does not have valid DN syntax.
- The baseDn specified on the **-b** command line parameter cannot be found on both the supplier and consumer servers.
- The encryption settings of the supplier and consumer servers cannot be retrieved.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the baseDn that is specified on the **-b** command line parameter is valid and exists on both LDAP servers. Ensure that the encryption settings for both servers can be retrieved. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8812I   Exceeded the specified number of non-matching entries.

Explanation: The **ldapdiff** utility has encountered the maximum number of non-matching entries between the LDAP servers being compared. The number of non-matching entries exceeds the number specified on the **-C** command line parameter.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the maximum number of entry mismatches allowed by **ldapdiff** utility is correct. Consider increasing the number of entry mismatches allowed or removing the **-C** command line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8813E   Exception: *exception_text*

Explanation: The **ldapdiff** utility encountered an exception while performing the requested task. This message is usually accompanied by another message indicating the operation that resulted in this exception.

In the message text:

exception_text
    Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in this message and other messages issued to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8814I   No attributes returned for *name* **entry.**

Explanation: The **ldapdiff** utility is unable to retrieve attribute values indicating encryption settings or password policy for the entry indicated in the message.

In the message text:

name
    Entry distinguished name

System action: The program continues without taking into account the encryption settings or password policy established on the LDAP server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8815E   Failed to determine the server version for one of the servers.

Explanation: The **ldapdiff** utility is unable to determine the LDAP server version because the **ibmdirectoryversion** attribute value does not exist in the rootDSE entry. The **ldapdiff** utility only properly works with the IBM Tivoli Directory Servers on z/OS and other platforms.

System action: The program continues but the results are unexpected.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify each LDAP server targeted by the **ldapdiff** utility is an IBM Tivoli Directory Server running on z/OS or other platforms. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8816W   Password policy is not enabled on one of the servers. Password policy attributes on entries will be ignored during comparisons.

Explanation: The **ldapdiff** utility has determined one of the servers does not have password policy enabled. Any password policy attributes that exist on entries are ignored during comparisons.

System action: The program continues but any password policy attributes that exist on entries are ignored during comparisons.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If password policy attributes must be compared on both servers, verify that the **cn=pwdpolicy,cn=ibmpolicies** entries on the supplier and consumer servers have the **ibm-pwdPolicy** attribute set to **true**. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8817E   Cannot open the specified file for LDIF output generation. LDIF file will not be created.

Explanation: The **ldapdiff** utility encountered an error while attempting to open the output LDIF file specified on the **-L** command line parameter for writing.

System action: The program continues with the differences between the LDAP servers being written to standard output.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the directory containing the output LDIF file exists and the user has the appropriate permissions to write the file to that directory. Correct the output LDIF file name specified on the **-L** command line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8818E   Exception occurred while closing the LDIF file: *exception_text*

Explanation: The **ldapdiff** utility encountered an exception when closing the output LDIF file specified on the **-L** command line parameter. The exception might have occurred for one of the following reasons:

- The output LDIF file is already closed.
- The output LDIF file does not exist at the specified location.
- The internal file reference is not valid.
- The user running the **ldapdiff** utility does not have the appropriate permissions to access the output LDIF file.

In the message text:

exception_text
    Exception text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the output LDIF file specified on the **-L** command line parameter still exists and the user has the appropriate permissions to access the file. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8819E   Missing arguments: Value not specified for *option***.**

Explanation: The **ldapdiff** utility has detected that a value has not been specified for the command line parameter specified in the message.

In the message text:

option
    Command line option

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the command line of the **ldapdiff** utility to specify a valid value for the command line parameter indicated in the message. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8820W   The supplier and consumer servers have different encryption seed or salt values. The operation will take longer.

Explanation: The **ldapdiff** utility has detected that the supplier and consumer servers have different encryption seed or salt values. This message is generally only issued when the **ldapdiff** utility is targeting a supplier or consumer server that is running against an non-z/OS IBM Tivoli Directory Server. The comparison operation is faster if the supplier and consumer servers have the same encryption seed and salt values.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8821E   Missing required argument; refer to the usage description for valid syntax.

Explanation: The **ldapdiff** utility has detected one of the following required parameters are missing from the command line:

- **-ch host**
- **-sh host**
- **-b baseDn** or **-S**

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the **ldapdiff** command line has the required parameters specified. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8822E   Exception occurred while adding DN to LDIF file: *exception_text*

Explanation: The **ldapdiff** utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the output LDIF file exists and the user has the appropriate permissions to write to the file. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8823E   Exception occurred while deleting DN from LDIF file: *exception_text*

Explanation: The **ldapdiff** utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the output LDIF file exists and the user has the appropriate permissions to write to the file. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8824E   Exception occurred while modifying DN in LDIF file: *exception_text*

Explanation: The **ldapdiff** utility encountered an exception while writing the entry to the output LDIF file. The exception that occurred while writing to the output LDIF file is indicated in the message.

In the message text:

exception_text
     Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the output LDIF file exists and the user has the appropriate permissions to write to the file. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8825E   Unable to search RootDSE: DirContext is Null.

Explanation: The **ldapdiff** utility encountered an internal problem while performing a rootDSE search.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

GLD8826E • GLD8827E

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8826E   No RootDSE attributes were returned.

Explanation: The **ldapdiff** utility encountered an error while performing a rootDSE search. The rootDSE entry returned from the targeted LDAP server did not have any attribute types or values.

System action: The program continues by using a default distinguished name (DN) of **cn=schema** for schema comparison on the targeted LDAP servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8827E   Error occurred during enumeration of attributes from the rootDSE entry.

Explanation: The **ldapdiff** utility encountered an internal error while retrieving the rootDSE entry attribute values returned on a search.

System action: The program continues by using a default distinguished name (DN) of **cn=schema** for schema comparison on the targeted LDAP servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8828E   **Error occurred while reading rootDSE attributes:** *exception_text*

Explanation: The **ldapdiff** utility encountered an internal error while reading and parsing the rootDSE entry attribute values.

In the message text:

exception_text
  Exception text

System action: The program continues by using a default distinguished name (DN) of **cn=schema** for schema comparison on the targeted LDAP servers.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8829W   **Number of grace logins remaining is** *number* **for entry "**name**" on server "**server_url**".**

Explanation: The authenticating user is only allowed the specified number of grace logins before the password expires. When the user's password expires, the authenticating user is no longer able to access the server.

In the message text:

number
  Number of grace logins

name
  Entry distinguished name

server_url
  LDAP server url

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password for the authenticating user should be changed before the number of allowed grace logins is exceeded. When the number of grace log ins is exceeded, the authenticating user is no longer able to authenticate to the targeted LDAP server. The password can be modified using the **ldapmodify** or **ldapchangepwd** utilities. See *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about these utilities.

GLD8830E • GLD8831E

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8830E   No subschemasubentry found in rootDSE.

Explanation: The **ldapdiff** utility is unable to find the **subschemasubentry** attribute on the search of the rootDSE entry. The **subschemasubentry** attribute specifies the distinguished name of the schema entry. Generally, this error can only occur when targeting the **ldapdiff** utility against a non-z/OS IBM Tivoli Directory Server.

System action: The program continues schema comparison by using the default distinguished name (DN) of **cn=schema** on the targeted LDAP server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Define a **subschemasubentry** attribute value on the non-z/OS IBM Tivoli Directory Server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8831E   An exception occurred during search: *exception_text*.

Explanation: The **ldapdiff** utility encountered an internal error while performing a search operation on the LDAP server. The exception is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. Ensure that the bound user has the necessary permissions to access the search query results. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8832E   **Error occurred while processing search results for server:** *exception_text*.

Explanation: The **ldapdiff** utility encountered an error while parsing through LDAP search results. The exception is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure that the targeted LDAP servers are running when using the **ldapdiff** utility. Verify that TCP/IP communication is working properly between the utility and each targeted LDAP server. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8833E   **Error occurred while setting environment variables:** *exception_text*.

Explanation: The **ldapdiff** utility encountered an error while initializing the environment for a connection to the LDAP server. The exception is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program continues but the environment settings are not set.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify that the user has enough permissions to set the environment settings or the system property settings. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

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Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8834W   **Password expires in** *number_seconds* **seconds (***number_days* **days and**
*number_hours***:***number_minutes***:***number_seconds***) for entry "***name***" on server "***server_url***".**

Explanation: The authenticating user is only allowed the specified amount of time before the password expires. When the user's password expires, the authenticating user is no longer able to access the server.

In the message text:

number_seconds
    Password expiration in seconds

number_days
    Password expiration in days

number_hours
    Password expiration in hours

number_minutes
    Password expiration in minutes

number_seconds
    Password expiration in seconds

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password for the authenticating user should be changed before the password expiration time is exceeded. Once the password has expired, the authenticating user is no longer able to authenticate to the targeted LDAP server. The password can be modified using the **ldapmodify** or **ldapchangepwd** utilities. See *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about these utilities.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8835E   **Password has expired for entry "***name***" on server "***server_url***".**

Explanation: The password for the authenticating user has expired. The authenticating user is unable to access the server until the password has been changed.

In the message text:

name
Entry distinguished name

server_url
LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The password for the authenticating user must be reset and changed before the user is allowed access to the server. The password can be modified using the **ldapmodify** or **ldapchangepwd** utilities. See *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about these utilities. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8836E **Account is locked for entry "***name***" on server "***server_url***".**

Explanation: The authenticating user's account has been locked and is prevented from accessing the specified server.

In the message text:

name
Entry distinguished name

server_url
LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: The authenticating user's account must be unlocked by an LDAP root or password administrator. If the authenticating user is the LDAP root administrator (**adminDN**) and the server being accessed is the z/OS LDAP server, use the **UNLOCK ADMIN** operator modify command to unlock the account. Once the account is unlocked, the authenticating user has access to the server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8837I   The specified base DN is not found on the consumer server.

Explanation: The **ldapdiff** utility was unable to find the baseDn on the consumer server. The baseDn was specified on the **-b** command line parameter of the **ldapdiff** utility.

System action: The program continues without traversing the subtree on the consumer server. If the **-F** command line parameter is specified, any entries that exist on the supplier server in that subtree are added to the consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8838I   The specified base DN is not found on the supplier server.

Explanation: The **ldapdiff** utility was unable to find the baseDn on the supplier server. The baseDn was specified on the **-b** command line parameter of the **ldapdiff** utility.

System action: The program continues without traversing the subtree on the supplier server. If the **-F** command line parameter is specified, any entries that exist on the consumer server in that subtree are deleted.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8839W   The supplier and consumer servers have different encryption settings. The operation may take longer.

Explanation: The **ldapdiff** utility performed a search of the **cn=configuration** subtree to obtain the **ibm-slapdPwEncryption** attribute value. This search is only performed when the **ldapdiff** utility is used with a non-z/OS IBM Tivoli Directory Server. The **ldapdiff** utility determined the supplier and consumer servers have different encryption settings so the comparison operation might take longer. The operation is faster if the supplier and consumer servers have the same encryption settings.

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8840E   **Error while retrieving attributes of DN:** *exception_text*.

Explanation: The **ldapdiff** utility encountered an internal error while adding the attributes to an internal hash table. The exception that occurred is indicated in the message.

In the message text:

exception_text
> Exception text

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8841E   **Exception occurred while parsing "***name***" DN:** *exception_text*.

Explanation: The **ldapdiff** utility encountered an exception while parsing the string representation of a distinguished name (DN). The exception that occurred is indicated in the message.

In the message text:

name
> String representation of a DN

exception_text
> Exception text

System action: If the distinguished name that is being parsed is the baseDn specified on the **-b** command line parameter, the program ends. If other distinguished names are being parsed, the program continues.

Operator response: None.

GLD8842E • GLD8843E

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Ensure the syntax of the DN being parsed is correct. Verify that a valid baseDn is specified on the **-b** command line parameter. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8842E   Exception occurred while fetching attributes from server: "*exception_text***".**

Explanation: The **ldapdiff** utility encountered an exception while fetching attributes from the LDAP server. The exception is indicated in the message.

In the message text:

exception_text
    Exception text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the exception text indicated in the message to correct the problem. Verify the attributes that are being compared exist on both LDAP servers. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8843E   Traverse exception occurred: *exception_text*

Explanation: The **ldapdiff** utility encountered an error while traversing the LDAP servers. The exception is indicated in the message. The error might have occurred for one of the following reasons:

- There is a problem performing a search operation on the LDAP server. Verify that the search request controls are valid.
- There is a problem traversing the search entry results from the LDAP server.
- There is a generic error traversing the LDAP server entries.

In the message text:

exception_text
  Exception text

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the targeted LDAP servers are still running. Use the information in this message and other messages to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8844E   **Password must be changed for "***name***" on server "***server_url***" this is what the "should" look like**

Explanation: The password for the authenticating user or the entry being modified must be changed. The effective password policy on the server indicates that the entry's password value must be changed.

In the message text:

name
  Entry distinguished name

server_url
  LDAP server url

System action: If authentication is being done, the program continues however the comparison and fix operations may fail. If an entry is being modified on the consumer server, the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Change the password for the authenticating user or the entry that was being modified on the consumer server. The password for the authenticating user or the entry being modified can be changed by using the **ldapmodify** or **ldapchangepwd** utilities. See *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about these utilities. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8845E • GLD8847E

GLD8845E   Entry format for "*option*" is not valid.

Explanation: The **ldapdiff** utility encountered an error while parsing the **-C countNumber**, **-sp port**, or **-cp port** command line parameters. The number specified is less than zero or not a proper numeric number.

In the message text:

option
    Option name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a valid number for the command line parameter indicated in the message. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8846E   Missing JSSE package for SSL connection.

Explanation: The installed version of Java™ is missing the Java secure socket extension (JSSE) package or the JSEE settings are not correct.

System action: The program continues but connecting with the proper JSSE settings is not successful.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the installed version of Java has the JSSE jar file installed. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8847E   Specified SASL mechanism is not available for server *name*.

Explanation: The **ldapdiff** utility encountered an error because the LDAP server does not support the SASL authentication mechanism specified. This message is usually accompanied by another message indicating the exact cause of the error.

In the message text:

name
> Server name

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8848E   Unable to fix entry

Explanation: The **ldapdiff** utility encountered an error while attempting to fix an entry on the consumer server because the bindDn specified on the **-cD** command line parameter does not have the appropriate permissions. This message is usually accompanied by another message indicating the exact cause of the error.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify the bindDn specified on the **-cD** command line parameter has the appropriate permissions to add, delete, or modify entries on the consumer server. Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8849E   Error occurred while retrieving filter ACL support of the server.

Explanation: The **ldapdiff** utility encountered an error while retrieving the rootDSE entry attributes from the LDAP server to determine if it supports filter ACL support. This message is usually accompanied by another message indicating the exact cause of the error.

System action: The program continues, however, filter ACL support is assumed not to be supported on the LDAP server.

Operator response: None.

GLD8850E • GLD8851E

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8850E   Password may not be modified for "*name***" on server "***server_url***".**

Explanation: The password for the entry being modified is not allowed to be changed by the authenticated user.

In the message text:

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the authenticated user has the appropriate permissions to change password values on the consumer server. Ensure that the effective password policy for the entry being modified on the consumer server allows the password to be modified. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8851E   Must supply old password for "*name***" on server "***server_url***".**

Explanation: The old password value must be supplied with the new password value while modifying the entry on the consumer server.

In the message text:

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8852E **Password syntax is not valid for "***name***" on server "***server_url***".**

Explanation: The syntax of the password value for the entry being modified on the consumer server is not valid. The effective password policy on the consumer server does not allow this password value because it does not conform to the allowed password syntax.

In the message text:

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8853I   **Finished comparing** *number* **entries.**

Explanation: The **ldapdiff** utility has processed the number of entries indicated in the message.

In the message text:

number
   Number of entries processed

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8854E   **Error occurred while setting the replication controls.**

Explanation: The **ldapdiff** utility encountered an internal error while setting the advanced replication request controls. This message is accompanied by another message indicating the exact cause of the error.

System action: The program continues without sending the advanced replication controls to the consumer server.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8855E   **Supplier and consumer servers cannot be the same.**

Explanation: The **ldapdiff** utility requires the host and port specified for the supplier and consumer servers be different. The **ldapdiff** utility does not support comparing and fixing entries on the same server.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Correct the host and port values specified for the supplier and consumer servers. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8856E   Internal error occurred.

Explanation: The **ldapdiff** utility encountered an internal error while removing controls from the previous request. This message is accompanied by another message indicating the exact cause of the error.

System action: The program continues without removing the control from the previous request.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Use the information in the accompanying message to correct the problem. If additional information is needed to solve the problem, specify **-d ALL** on the command line. Then restart the program. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8857E   Unable to display DNs only for non-matching entries. Servers must be able to calculate entry checksums in order to use this feature.

Explanation: If the **-O** command line parameter is specified on the **ldapdiff** utility, both servers must support entry checksum calculation with the **ibm-entryCheckSum** and the **ibm-entryCheckSumOp** attributes. The utility uses these attribute values to compare each entry on the supplier and consumer servers to quickly detect differences.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that both servers support the calculation of entry checksums by searching the rootDSE entry. Each LDAP server must have an **ibm-supportedCapabilities** attribute value of **1.3.18.0.2.32.56** on the

rootDSE entry to use the **-O** command line parameter. If both LDAP servers do not have this support, remove the **-O** command line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8858W   Schema differences will not be automatically fixed.

Explanation: The **ldapdiff** utility does not support automatically fixing schema differences. The **-F** command line parameter is only supported for automatically fixing non-schema related entries.

System action: The program continues but the schema is not automatically fixed.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the **-L** command line parameter is specified, the schema differences between the LDAP servers are written to an output schema LDIF file. This generated LDIF file can be used to manually modify the consumer server. If the **-L** command line parameter is not specified, the schema differences are written to standard output.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8859E   A KeyStorePwd or TrustStorePwd is required.

Explanation: A KeyStorePwd or TrustStorePwd is required when the keyStoreType or trustStoreType options on the **ldapdiff** command line are set to **JCEKS**. The password must be specified on the **-sP**, **-sY**, **-cP**, or **-cY** command line parameters to gain access to the keyStore or trustStore.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Specify a password value for the keyStore or trustStore. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8860E   The "*name*" DN is not valid.

Explanation: The **ldapdiff** utility is unable to search the supplier and consumer servers for the distinguished name indicated in the message because the name is not valid.

In the message text:

name
    Entry distinguished name

System action: If the **-S** command line parameter is specified to compare the schema on both LDAP servers, the program continues; otherwise the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the distinguished name indicated in the message is the baseDn specified on the **-b** command line parameter, verify that it is valid and exists on both LDAP servers being compared. If the distinguished name is not the baseDn, check the entry on the LDAP server to verify that it is valid. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8861E   A specified option is not supported.

Explanation: The **ldapdiff** utility has detected an option that it does not support.

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that each command line parameter specified on the command line of the **ldapdiff** utility is valid. See ldapdiff utility for the correct **ldapdiff** utility syntax. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8862W   The -O option overrides the -F and -L options.

Explanation: The **-O** command line parameter was specified with either the **-F** or **-L** parameters on the **ldapdiff** utility command line. When this occurs, the distinguished names (DNs) of entries that differ between the LDAP servers are only displayed to standard output. The differences are not fixed and are not written to the output LDIF file specified on the **-L** command line parameter.

System action: The program continues but entry differences are not fixed and are not written to the output LDIF file specified on the **-L** command line parameter.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If entry differences need to be fixed or written to the output LDIF file, remove the **-O** command line parameter. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8863I   **LDIF output will be written to** *filename***.**

Explanation: Since the **-L** command line parameter was specified, the entry differences between the LDAP servers are written to the output LDIF file that is indicated in the message.

In the message text:

filename
    Output LDIF file

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8864I   **Schema LDIF output will be written to** *filename***.**

Explanation: Since the **-S** and **-L** command line parameters were specified together on the **ldapdiff** utility, the schema differences between the LDAP servers are written to the schema output LDIF file that is indicated in the message.

In the message text:

filename
    Schema output LDIF file

System action: The program continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8865E   Password is too short for "*name*" on server "*server_url*".

Explanation: The password value for the entry being modified on the consumer server is too short in length. The effective password policy on the consumer server does not allow the entry to have a password value this short.

In the message text:

name
    Entry distinguished name

server_url
    LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8866E   Password is too young for "*name*" on server "*server_url*".

Explanation: The password value for the entry being modified on the consumer server is not allowed to be changed because it has been modified too recently. The effective password policy on the consumer server does not allow the entry's password value to be modified now.

In the message text:

name
    Entry distinguished name

GLD8867E

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to allow this password value on the consumer server. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD8867E   **Password is in history for "***name***" on server "***server_url***".**

Explanation: The password value for the entry being modified on the consumer server is not allowed to be changed to this value because it already exists in the entry's password history. The effective password policy on the consumer server does not allow the entry's password value to be set to this value.

In the message text:

name
  Entry distinguished name

server_url
  LDAP server url

System action: The program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Verify that the effective password policy for the entry being modified on the consumer server is the same as it is on the supplier server. Use the **Effective password policy** extended operation in the **ldapexop** utility to query the effective password policy on both servers. If there are differences in the effective password policies on both servers, synchronize the password policies using the **ldapdiff** utility to allow this password value on the consumer server. All **pwdHistory** attribute values for the entry may need to be removed from the consumer server using the **ldapmodify** utility to allow the entry to be synchronized. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 6. Plug-in messages (9000)

This section lists the messages issued by the remote crypto ("Remote crypto plug-in messages") and ICTX ("ICTX plug-in messages" on page 413) plug-ins.

Remote crypto plug-in messages

GLD9101A   **Unable to get plug-in type:** *error_code* **-** *error_text*

Explanation: During initialization the remote crypto plug-in called **slapi_pblock_get()** to determine the type of plug-in. The call to **slapi_pblock_get()** failed, with the specified return code. See the description of **slapi_pblock_get()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

error_code
 Error code from **slapi_pblock_get()**

error_text
 Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9102A   **Unrecognized plug-in type** *plugin_type*

Explanation: During initialization the remote crypto plug-in calls **slapi_pblock_get()** with function code **SLAPI_PLUGIN_TYPE** to determine the type of plug-in. The type returned is not **SLAPI_PLUGIN_CLIENTOPERATION**. The plug-in type is defined in the LDAP server configuration file. The type must be **clientOperation**.

In the message text:

plugin_type
 Type of plug-in

System action: The plug-in does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the

GLD9103A

srvStartUpError option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Change the plug-in type to clientOperation and restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9103A   Unable to explicitly load the ICSF DLL 'CSFDLL64': *error_code/reason_code* **-** *error_text*

Explanation: During initialization the remote crypto plug-in calls **dllload()** to load the ICSF DLL. The call to **dllload()** failed, with the specified return code. See the description of **dllload()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
   Error code from **dllload()**

reason_code
   Reason code from **dllload()**

error_text
   Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9104A   **Unable to register** *function* **function:** *error_code* **-** *error_text*

Explanation: During initialization the remote crypto plug-in calls **slapi_pblock_set()** to register for the specified function. The call to **slapi_pblock_set()** fails, with the specified return code. See the description of **slapi_pblock_set()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

function
    Function type

error_code
    Error code from **slapi_pblock_set()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9105A   **Unable to set** *oid* **request OID:** *error_code* **-** *error_text*

Explanation: During initialization the remote crypto plug-in calls **slapi_pblock_set()** to register for the specified OID. The call to **slapi_pblock_set** fails, with the specified return code. See the description of **slapi_pblock_set()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

oid
    Request OID

error_code
    Error code from **slapi_pblock_set()**

error_text
    Error text corresponding to the error code

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9106E   Unable to allocate *bytes* **bytes of storage at** *function***():***line_number*

Explanation: The remote crypto plug-in called **slapi_ch_malloc()** to allocate storage. The allocation failed. See the description of **slapi_ch_malloc()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

bytes
    Number of bytes

function
    Function name where the allocation failed

line_number
    Line number where the allocation failed

System action:
* If the error occurs during initialization of an LDAP server plug-in, then the plug-in does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
* If the error occurs while processing an LDAP server operation, the LDAP server and plug-in continue. The request fails.

Operator response: Increase the storage available for use by the LDAP server, then restart the program. If the problem persists, contact the service representative.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9107E   Unable to save *function_code***:** *error_code* **-** *error_text*

Explanation: The remote crypto plug-in called **slapi_pblock_set()** to save the specified value. The call to **slapi_pblock_set()** failed, with the specified return code. See the description of **slapi_pblock_set()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

function_code
    Function code to save

error_code
    Error code from **slapi_pblock_set()**

error_text
    Error text corresponding to the error code

System action:
- If the error occurs during initialization of an LDAP server plug-in, then the plug-in does not start. If the **srvStartUpError** option in the LDAP server configuration file is set to **ignore**, the LDAP server continues to run with those backends and plug-ins that successfully start. If the **srvStartUpError** option is set to **terminate** (this is the default if the configuration option is not specified), the program ends.
- If the error occurs while processing an LDAP server operation, the LDAP server and plug-in continue. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9108E   **Unable to get** *function_code***:** *error_code* **-** *error_text*

Explanation: The remote crypto plug-in called **slapi_pblock_get()** to get the specified item. The call to **slapi_pblock_get()** failed, with the specified return code. See the description of **slapi_pblock_get()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error.

In the message text:

function_code
    Function code to get

error_code
    Error code from **slapi_pblock_get()**

error_text
    Error text corresponding to the error code

System action: The LDAP server and plug-in continue. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9109E   **Unable to create** *mutex* **mutex:** *error_code*/*reason_code* **-** *error_text*

Explanation: The plug-in is unable to create a mutex. See the description of **pthread_mutex_init()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

mutex
> Mutex Name

error_code
> Error code from **pthread_mutex_init()**

reason_code
> Reason code from **pthread_mutex_init()**

error_text
> Error text corresponding to the error code

System action: The LDAP server and plug-in continue. The request fails.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

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

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9110E   **Remote crypto plug-in parameter is not valid:** *value*

Explanation: The LDAP server encountered a configuration error with the Remote Crypto plug-in because a plug-in parameter that is not valid was specified for the **plugin** configuration option.

In the message text:

value
> Plug-in parameter value in **plugin** option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to specify valid plug-in parameters for the Remote Crypto **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9111E   The number of remote crypto plug-in parameters is not valid: *parm_count*

Explanation: The LDAP server encountered a configuration error with the Remote Crypto plug-in because the number of parameters specified for the **plugin** configuration option was not valid.

In the message text:

parm_count
    Number of parameters in **plugin** option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to specify valid plug-in parameters for the Remote Crypto **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9112I   The remote crypto plug-in is enabled. CCA enabled: *cca_status*. **PKCS#11 enabled:** *pkcs11_status*

Explanation: The LDAP server has successfully configured the Remote Crypto **plugin**.

In the message text:

cca_status
    CCA support status

pkcs11_status
    PKCS#11 support status

System action: The plug-in starts, and the LDAP server continues to run.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: None

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

ICTX plug-in messages

GLD9201A **No suffix configured for ICTX. Specify suffix "CN=ICTX".**

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because a suffix was not specified for the **plugin** configuration option. The suffix for the ICTX plug-in must be set to `CN=ICTX`.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of `CN=ICTX` for the ICTX **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9202A **Too many suffixes configured for ICTX. Specify only suffix "CN=ICTX".**

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because there were too many suffixes that are specified for the **plugin** configuration option. The suffix for the ICTX plug-in must be set to `CN=ICTX`.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of `CN=ICTX` for the ICTX **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9203A   Incorrect suffix configured for ICTX. Specify suffix "CN=ICTX" instead.

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because a suffix that was not valid was specified for the **plugin** configuration option. The suffix for the ICTX plug-in must be set to `CN=ICTX`.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to only specify a suffix of `CN=ICTX` for the ICTX **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9204E   Failure encountered in the audit logging facility. R_auditx returned *SAF_return*, *RACF_return_code*, *RACF_reason_code*.

Explanation: The ICTX plug-in extended operations encountered a failure during initialization when invoking the audit logging facility. The R_auditx callable service returned the *SAF_return_code*, *RACF_return_code*, and *RACF_reason_code*.

In the message text:

SAF_return
    SAF return code from R_auditx

RACF_return_code
    RACF return code from R_auditx

RACF_reason_code
    RACF reason code from R_auditx

System action: Initialization continues, but the remote auditing requests fail until an administrator responds to the problem.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: If the remote auditing function is needed, correct the problem indicated by the R_auditx codes. If *SAF_return_code* is set to **8**, *RACF_return_code* is set to **8**, and *RACF_reason_code* is set to **4**, it indicates the user associated with the LDAP server does not have at least READ access to the FACILITY class profile IRR.RAUDITX. See *z/OS Security Server RACF Callable Services* for more information about the returned *SAF_return_code*, *RACF_return_code*, and *RACF_reason_code*.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9205A   **Incorrect plugin type configured for ICTX. Specify type clientOperation instead.**

Explanation: The LDAP server encountered a configuration error with the ICTX plug-in because the **plugin** configuration option did not specify **clientOperation** as the `pluginType`. The ICTX **plugin** option must specify the plug-in type as a **clientOperation**.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to specify a plug-in type of **clientOperation** for the ICTX **plugin** configuration option, then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

GLD9206A   **Unexpected function error encountered during ICTX initialization.**

Explanation: The LDAP server encountered an error while initializing the ICTX plug-in. The ICTX plug-in initialization process was terminated prematurely as a result of an unforeseen error.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Look for associated diagnostic information in the system or job log. Consider restarting the LDAP server with debug tracing activated to obtain additional error information. If the problem persists, contact the service representative.

Source: LDAP

Routing code: None.

Descriptor code: None.

GLD9207A

Automation: Not applicable.

GLD9207A   **Suffix** *suffix_value* **already in use. Remove duplicate suffix definition.**

Explanation: The LDAP server encountered an error while initializing the ICTX plug-in because the *suffix_value* has already been defined as a suffix for another plug-in or backend. The suffix for the ICTX plug-in must be set to `CN=ICTX` and not be used by any other plug-in or backend in the LDAP server configuration file.

In the message text:

suffix_value
     Suffix value in **plugin** option

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: None.

Example: None.

Administrator response: Update the LDAP server configuration file to remove the `CN=ICTX` suffix from any other configured backends or plug-ins. A subordinate *suffix_value* in any casing such as `cn=abc, cn=ictx` is also not allowed in any other backends or plug-ins. Also, verify that the ICTX **plugin** option was not duplicated accidentally. Then restart the program.

Source: LDAP

Routing code: None.

Descriptor code: None.

Automation: Not applicable.

Chapter 7. Return and reason codes

This section contains LDAP server return codes, LDAP reason codes "LDAP server reason codes" on page 424, remote crypto plug-in reason codes "Remote crypto plug-in reason codes" on page 551, and ICTX plug-in reason codes "ICTX plug-in reason codes" on page 557.

Changed LDAP return codes

For information about changed LDAP return codes, see *z/OS V2R2 Migration* or see Migration considerations for applications.

LDAP return codes

If errors occur in the LDAP server during a client request, a return code is returned as part of the operations response. The return codes that are returned by the z/OS LDAP server on client requests are documented in **/usr/include/ldap.h**. However, only a subset of the documented return codes in **ldap.h** is allowed to be returned by the z/OS LDAP server. When an error occurs in the LDAP server, more specific information about the error is returned to the client application in the reason code message. See "LDAP reason codes" on page 423 for information about the reason codes.

Table 1 summarizes return codes in the **ldap.h** file which the z/OS LDAP server issues when processing client requests. Some return codes in Table 1 and other return codes that are documented in the **ldap.h** file, but not found in Table 1, are returned by the LDAP C client programming routines.

Table 1. LDAP server return codes

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_SUCCESS	0 (0x00)	The operation is successful.
LDAP_OPERATIONS_ERROR	1 (0x01)	An internal operations error occurred in the LDAP server.
LDAP_PROTOCOL_ERROR	2 (0x02)	The LDAP server encountered an LDAP client request that is not a valid LDAP message. Verify that the LDAP client request messages are encoded properly.
LDAP_TIMELIMIT_EXCEEDED	3 (0x03)	The time limit for the search request has been exceeded. See Customizing the LDAP server configuration about the **timelimit** option for more information about how time limits are processed in the LDAP server.
LDAP_SIZELIMIT_EXCEEDED	4 (0x04)	The size limit on the search request has been exceeded. See the Customizing the LDAP server configuration about the **sizelimit** option for more information about how size limits are processed in the LDAP server.

Table 1. LDAP server return codes (continued)

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_COMPARE_FALSE	5 (0x05)	The attribute value specified for the attribute type on the compare request does not exist in the entry.
LDAP_COMPARE_TRUE	6 (0x06)	The attribute value specified for the attribute type on the compare request does exist in the entry.
LDAP_STRONG_AUTH_NOT_SUPPORTED	7 (0x07)	The requested authentication mechanism is not supported by the z/OS LDAP server. The bind mechanisms supported by the z/OS LDAP server are: anonymous, simple, CRAM-MD5, DIGEST-MD5, GSSAPI (Kerberos), and SASL EXTERNAL.
LDAP_STRONG_AUTH_REQUIRED	8 (0x08)	Not currently returned by the z/OS LDAP server.
LDAP_PARTIAL_RESULTS	9 (0x09)	The LDAP server encountered an error while processing an LDAP Version 2 search request and a referral entry was encountered. This return code is used to indicate that not all search results have been obtained because LDAP version 2 client applications do not follow referrals automatically.
LDAP_REFERRAL	10 (0x0A)	The LDAP server encountered a referral while processing a search request. The client application may follow the referral to another LDAP server to process the remainder of the request.
LDAP_ADMIN_LIMIT_EXCEEDED	11 (0x0B)	Not currently returned by the z/OS LDAP server.
LDAP_UNAVAILABLE_CRITICAL_ EXTENSION	12 (0x0C)	Not currently returned by the z/OS LDAP server.
LDAP_CONFIDENTIALITY_REQUIRED	13 (0x0D)	A control specified on an LDAP client request had the control criticality set to true however the server does not recognize the control or the control is not appropriate for the operation. If the control is not critical, set the criticality to false to allow the LDAP server to ignore the control if it is always sent on all client requests. See Supported server controls for more information about the supported controls in the z/OS LDAP server.
LDAP_SASLBIND_IN_PROGRESS	14 (0x0E)	A CRAM-MD5, DIGEST-MD5, or GSSAPI (Kerberos) bind is currently in progress. This is a temporary error that occurs on these multi-handshake binds between the client and server.

Table 1. LDAP server return codes (continued)

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_NO_SUCH_ATTRIBUTE	16 (0x10)	An attribute type specified on the LDAP client request does not exist in the entry. Verify that the entry being modified or compared has the attribute that was specified.
LDAP_UNDEFINED_TYPE	17 (0x11)	An attribute specified on the LDAP client request does not exist in the schema of the LDAP. The attribute must be added to the LDAP server's schema so that it can be used.
LDAP_INAPPROPRIATE_MATCHING	18 (0x12)	The LDAP server encountered an error during a search request because the search filter is attempting to use a matching rule that is not supported by the attribute type. This can occur while attempting to use an attribute type/value pair in the search filter that has binary syntax. These types of search filters are not supported in the z/OS LDAP server.
LDAP_CONSTRAINT_VIOLATION	19 (0x13)	The LDAP server encountered a constraint error during a client request. This error can occur if an integer value specified on an integer syntax attribute is too large or small, an entry is attempted to be added or modified with an obsoleted objectclass or attribute type, or a non-user modifiable attribute type in the schema.
LDAP_TYPE_OR_VALUE_EXISTS	20 (0x14)	The LDAP server encountered an error during a client request because the attribute type or the attribute type and value pair exist in the targeted entry.
LDAP_INVALID_SYNTAX	21 (0x15)	An attribute value specified on an LDAP client request does not have a valid syntax specified. For example, if an attribute type in the schema has an integer syntax, an integer value must be specified on an add or modify request.
LDAP_NO_SUCH_OBJECT	32 (0x20)	The LDAP server encountered an error during a client request because the target entry does not exist in the directory.
LDAP_ALIAS_PROBLEM	33 (0x21)	The LDAP server encountered an error while attempting to process alias entries on a client request. Verify that there are no alias loops in the directory (for example, alias entries pointing at each other) and that the alias entries are properly configured. See Alias for more information about configuring aliases in the LDAP server.

Table 1. LDAP server return codes (continued)

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_INVALID_DN_SYNTAX	34 (0x22)	The LDAP client request is not allowed because the DN does not have valid syntax. This error can occur on add and modify requests if the distinguished name (DN) is missing an equal sign ('=') between an attribute type and value or the DN does not contain a correct escaping sequence before a multi-byte UTF8 value.
LDAP_ALIAS_DEREF_PROBLEM	36 (0x24)	The LDAP server encountered an error on a search request while attempting to dereference an alias entry however the dereferenced entry does not exist in the directory. Verify that alias entries in the directory point to valid entries in the DIT.
LDAP_INAPPROPRIATE_AUTH	48 (0x30)	The LDAP client request is not allowed because the password (credentials) specified is not correct or the distinguished name of the authenticating user is not correct. Verify that the distinguished name and password of the authenticating user are correct.
LDAP_INVALID_CREDENTIALS	49 (0x31)	The LDAP client request is not allowed because the password (credentials) specified is not correct or the authenticating user's distinguished name is not correct. Verify that the distinguished name and password of the authenticating user are correct.
LDAP_INSUFFICIENT_ACCESS	50 (0x32)	The LDAP client request is not allowed because the authenticated user does not have the appropriate authority to perform the requested operation. Verify that ACLs are configured correctly for the authenticated user or the groups that the authenticated user belongs to.
LDAP_BUSY	51 (0x33)	The LDAP server is currently busy processing another request.
LDAP_UNAVAILABLE	52 (0x34)	The LDAP server is currently not available to process the client request. This error occurs for variety of reasons including DB2 is not available for configured TDBM or GDBM backends, ICSF is not available for password encryption or decryption, and RACF is not available for the SDBM backend. Verify that products the LDAP server must use to process the request are available.
LDAP_UNWILLING_TO_PERFORM	53 (0x35)	The LDAP server is unwilling to perform the requested LDAP client request.
LDAP_LOOP_DETECT	54 (0x36)	Not currently returned by the z/OS LDAP server.

Table 1. LDAP server return codes (continued)

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_NAMING_VIOLATION	64 (0x40)	The LDAP client request is not allowed because of a distinguished name violation. This error occurs on add requests when the superior entry is a referral or an alias entry. This error also occurs on add and modify requests when the distinguished name (DN) contains an attribute type that has binary syntax, which is not allowed in distinguished names.
LDAP_OBJECT_CLASS_VIOLATION	65 (0x41)	The LDAP client request is not allowed because it does not adhere to the schema of the LDAP server. This error occurs on add, modify, and modify dn requests when adding or modifying an entry in such a way that it does not have all required attribute values for the object class of the entry.
LDAP_NOT_ALLOWED_ON_NONLEAF	66 (0x42)	The LDAP client request is not allowed on a non-leaf node in the directory. This error generally occurs while attempting to delete an entry that has child entries underneath it in the DIT. The leaf or child entries must be deleted before removing this entry from the DIT.
LDAP_NOT_ALLOWED_ON_RDN	67 (0x43)	The LDAP client request is attempting to change a relative distinguished name (RDN) component of a distinguished name (DN) which is not allowed. For example, this can occur when attempting to delete the cn attribute from the DN, cn=yvonne,o=ibm, but the cn attribute value is a required attribute for the object class of the entry.
LDAP_ALREADY_EXISTS	68 (0x44)	The LDAP client request is attempting to add an entry to the LDAP server that exists or attempting to modify the schema to include an attribute type or object class that is already present in the schema.
LDAP_NO_OBJECT_CLASS_MODS	69 (0x45)	Not currently returned by the z/OS LDAP server.
LDAP_AFFECTS_MULTIPLE_DSAS	71 (0x47)	Not currently returned by the z/OS LDAP server.
LDAP_OTHER	80 (0x50)	An internal error occurred in the LDAP server that does not fall under one of the previously documented return codes. It is commonly used for indicating an out of storage error in the LDAP server.

Table 1. LDAP server return codes (continued)

#define in ldap.h file	LDAP return code decimal (hexadecimal)	LDAP return code description
LDAP_NO_RESULT_MESSAGE	248 (0xF8)	The LDAP client received no result message for this request. The server does not send this return code to the client. However, it might indicate this return code in the activity log or in SMF record type 83 subtype 3 audit records when a result message is not sent. This can occur when the request is abandoned by the client, when the client issues an unbind request before the indicated request completes, or when the connection between the client and server is terminated for other reasons.

LDAP reason codes

The **LDAPResult** construct is used by the LDAP protocol to return success or failure indications from servers to clients. This construct contains an error message field. Servers can optionally provide "human-readable" diagnostic information in this field. Depending on the location in the LDAP server where errors are detected, error messages that are generated might have the following format:

`<prefix><numeric digits> <diagnostic information> <traceback information>`

where:

prefix   Is one of the following
ITYXOR - The reason code message is issued by the ICTX plug-in.
RC - The reason code message is issued by the remote crypto plug-in.
R - All other reason code messages that are issued by the z/OS LDAP server.

numeric digits
Represents a specific reason code.

diagnostic information
Provides details about the reason for the failure.

traceback information
Is of the form (*function_name:line_number*) and assists you in diagnosing application or configuration problems.

Note the following regarding this error information:

- It is intended to be "human-readable" to help identify problems that are detected by the server.
- It is not translated (English text only).
- It is not intended to be used as an application programming interface (API).
- Data returned may be changed by service or new releases of the product. (Again, it is not intended to be an API.)
- The reason code that is returned for a particular error can change and the reason code text can change.

LDAP server reason codes

This section lists the reason codes that are issued by the LDAP server and their diagnostic information. These reason codes have a prefix of "R".

R000001   Unable to allocate storage

Explanation: An LDAP operation failed because the LDAP server is unable to allocate the necessary storage to continue processing the request.

System action: Depending on the severity of the storage problem, the LDAP server may continue or may end. The LDAP operation fails.

Operator response: Increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R000004   Internal server error encountered

Explanation: An LDAP operation failed because the LDAP server detects an internal programming error.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locating and correcting the problem. If the problem persists, contact the service representative.

R000005   Unable to translate value for attribute '*name*' from *source_codepage* to *target_codepage*

Explanation: An LDAP operation failed because the LDAP server cannot translate an attribute name or value between local code page and UTF8.

In the message text:

name
    Attribute name

source_codepage
    Source code page name

target_codepage
    Target code page name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use server ERROR debug trace output to help locating and correcting the problem. If the problem persists, contact the service representative.

R000100   The password has expired

Explanation: An LDAP bind operation to the SDBM backend failed because the password of the z/OS Security Server user associated with the bind distinguished name is expired.

System action: The LDAP server continues to run, but the operation fails.

User response: The expired password must be reset. A new password can be specified during bind using the *old_password*/*new_password* format. For RACF, the password can be a password or a password phrase. Also, for RACF, the password or phrase can be changed by another LDAP user using an SDBM modify command of the **racfPassword** or **racfPassPhrase** attribute, assuming that the user has the RACF authorization to change a password or phrase.

R000101   **The new password is not valid**

Explanation: An LDAP bind operation to the SDBM backend failed. The bind tries to change the current password of the z/OS Security Server user associated with the bind distinguished name but the new password is not valid to the z/OS Security Server. For RACF, the password can be a password or a password phrase.

System action: The LDAP server continues to run, but the operation fails.

User response: Review the password requirements of the z/OS Security Server, including rules on password history and syntax. For RACF, when using the *old_password*/*new_password* format to change a password or password phrase during bind, the old and new values must both be passwords or both be password phrases. Correct the passwords and then reissue the operation.

R000102   **The user ID has been revoked**

Explanation: An LDAP bind operation to the SDBM backend failed because the z/OS Security Server user associated with the bind distinguished name is revoked. This user cannot be used until the user is no longer revoked.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact a z/OS Security Server administrator to unrevoke the user. For RACF, this can also be accomplished by another LDAP user using an SDBM modify operation specifying a value of **resume** for the **racfAttributes** attribute, assuming that the user has the RACF authorization to do this. Then reissue the operation.

R000104   **The password is not correct or the user ID is not completely defined (missing password or uid)**

Explanation: An LDAP bind operation to the SDBM backend failed. Either the password specified in the bind does not match the password of the z/OS Security Server user associated with the bind DN or the z/OS Security Server user definition is missing some fields. For RACF, the password can be a password or a password phrase. Also, for RACF, the user profile must be defined, with a password or password phrase, and a UID value in the OMVS segment.

System action: The LDAP server continues to run, but the operation fails.

User response: If the password (or password phrase) is not correct, reissue the bind request with the correct value. If the user is not complete in the z/OS Security Server, contact a z/OS Security Server administrator. For RACF, another user can use an SDBM modify operation specifying a value for the **racfOmvsUid** attribute, assuming that the user has the RACF authorization to do this. Then reissue the operation.

R000105   **A bind argument is not valid**

Explanation: An LDAP bind operation to the SDBM backend failed because of a problem using the password or parsing the old and new passwords when using the *old_password*/*new_password* format to change a password. The length of the old password and new password (if specified) must be greater than 0 and less than 101. For RACF, the passwords can be passwords or password phrases.

System action: The LDAP server continues to run, but the operation fails.

User response: Check that the supplied passwords are not too short or long. When using the *old_password*/ *new_password* format, leaving out the old or new password (by specifying /*new_password* or *old_password*/) produces a zero-length password. Then reissue the operation.

R000114   **The realm portion of the value of attribute '*name*' is not the RACF default realm**

Explanation: An LDAP add, modify, or search operation to the SDBM backend failed. The operation specifies an attribute value using *principal@realm* format, but the *realm* part of the value does not match the name of the local z/OS Kerberos Security Server (KERBDFLT) realm.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Either contact a z/OS Security Server administrator to determine the correct realm name to use in

the attribute value or remove the @*realm* part of the value. Then reissue the operation.

R000115   **There is no RACF default realm**

Explanation: An LDAP operation to the SDBM backend failed because SDBM is not able to determine the local z/OS Kerberos Security Server (KERBDFLT) realm. SDBM uses the RACF R_kerbinfo callable service to retrieve the realm name. Either there is no realm name or the callable service failed to retrieve it.

System action: The LDAP server continues to run, but the operation fails.

System programmer response: Determine why the R_kerbinfo callable service failed. LDAP server ERROR debug trace output contains the various return codes from R_kerbinfo.

User response: Contact a z/OS Security Server administrator to correct the problem. Then reissue the operation.

R000116   **Cannot specify a value when deleting attribute '*name*'**

Explanation: An LDAP modify operation to the SDBM backend failed because it tries to delete a specific value from the attribute indicated in the reason code. SDBM does not support deleting individual values for this attribute.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify operation input to delete the entire attribute or to replace the attribute values with the wanted values. Then reissue the operation.

R000117   **Cannot delete attribute '*name*'**

Explanation: An SDBM modify operation failed because it is trying to delete an attribute that corresponds to a RACF profile field that cannot be deleted. This reason code can also occur when the LDAP server is processing a replicated add or modify operation that attempts to delete a value for certain operational attributes that cannot be deleted.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input to delete the entire attribute or to replace the attribute values with the wanted values. Then reissue the operation.

R000119   **Cannot add or replace attribute '*name*'**

Explanation: An LDAP add or modify operation to the SDBM backend failed because there is an attribute in the input that cannot be added or modified in the entry. There are some SDBM attributes that represent fields set by RACF (for example the **racfAuthorizationDate** attribute corresponds to the CREATEDAT field in a user profile). These fields cannot be set by a user in an SDBM add or modify operation. Also, the attributes used in the distinguished name (DN) of SDBM entries (**cn**, **racfid**, **racfuserid**, **racfgroupid**, and **profilename**) can only be specified in add or modify input if they have the same value as in the DN of the entry being added or modified.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the add or modify input or, for a naming attribute, ensure that its value is the same as in the distinguished name of the entry. Then reissue the operation.

R000120   **Cannot specify multiple values for attribute '*name*'**

Explanation: An LDAP add or modify operation failed because it results in multiple values for an attribute that only allows a single value. Attributes that are defined as SINGLE-VALUE in the LDAP schema cannot be assigned more than one value. Also, in an SDBM entry, the **cn** attribute must be single-valued although it is not defined that way in the schema. Note that when adding an entry, the LDAP server automatically adds the attributes in the leftmost part of the entry's distinguished name to the entry. If one of those attributes is defined as SINGLE-VALUE and the add input includes a different value for that attribute, then the add operation fails because the attribute would end up with multiple values.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input so that it does not specify multiple values for single-valued attributes. Then reissue the operation.

R000121   **Value for attribute '*name*' must be same as value for DN**

Explanation: An LDAP add or modify operation to the SDBM backend failed because it specifies an attribute value that is not the same as in the relative distinguished name (RDN) of the entry. The RDN is leftmost part of the entry's distinguished name. An attribute that is in the RDN cannot be assigned a value other than its value in the RDN. This applies to **cn**, **racfid**, **racfuserid**, **racfgroupid**, and **profilename** if they appear in the RDN.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input so that it specifies the same attribute value as in the relative distinguished name. Alternatively, remove the attribute from the input (the LDAP server adds the RDN attributes automatically to the entry). Then reissue the operation.

R000122   **The value for attribute '*name*' must be the DN of a user**

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for *name* does not have the correct format for an SDBM user DN. The format of an SDBM user DN is `racfid=`*userid*`,profiletype=user,`*SDBMsuffix*.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify input to specify a valid, complete SDBM user DN. Alternatively, specify just the *userid* as the attribute value instead of a complete SDBM user DN. Then reissue the operation.

R000123   **The value for attribute '*name*' must be the DN of a group**

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for *name* does not have the correct format for an SDBM group DN. The format of an SDBM group DN is `racfid=`*groupid*`,profiletype=group,`*SDBMsuffix*.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify operation input to specify a valid, complete SDBM group DN. Alternatively, specify just the *groupid* as the attribute value instead of a complete SDBM group DN. Then reissue the operation.

R000124   **The value for attribute '*name*' must be the DN of a user or a group**

Explanation: An LDAP add or modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for *name* does not have the correct format for an SDBM user DN or group DN. The format of an SDBM user DN is `racfid=userid,profiletype=user,SDBMsuffix` and the format of an SDBM group DN is `racfid=groupid,profiletype=group,SDBMsuffix.`

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify operation input to specify a valid, complete SDBM user or group DN. Alternatively, specify just the *userid* or *groupid* as the attribute value instead of a complete SDBM user or group DN. Then reissue the operation.

R000125   **Attribute '*name*' is not supported**

Explanation: An LDAP add or modify operation to the SDBM backend failed because the operation input includes an attribute that is not supported by SDBM. SDBM only allows using the attributes that map to fields in the corresponding RACF profile.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the add or modify input. Then reissue the operation.

R000126   **Filter '*filter*' is not supported for this base**

Explanation: An LDAP search operation to the SDBM backend failed because the search filter contains an attribute that is not allowed for the base (target entry) of the search. SDBM has limited search support. Only certain filters can be used, depending on the base of the search. The acceptable combinations are documented in SDBM search capabilities.

In the message text:

filter
    Search filter attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to use a combination of filter and base that is supported by SDBM. Then reissue the operation.

R000127   **Filter '*filter*' contains a type without a value**

Explanation: An LDAP search operation to the SDBM backend failed because the search filter contains an attribute without a value. All attributes in the filter must have a non-blank value after leading blanks are removed.

In the message text:

filter
    Search filter attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to specify a non-blank value for the attribute in filter. Then reissue the operation.

R000128   **Filter is not supported**

Explanation: An LDAP search operation to the SDBM backend failed because the search filter is not one of the few that SDBM accepts. Either the filter syntax or the attributes used in the filter are not supported by SDBM. SDBM has limited search support. Only certain filters can be used. The supported filters are documented in SDBM search capabilities.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to specify a filter that is supported by SDBM. Then reissue the operation.

R000129   **Value '*value*' is not supported for filter '*name*'**

Explanation: An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is not acceptable to SDBM. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented in SDBM search capabilities. In particular, the only value that can be specified in an SDBM search filter for the **objectclass** attribute is *****.

In the message text:

value
　　Search filter attribute value

name
　　Search filter attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the search input to specify a supported value for the attribute in the search filter. Then reissue the operation.

R000131   **'*name*' is not a valid RACF DN**

Explanation: An LDAP operation to the SDBM backend failed because it involved a distinguished name (DN) that is not a valid SDBM DN. The DN might have been used, for example, as the target of the operation.

In the message text:

name
　　Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a DN value that is a valid SDBM DN. In particular:

- For the DN of a RACF user, group, connection, class, or resource, the **racfid**, **racfuserid**, **racfgroupid**, and **profiletype** value must be from 1 to 8 characters long. The value must not contain a space or a comma, and the value cannot be an asterisk (*).
- For the DN of a RACF resource, the **profilename** value must be from 1 to 256 characters long. The value cannot contain a space or a comma. The value can be an asterisk (*).

Then reissue the operation.

R000132   **Value for attribute '*name*' cannot be more than *size* characters**

Explanation: An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is too long for that attribute. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented in SDBM search capabilities.

In the message text:

name
　　Search filter attribute name

size
　　Maximum length for value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search input to specify a value that does not exceed the maximum length for the attribute in the search filter. Then reissue the operation.

R000133   **Value for attribute '*name*' must be an integer less than** *size*

Explanation: An LDAP search operation to the SDBM backend failed because the value of an attribute in the search filter is too large. SDBM has limited search support. Only certain filters and values can be used. The supported filters are documented in SDBM search capabilities.

In the message text:

name
    Search filter attribute name

size
    Maximum value for attribute

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search input to specify a value that does not exceed the maximum value for the attribute in the search filter. Then reissue the operation.

R000134   **The RACF *type* command created to satisfy this request is too long, probably due to specifying a long filter or attribute value or too many attribute values**

Explanation: An LDAP operation to the SDBM backend failed because the RACF command created by SDBM to process the SDBM operation is too long. For example, SDBM parses the attributes and values in an add operation for a user and translates them into the keywords and values of a RACF ADDUSER command. The maximum length of a RACF command is 4093.

In the message text:

type
    Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to reduce the number and length of attributes and values specified. This might involve dividing an add operation into a smaller add operation followed by a modify operation, or dividing a modify operation into two smaller modify operations. Then reissue the operations.

R000135   **Cannot perform this request on a reserved SDBM DN, '*name*'**

Explanation: An LDAP operation to the SDBM backend failed because it cannot be performed on the entry to which it was targeted. When the LDAP server is started, SDBM automatically creates the following entries to provide a directory hierarchy: suffix entry, user subtree top entry, group subtree top entry, connect subtree top entry, and class entries. These reserved entries cannot be added, modified, or deleted by SDBM operations. SDBM also creates a setrops entry. This entry cannot be added or deleted by SDBM operations, but it can be modified. All reserved entries can be searched and compared.

In the message text:

name
    Distinguished name of target entry

System action: The LDAP server continues to run, but the operation fails.

User response: Change the target of the operation so that it is not one of the SDBM reserved entries. Then reissue the operation.

R000137   **'*name*' is not a valid RACF DN for bind, check that the syntax is correct for a RACF user DN**

Explanation: An LDAP operation to the SDBM backend failed because the distinguished name (DN) of the requester is not valid for an SDBM user. The format of an SDBM user DN is `racfid=`*userid*`,profiletype=user,`*SDBMsuffix*.

In the message text:

name
> Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: When binding to SDBM, check that the distinguished name is valid for an SDBM user. When issuing other SDBM commands, ensure that the requester has bound using an SDBM distinguished name or using some other bind method that is associated to an SDBM user (for example, an LDBM or TDBM native authentication bind). Then reissue the operation.

R000139   **RACF '*type*' command failed**

Explanation: An LDAP operation to the SDBM backend failed. SDBM backend operations are converted to RACF commands and the RACF command invoked by the SDBM backend failed for some unknown reason.

In the message text:

type
> Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R000140   **Cannot parse RACF '*type*' output**

Explanation: An LDAP operation to the SDBM backend failed because SDBM cannot process the output from the RACF command or service invoked by SDBM to perform the operation. Either the format of the output is not what SDBM expects or there is not enough storage available to parse the output.

In the message text:

type
> Type of RACF command

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R000141   **Routine '*name*' failed, rc=*return_code***

Explanation: An LDAP operation to the SDBM backend failed because a routine called to process the operation did not succeed for an unknown reason. The reason code can also occur when trying to parse an **changeLogAddEntry** extended operation.

In the message text:

name
> Routine name

return_code
> Return code from routine

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code and from server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R000142   **Cannot obtain the password of a RACF user**

Explanation: There are several types of bind methods, for example CRAM-MD5 and DIGEST-MD5, that require retrieval of a password for the bound user. These methods are not supported when binding with an SDBM user, because the password cannot be retrieved from the z/OS Security Server. SDBM only supports simple bind when binding with an SDBM user.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to use a bind method supported by SDBM. Then reissue the operation.

R000143   **Bound user does not have the authority to perform this operation**

Explanation: An LDAP operation to the SDBM backend failed because it tries to extract or modify RACF information but the RACF user associated with the bound user does not have the necessary RACF authority. When SDBM issues RACF commands and uses RACF interfaces to process an SDBM request, it does so under the context of the RACF user associated with the bound user.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the RACF user associated with the bound user has the RACF authority to perform the RACF operations required to process the SDBM operation. You might need to contact a z/OS Security Server administrator to obtain the necessary authorization. Then reissue the operation.

R000144   **Cannot specify a binary attribute in a compare operation**

Explanation: An LDAP compare operation to the SDBM backend failed because the attribute to compare has binary syntax. SDBM does not support comparing binary values. For example, SDBM compare operations using the **racfPasswordEnvelope** and **racfPassPhraseEnvelope** attributes are not allowed.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the compare input to specify an attribute that does not have binary syntax. Then reissue the operation.

R000145   **Must specify a value when deleting attribute '*name*'**

Explanation: An LDAP modify operation to the SDBM backend failed because it tries to delete the attribute indicated in the reason code rather than specifying values to delete from the attribute. SDBM only supports deleting specific values from this attribute.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input to specify which values to delete for the attribute. Or, use a replace operation to replace all the values of the attribute with the wanted values. Then reissue the operation.

R000146   **Cannot access entry with DN '*name*' because SDBM is not configured to support RACF resources**

Explanation: An LDAP operation to the SDBM backend or the **changeLogAddEntry** extended operation failed because operation involves a class entry, resource entry, or the setropts entry, but the SDBM support for these entries is not enabled in the LDAP server. The **enableResources on** option must be specified in the SDBM section of the LDAP server configuration file when using one of these types of entries.

In the message text:

name
     Distinguished name

System action: The LDAP server continues to run, but the operation or extended operation fails.

User response: Contact an LDAP administrator to enable SDBM support for resources. After the problem is resolved, reissue the operation or extended operation.

Administrator response: Add the **enableResources on** option to the SDBM section of the LDAP server configuration file. Then restart the LDAP server.

R000147   **The value for attribute '***name***' must be the DN of a class**

Explanation: An LDAP modify operation to the SDBM backend failed because a distinguished name (DN) value is specified for *name* does not have the correct format for a class DN. The format of a class DN is `profiletype=classname,SDBMsuffix`.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct each value for this attribute in the modify input to specify a valid, complete class DN. Alternatively, specify just a *classname* as the attribute value instead of a complete class DN. Then reissue the operation.

R000148   **DN '***name***' is not supported as a target of an SDBM operation**

Explanation: An LDAP operation to the SDBM backend failed because SDBM does not allow that operation to be performed on the target of the request. In particular, SDBM does not support any operation on a data set profile, which is represented by a distinguished name (DN) whose format is `profilename=name,profiletype=DATASET,SDBMsuffix` (for example, `profilename=SUSET1.PRIVATE.SQL,profiletype=DATASET,cn=myRACF`).

In the message text:

name
     Distinguished name of target

System action: The LDAP server continues to run, but the operation fails.

User response: Change the target of the operation so that it is supported by SDBM. Then reissue the operation.

R000149   **Attribute '***attribute***' is not supported for entry with DN '***name***'**

Explanation: An LDAP add or modify operation to the SDBM backend failed because it tries to add an attribute that is not supported for the type of entry being added or modified. In particular, the setropts entry (`cn=setropts,SDBMsuffix`) supports a very limited set of attributes. Also, the **racfAccessControl** attribute can only be used in a resource entry, which is represented by a DN whose format is `profilename=name,profiletype=classname,SDBMsuffix`.

In the message text:

attribute
     Attribute name

name
     Distinguished name of the entry

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the add or modify input. Then reissue the operation.

R000150   **Unable to generate random data bytes**

Explanation: An LDAP operation or utility failed because it uses random data and the routine to generate the random data does not succeed. Random data is used during CRAM-MD5 or DIGEST-MD5 bind operations and any operation that involves passwords that must be hashed using Salted SHA-1 or Salted SHA-2 methods, including when using the **ldif2ds** utility to load entries with passwords.

System action: The LDAP server continues to run, but the operation fails. The **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the request or restart the utility.

Administrator response: Use server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R000200   Change log not active

Explanation: A **changeLogAddEntry** extended operation to create a change log entry failed because the LDAP server is not set up to do change logging. The GDBM backend must be configured in the LDAP server configuration file and the **changeLogging off** option must not be specified.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Add a GDBM section to the LDAP server configuration file. Do not specify the **changeLogging off** option in the section. Then restart the LDAP server.

R000201   Cannot decode *field* **from request, rc=***return_code*

Explanation: An LDAP **changeLogAddEntry** extended operation to create a change log entry failed because it includes a field value that cannot be decoded. The most likely return codes are:

- 6 (LDAP_CHANGELOG_DECODE_FAILED): Some part of the extended operation data is not encoded correctly.

In the message text:

field
    Request field

return_code
    Return code from decode routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: If the problem is in the encoding, check that all the extended operation data is correctly encoded. Then reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R000202   Request did not come over PC interface

Explanation: There are some LDAP extended operations (for example, **changeLogAddEntry**) that are only supported by the LDAP server when they are received over the Program Call (PC) interface. The request failed because the requester did not use the PC interface.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that your program is using the Program Call interface to communicate with the LDAP server. Then reissue the extended operation.

R000203   Value for *name* **out of range**

Explanation: An LDAP extended operation failed because it specifies a value that is not supported for a field. For example, the **changeLogAddEntry** extended operation requires the **version** field value to be **2**. See Supported extended operations for information about the extended operations supported by the LDAP server.

In the message text:

name
    Field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the value of the field in the extended operation input so that it is within the supported range. Then reissue the extended operation.

R000204 **Required value for** *name* **is missing**

Explanation: An LDAP extended operation failed because it does not include a required field. For example, the **changeLogAddEntry** extended operation requires at least one of the **userid**, **group**, or **class** and **resource** fields. See Supported extended operations for more information about the extended operations that are supported by the LDAP server.

In the message text:

name
    Field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input so that it contains all the required fields. Then reissue the extended operation.

R000205 **Unable to convert userid (***user***), group (***group***), class (***class***), or resource (***resource***) to DN, rc=***return_code***

Explanation: An LDAP extended operation failed because it is not able to convert the values that are indicated in the reason code into an SDBM distinguished name (DN). The LDAP return code is also displayed in the reason code. The most likely return codes are:

- 80 (LDAP_OTHER): Either a value contains a character that cannot be a user or the LDAP server ran out of storage. An error message is usually printed to the server output when there is a storage problem.

In the message text:

user
    User ID name (if any)

group
    Group name (if any)

class
    Class name (if any)

resource
    Resource name (if any)

return_code
    Return code from routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Ensure that all values used in the extended operation input contain valid characters. Then reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R000206 **PC caller must be in supervisor state**

Explanation: An LDAP extended operation received over the Program Call (PC) interface failed because the requester is not in supervisor state. The LDAP server only processes requests from PC callers who are in supervisor state.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that your program is running in supervisor state when it sends an extended operation

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request by a Program Call to the LDAP server. Then reissue the extended operation.

R000207   *name1* **cannot be specified with** *name2*

Explanation: An LDAP extended operation request to create a change log entry (**changeLogAddEntry**) failed because it specifies two fields that cannot be used together. For example, if the **userid** or **groupid** field is specified in the extended operation, then do not specify the **class** or the **resource** field. See Supported extended operations for more information about the **changeLogAddEntry** extended operation.

In the message text:

name1
   First field name

name2
   Second field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Remove one of the conflicting fields in the **changeLogAddEntry** extended operation input. Then reissue the extended operation.

R000208   **Unexpected racroute error safRC=**safRC **racfRC=**racfRC **racfReason=**racfReason

Explanation: A call to RACROUTE has returned an unexpected combination of return and reason codes. The return and reason codes are returned by **RACROUTE**. See the description of RACROUTE return and reason codes in *z/OS Security Server RACROUTE Macro Reference* for more information about the error.

In the message text:

safRC
   SAF return code

racfRC
   RACF return code

racfReason
   RACF reason code

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the return and reason codes and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R000209   **Request was terminated early with partial or no results**

Explanation: An LDAP operation failed to complete because of a possible LDAP abandon or disconnect.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R001001   **Generalized Time value '**value**' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Generalized Time syntax of the attribute. The format of a Generalized Time value is

- *yyyymmddhhmmss.ffffff* for local time
- *yyyymmddhhmmss.ffffff*Z for Greenwich Mean Time
- *yyyymmddhhmmss.ffffff-hhmm* for time zone west of GMT
- *yyyymmddhhmmss.ffffff+hhmm* for time zone east of GMT

where *yyyy* is year, *mm* is month, *dd* is day, *hh* is hour, *mm* is minutes, *ss* is seconds, and *ffffff* is microseconds. The seconds (*ss*) and microseconds (*ffffff*) can be omitted and default to 0.

In the message text:

value
   Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Generalized Time syntax. Then reissue the operation.

R001005   **Duplicate value encountered:** *value*

Explanation: An LDAP schema modify operation of an attribute or object class definition failed because the definition involves a duplicate value. The object identifier of the attribute or object class cannot be the same as an existing attribute, object class, matching rule, or syntax. It also cannot be the same as another attribute or object class added in this schema modify. Also, for an object class, the same attribute name cannot be specified twice within the **SUP** values, within the **MUST** values, or within the **MAY** values.

In the message text:

value
   Name or object identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Review the modify input to ensure that there are no duplicate names or object identifiers involved. Then reissue the operation.

R001011   **COLLECTIVE keyword is not supported for attribute type '***name***'**

Explanation: An LDAP schema modify operation of an attribute failed because the attribute definition includes the **COLLECTIVE** keyword. The LDAP server does not support usage of this keyword.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the **COLLECTIVE** keyword from the modify input. Then reissue the operation.

R001012   **Attribute type '***name***' is not defined**

Explanation: An LDAP operation or utility failed because it involves an attribute that is not defined in the schema. For a schema modify, an attribute or object class definition cannot reference an attribute that does not exist in the schema or that is deleted in a previous modification in the modify operation. For an add or modify DN operation to another backend and for the **ldif2ds** utility, the attributes used in the new relative distinguished name (RDN) of the entry must exist, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Either add the missing attribute to the schema or remove the attribute from the operation or utility input. Then reissue the operation or restart the utility.

R001015   **Cycle detected in superior hierarchy for '*identifier*'**

Explanation: An LDAP schema modify operation failed because the **SUP** value in an attribute or object class definition results in a cycle of references. When following the superior hierarchy for this attribute or object class, the chain leads back to the start.

In the message text:

identifier
    Attribute or object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Change the **SUP** value of the attribute or object class in the modify input so that it does not form a cycle. Then reissue the operation.

R001017   **Syntax/matching rule inconsistency for attribute type '*identifier*'**

Explanation: An LDAP schema modify operation failed because it results in an attribute with a matching rule that is not valid for the syntax of the attribute. See LDAP directory schema for more information about the acceptable combinations of syntax and matching rules. Note that the failing attribute might not be directly modified in the schema modify operation. Instead, the modify may change a syntax or matching rule in an attribute from which the failing attribute inherits its syntax or a matching rule, resulting in the inconsistency.

In the message text:

identifier
    Attribute numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the modify input to ensure that it does not create any inconsistencies between syntax and matching rules for the modified attributes and the attributes that inherit from them. Then reissue the operation.

R001018   **Attribute type '*name*' is obsolete**

Explanation: An LDAP add, modify, or modify DN operation failed because it involves an attribute that is marked as **OBSOLETE** in the schema. An obsolete attribute cannot be added or replaced in an entry. The attribute can be deleted from the entry. Note that an add or modify DN operation may try to add an obsolete attribute to the entry if the attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not involve adding or replacing an obsolete attribute in the entry. Then reissue the operation.

R001024   **Abstract class '*name*' may not be a base object class**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in specifying an **ABSTRACT** object class in the entry that is not in the superior hierarchy of some other **STRUCTURAL** or **AUXILIARY** object class in the entry. An **ABSTRACT** object class that is not in the superior hierarchy cannot be included in the entry. Note that an add or modify DN operation may try to add an object class if the **objectclass** attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
    Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not involve adding an abstract object class that is not in the superior hierarchy of the other object classes in the entry. Then reissue the operation.

R001025   **Multiple base structural object classes specified for '*name*'**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in more than one base structural object class in an entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information kept in the entry. Examples are the `person` and `organization` object classes. There must be a single base structural object class in an entry and the object class cannot be changed. Note that an add or modify DN operation may try to add an object class if the **objectclass** attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Check the operation input to ensure that it does not result in multiple base structural object classes. Then reissue the operation.

R001026   **No structural object class specified for '*name*'**

Explanation: An LDAP add operation failed because it does not include a base structural object class in the entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information that is kept in the entry. Examples are the `person` and `organization` object classes. There must be a single base structural object class in an entry and the object class cannot be changed.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Check the add input to ensure that it includes a base structural object class in the entry. Then reissue the operation.

R001027   **Base structural object class '*name*' may not be changed**

Explanation: An LDAP modify or modify DN operation failed because it results in changing the base structural object class of the entry. An entry's base structural object class is the **STRUCTURAL** object class that identifies the type of information that is kept in the entry. Examples are the `person` and `organization` object classes. There must be a single base structural object class in an entry and the object class cannot be changed. Note that a modify DN operation may try to change the object class if the **objectclass** attribute is part of the relative distinguished name (RDN) of the entry, the RDN is being changed, and the modify DN operation specifies removing the current RDN. The RDN is the leftmost part of the distinguished name.

In the message text:

name
     Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Check the operation input to ensure that it does not change the base structural object class for the entry. Then reissue the operation. To change the base structural object class, delete the entry and then add it back using the new base structural object class.

R001029   **Entry does not contain MUST attribute '***name***'**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry which does not contain all the **MUST** attributes required by the object classes in the entry (including those in the object class superior hierarchies). Every **MUST** attribute must appear in the entry. Note that a modify DN operation may try to remove attributes from an entry if they are in the current relative distinguished name (RDN) of the entry but not the new RDN and the modify DN operation specifies removing the current RDN. The RDN is the leftmost part of the distinguished name.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not result in an entry that is missing a required attribute. Then reissue the operation.

R001030   **Entry contains attribute '***name***' which is not allowed for object class**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry that contains an attribute that is not in the **MUST** or **MAY** lists of the object classes in the entry (including those in the object class superior hierarchies). Every non-operational attribute must appear in the **MUST** or **MAY** lists of an object class associated with the entry. Note that an add or modify DN operation may try to add an attribute to an entry if it is in the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not result in an entry that contains attributes not allowed by the object classes in the entry. Then reissue the operation.

R001031   **Missing left parenthesis in definition:** *definition*

Explanation: An LDAP schema modify operation failed because a left parenthesis is missing in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema. The reason code may also occur on an entry add or modify operation when adding a value that does not begin with a left parenthesis for an attribute that is defined with the **integerFirstComponentMatch** matching rule. In this case, the value is indicated in the reason code.

In the message text:

definition
     Attribute or object class definition or value

System action: The LDAP server continues to run, but the operation fails.

User response: For a schema modify operation, check the input to ensure that all the schema definitions are complete and correctly formatted. For an entry add or modify operation, put a left parenthesis at the beginning of the value for the attribute defined with the **integerFirstComponentMatch** matching rule. Then reissue the operation.

R001032   **Missing right parenthesis in definition:** *definition*

Explanation: An LDAP schema modify operation failed because a right parenthesis is missing in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

definition
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001038   **Numeric object identifier '***value***' is not valid**

Explanation: An LDAP operation or extended operation failed because it includes a value that is supposed to be a numeric object identifier but is not. A numeric object identifier consists of digits separated by periods. It must start with a digit and cannot have two periods in a row. Numeric object identifiers can be used in schema definitions and within entries. They are also contained in controls that are specified with the operation and in identifying extended operations.

In the message text:

value
    Numeric object identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the operation input to ensure that all numeric object identifiers are correctly formatted. Then reissue the operation.

R001046   **Missing closing quote for value '***value***'**

Explanation: An LDAP schema modify operation failed because a quoted value does not end with a quotation mark in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

value
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001047   **Missing opening quote for value '***value***'**

Explanation: An LDAP schema modify operation failed because a quoted value does not begin with a quotation mark in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

value
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001048   **Missing closing brace for value '***value***'**

Explanation: An LDAP schema modify operation failed because a value that starts with an open brace does not end with a closing brace in a schema definition. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

value
>   Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001052   **Non-numeric character found in integer value '***value***'**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Integer syntax of the attribute. An Integer value consists of one or more digits, optionally starting with a plus sign or minus sign.

In the message text:

value
>   Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Integer syntax. Then reissue the operation.

R001053   **Integer value of length** *size* **exceeds maximum length of** *max_size*

Explanation: An LDAP operation failed because an attribute value involved in the operation is too long for the Integer syntax of the attribute.

In the message text:

size
>   Integer value length

max_size
>   Maximum integer length

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that the length is valid for the Integer syntax. Then reissue the operation.

R001055   **Attribute type '***name***' is not valid for the directory schema**

Explanation: An LDAP schema modify operation failed because it involves an attribute that is not supported for the schema entry. The schema entry itself contains a fixed set of attributes that can be changed, the most useful of which are: **attributeTypes**, **ibmAttributeTypes**, **objectClasses**, **aclEntry**, and **entryOwner**.

In the message text:

name
>   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the modify input. Then reissue the operation.

R001060   **Object class '***name***' is obsolete**

Explanation: An LDAP add, modify, or modify DN operation failed because it involves an object class that is marked as **OBSOLETE** in the schema. An obsolete object class cannot be added or replaced in an entry. The object class can be deleted from the entry. Note that an add or modify DN operation may try to add an obsolete object class if the object class is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished entry.

In the message text:

name
   Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Analyze the operation input to ensure that it does not involve adding or replacing an obsolete object class in the entry. Then reissue the operation.

R001069 **Reference attribute type not found for IBM attribute type '*name*'**

Explanation: An LDAP schema modify operation failed because an **ibmattributetypes** definition specifies an object identifier that does not match the object identifier of an **attributetypes** definition. The **attributetypes** definition can already exist in the schema or can be added as part of the schema modify.

In the message text:

name
   ibmattributetypes definition object identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that each **ibmattributetypes** modification specifies the object identifier of an **attributetypes** definition. Make sure that this **attributetypes** definition is not deleted as part of the schema modify. Then reissue the operation.

R001072 **More than one object class type keyword found in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because an object class definition contains more than one of the keywords that indicate the type of object class: **ABSTRACT**, **AUXILIARY**, or **STRUCTURAL**. At most one of these keywords can be specified and the default is **STRUCTURAL** if none is specified. See LDAP directory schema for more information about the keywords for an object class definition.

In the message text:

definition
   Object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001075 **Object identifier missing in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because there is a schema definition that does not include an object identifier. The object identifier is required in all schema definitions. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

definition
   Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001076 *keyword* **keyword specified multiple times in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because the same keyword is specified more than once in a schema definition. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

keyword
   Duplicated keyword

definition
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001077   *keyword* **keyword not supported in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because it contains a keyword that is not supported in a schema definition. Note that unknown keywords are ignored if they occur in an **ibmattributetypes** definition, but not in other definitions. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

keyword
    Unknown keyword

definition
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001078   **Value missing for** *keyword* **keyword in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because it does not specify a value for a keyword in a schema definition. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

keyword
    Keyword missing a value

definition
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001079   **Unsupported value for** *keyword* **keyword in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because a schema definition contains a keyword value that is not supported for that keyword. Note that the acceptable values for the **SYNTAX**, **EQUALITY**, **ORDERING**, and **SUBSTR** keywords in an attribute definition depend on the compatibility level at which the server is running. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema.

In the message text:

keyword
    Keyword in definition

definition
    Attribute or object class definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation. Contact an LDAP administrator if you must use values that are not supported by the compatibility level at which the LDAP server is running. After the problem is resolved, reissue the operation.

Administrator response: If the server is running at a compatibility level that does not support needed values, change the value of the **serverCompatLevel** option in the LDAP server configuration file. Then restart the LDAP server.

R001080   **Attribute type '*identifier*' is already defined**

Explanation: An LDAP schema modify operation failed because it tries to add an attribute definition with the same identifier as an attribute that is already in the schema or that is added in a previous modification in the schema modify operation. Two attributes cannot have the same identifier.

In the message text:

identifier
     Attribute identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the identifier for each attribute being added is unique. Then reissue the operation.

R001081   **Object class '*identifier*' is already defined**

Explanation: An LDAP schema modify operation failed because it tries to add an object class definition with the same identifier as an object class that is already in the schema or that is added in a previous modification in the schema modify operation. Two object classes cannot have the same identifier.

In the message text:

identifier
     Object class identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the identifier for each object class being added is unique. Then reissue the operation.

R001082   **Inappropriate *type* matching rule in schema definition:** *definition*

Explanation: An LDAP schema modify operation failed because an attribute definition specifies a value for a matching rule that is not appropriate for the matching rule. The matching rule type (**EQUALITY**, **ORDERING**, or **SUBSTR**) and the definition that is in error are indicated in the reason code. See LDAP directory schema more information about the values that can be specified for each type of matching rule.

In the message text:

type
     Matching rule type

definition
     Attribute definition

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001083   **Object class '*identifier*' is not defined**

Explanation: An LDAP operation or utility failed because it involves an object class that is not defined in the schema. For a schema modify, an object class definition cannot reference an object class that does not exist in the schema or that is deleted in a previous modification in the modify operation. Similarly, an object class being deleted from the schema must exist in the schema, and must not be deleted in a previous modification. For an add operation to another backend and the **ldif2ds** utility, the object class specified in the entry must exist in the schema.

In the message text:

identifier
     Object class identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Either add the object class to the schema or remove the object class from the operation input. Then reissue the operation.

R001084   **IBM attribute type '***identifier***' is not defined**

Explanation: An LDAP schema modify operation failed because it tries to delete an **ibmattributetypes** definition that does not exist or is already being deleted or whose corresponding **attributetypes** definition is being deleted in a previous modification in the modify operation.

In the message text:

identifier
    ibmattributetypes numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the delete of the **ibmattributetypes** definition from the modify input. Then reissue the operation.

R001085   **IBM attribute type '***identifier***' is already defined**

Explanation: An LDAP schema modify operation failed because it tries to add an **ibmattributetypes** definition that already exists or is already being added in a previous modification in the modify operation.

In the message text:

identifier
    ibmattributetypes numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the add of the **ibmattributetypes** definition from the modify input. Then reissue the operation.

R001086   **No syntax value specified for attribute type '***identifier***'**

Explanation: An LDAP schema modify operation failed because an attribute definition does not contain the **SYNTAX** keyword or the **SUP** keyword. Every attribute must have a syntax, either specified directly using the **SYNTAX** keyword or derived by inheritance by specifying the **SUP** keyword. See LDAP directory schema for more information about the values that can be specified for an attribute definition.

In the message text:

identifier
    Attribute numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that all the schema definitions are complete and correctly formatted. Then reissue the operation.

R001087   **Attribute type '***identifier***' is in use and cannot be replaced or deleted**

Explanation: An LDAP schema modify operation failed because it tries to delete or change the definition of an attribute that is in use by some entry in a backend directory. The modification cannot be made because it could make the values in the entry no longer valid. The reason code can also be issued when modifying certain attribute values in a CDBM entry. In particular, the **ibm-slapdserverId** attribute in the **cn=configuration** entry and the **ibm-slapdLog** attribute in the **cn=replication,cn=Log Management,cn=configuration** entry cannot be changed if these values are in use.

In the message text:

identifier
    Attribute identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the modification from the modify input. Then reissue the operation. Alternatively, remove usage of the attribute from all the entries that are currently using it. This involves searching the entire LDAP server for entries that contain that attribute and then modifying each of the entries to remove the attribute. This might not be possible if the attribute is required by an object class in an entry. Then reissue the original operation. For the special attributes in CDBM entries, see Advanced replication for more information.

R001088   **Object class '*identifier*' is in use and cannot be replaced or deleted**

Explanation: An LDAP schema modify operation failed because it tries to delete or change the definition of an object class that is in use by some entry in a backend directory. The modification cannot be made because it could make the values in the entry no longer valid.

In the message text:

identifier
    Object class identifier

System action: The LDAP server continues to run, but operation fails.

User response: Remove the modification from the modify input. Then reissue the operation. Alternatively, remove usage of the object class from all the entries that are currently using it. This involves searching the entire LDAP server for entries that contain that object class and then modifying each of the entries to remove the object class and any attributes that are included only in that object class in the entry. Then reissue the original operation.

R001089   **Attribute type name '*name*' is already assigned**

Explanation: An LDAP schema modify operation failed because the name used in an attribute definition conflicts with the name used by an existing attribute or by an attribute added by a previous modification in the modify operation.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the names for each attribute being added are unique. Then reissue the operation.

R001090   **Object class name '*name*' is already assigned**

Explanation: An LDAP schema modify operation failed because the name used in an object class definition conflicts with the name used by an existing object class or by an object class added by a previous modification in the modify operation.

In the message text:

name
    Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Check the modify input to ensure that the names for each object class being added are unique. Then reissue the operation.

R001091   **TOP object class not found in superior hierarchy for '*identifier*'**

Explanation: An LDAP schema modify operation failed because an object class definition does not include the object class named **TOP** in its superior hierarchy. Every structural object class definition (one in which the **ABSTRACT** or **AUXILIARY** keywords are not specified) must include a **SUP** keyword and the superior chain must eventually include object class **TOP**.

In the message text:

identifier
    Object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Change the object class definition in the modify input, either by adding a **SUP** value that eventually leads to object class **TOP** or by specifying the **ABSTRACT** or **AUXILIARY** keyword (and removing **STRUCTURAL** if it is specified). Then reissue the operation.

R001092   **Unable to save directory schema**

Explanation: An LDAP schema modify operation failed because the modified schema cannot be saved to the schema database.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R001094   **Attribute type '***identifier1***' is referenced by '***identifier2***' and cannot be deleted**

Explanation: An LDAP schema modify operation failed because it is deleting an attribute definition of an attribute that is used as a **SUP** value in another attribute or as a **MUST** or **MAY** value in an object class.

In the message text:

identifier1
    Deleted attribute numeric identifier

identifier2
    Referencing attribute or object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the modification that deletes the attribute definition from the modify input. Then reissue the operation. If you must delete the attribute from the schema, then you must first modify any attribute or object class that uses that attribute to remove the reference. This cannot be done if any of these attributes or object classes are in use an entry. If that is the case, you must remove usage of the referencing attributes or object classes from all the entries that are currently using them. Then reissue the operation.

R001095   **Object class '***identifier1***' is referenced by '***identifier2***' and cannot be deleted**

Explanation: An LDAP schema modify operation failed because it is deleting an object class that is used as a **SUP** value in another object class.

In the message text:

identifier1
    Deleted object class numeric identifier

identifier2
    Referencing object class numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the modification that deletes the object class from the schema modify input. Then reissue the schema modify operation.

R001096   **OID change not allowed because the new definition is not the same as the current definition**

Explanation: An LDAP schema modify operation to change the numeric identifier of an attribute or object class failed because it also changes some other part of the attribute or object class definition that cannot be changed. For an attribute numeric identifier change, the values of the **NAME**, **SUP**, **EQUALITY**, **ORDERING**, **SUBSTR**, and **SYNTAX** keywords cannot be changed. Also, the **SINGLE-VALUE** keyword cannot be specified in the new definition if it is not also in the current definition. For an object class numeric identifier change, the values of the **NAME**, **SUP**, **MUST**, and **MAY** keywords cannot be changed.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input so that the definition of the new attribute or object class does not change any of the keywords that are listed above. Then reissue the operation.

R001097 **Attribute type '*identifier*' conflicts with existing type, cannot be replaced for migration**

Explanation: A migration of the TDBM schema failed because the current schema contains a different definition for an attribute than is in the TDBM schema to be migrated. As a result, TDBM entries using the attribute may not be valid under the current schema definition of the attribute.

In the message text:

identifier
   Attribute numeric identifier

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

Administrator response: Analyze the difference between the attribute definition in the LDAP schema and in the TDBM schema. Resolve the problem by modifying the definition in one of the two places. Then restart the LDAP server if it stopped or if the TDBM backend is needed.

R001098 **Object class '*identifier*' conflicts with existing class, cannot be replaced for migration**

Explanation: A migration of the TDBM schema failed because the current schema contains a different definition for an object class than is in the TDBM schema to be migrated. As a result, TDBM entries using the object class may not be valid under the current schema definition of the object class.

In the message text:

identifier
   Object class numeric identifier

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

Administrator response: Analyze the difference between the object class definition in the LDAP schema and in the TDBM schema. Resolve the problem by modifying the definition in one of the two places. Then restart the LDAP server if it stopped or if the TDBM backend is needed.

R001099 **Duplicate values specified for attribute '*name*'**

Explanation: An LDAP schema modify operation failed because it specifies a duplicate value for a schema attribute, such as **aclEntry** or **entryOwner**. Note that two **aclEntry** values or two **entryOwner** values are the same if they contain the same distinguished name, even if other parts of the values are different.

In the message text:

name
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate value from the modify input. Then reissue the operation.

R001100 **Syntax specified in attribute '*identifier*' is not valid when RACFFIELD is included in IBM attribute type**

Explanation: An LDAP schema modify operation failed because of one of the following:

- An **ibmattributetypes** definition contains the **RACFFIELD** keyword but the syntax of the corresponding attribute is not **IA5 String**.
- An attribute definition sets the attribute syntax to something other than **IA5 String**, but the corresponding **ibmattributetypes** definition contains the **RACFFIELD** keyword.

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When the **RACFFIELD** keyword is specified in an **ibmattributetypes** definition, the syntax of the associated attribute definition (the one with the same numeric identifier) must be **IA5 String**, as specified directly in the **SYNTAX** keyword or as derived from the superior hierarchy created by the **SUP** keyword.

In the message text:

identifier
    Attribute numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Depending on which definition is in error, either remove the **RACFFIELD** keyword from the **ibmattributetypes** definition or change the attribute definition to use the **IA5 String** syntax. Then reissue the operation.

R001101   **Duplicate value for name in RACFFIELD in IBM attribute types '**_identifier1_**' and '**_identifier2_**'**

Explanation: An LDAP schema modify operation failed because it tries to add an **ibmattributetypes** definition with the same **RACFFIELD** name value as is already in an existing **ibmattributetypes** definition or in a previous **ibmattributetypes** definition in the modify operation. The name part of the **RACFFIELD** value must be unique within the schema.

In the message text:

identifier1
    First **ibmattributetypes** numeric identifier

identifier2
    Second **ibmattributetypes** numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate **ibmattributetypes** definition from the modify input or change its **RACFFIELD** value to be unique. Then reissue the operation.

R001102   **Value '**_value_**' specified for attribute '**_name_**' is not valid.Schema Description:** *description*

Explanation: An LDAP operation failed because it uses an attribute value that is not acceptable for that attribute. The syntax and equality matching rule of the attribute determine what values are valid for the attribute.

In the message text:

value
    Attribute value

name
    Attribute name

description
    Attribute description from the schema

System action: The LDAP server continues to run, but the operation fails.

User response: Use the attribute description to correct the value used in the operation input so that it is valid for the attribute. Then reissue the operation.

R001103   **Syntax or matching rule specified in attribute '**_name_**' is not supported at compatibility level** *level*

Explanation: The LDAP server or utility cannot load the schema because the schema contains an attribute that uses a syntax or matching rule that is not valid when the LDAP server or utility is running at the current compatibility level. Some syntaxes and matching rules are not supported when the LDAP server is running at lower compatibility levels. See LDAP directory schema for more information about syntaxes and matching rules. Also, see the **serverCompatLevel** option in Customizing the LDAP server configuration for more information about setting the server compatibility level.

In the message text:

name
  Attribute name or numeric identifier

level
  Server compatibility level

System action: The LDAP server or utility ends.

Administrator response: Set the **serverCompatLevel** option in the LDAP server configuration file to a value that supports all the syntaxes and matching rules used in the schema. Then restart the LDAP server.

R001104   **Numeric String value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Numeric String syntax of the attribute. A complete Numeric String value must be a list of space-separated numbers, and must contain at least one number. An example is 1 524 44. A substring value used in a substring filter can be any part of the complete value, and can be just spaces. An example is 24 4.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Numeric String syntax. Then reissue the operation.

R001105   **Facsimile Telephone Number value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Facsimile Telephone Number syntax of the attribute. The characters that can be used in a Facsimile Telephone Number value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, space, and dollar sign.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Facsimile Telephone Number syntax. Then reissue the operation.

R001106   **Telex Number value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Telex Number syntax of the attribute. The characters that can be used in a Telex Number value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, space, and dollar sign.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Telex Number syntax. Then reissue the operation.

R001107   **Printable String value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Printable String syntax of the attribute. The characters that can be used in a Printable String value are: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Printable String syntax. Then reissue the operation.

R001108   **ibm-slapdSAFSecurityDomain value '***value***' is too long**

Explanation: An LDAP operation failed because the value specified for the **ibm-slapdSAFSecurityDomain** attribute is more than 228 characters long. This is determined by the maximum length of a RACF general resource class (246 characters) and the length of the fixed fields (.ADMINROLE.) (11 characters) and the length of the longest administrative role (DIRDATA) (7 characters).

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the **ibm-slapdSAFSecurityDomain** attribute. Then reissue the operation.

R001109   **'***name***' value '***value***' contains a character '***character***' that is not valid.**

Explanation: An LDAP operation failed because the value for the specified attribute type contains a character that is not valid. If the attribute type is **ibm-slapdSAFSecurityDomain**, the value cannot contain blanks, semicolons, parentheses, commas, asterisks, percent signs, or ampersands.

In the message text:

name
    Attribute name

value
    Attribute value

character
    Character that is not valid

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the **ibm-slapdSAFSecurityDomain** attribute. Then reissue the operation.

R002001   **Missing equal sign in DN component '***component***'**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute without a value. The equal sign (=) which indicates the end of the attribute name and the beginning of the value is missing. For example, in the DN `cn=fred,outest,o=ibm`, the `outest,o=ibm` component contains an attribute (`oudeptG1`) without a value, because the equal sign after `ou` is missing.

In the message text:

component
    Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.

R002004   **Incomplete escape sequence in DN component '***component***'**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has started an escape sequence with a double quotation mark (") but there is no corresponding double quotation mark to end the sequence. For example, in the DN `cn=fred,ou="test,o=ibm`, the `ou="test,o=ibm` component contains an incomplete escape sequence (`"test,o=ibm`).

In the message text:

component
  Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.

R002006   **Empty DN component is not supported**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) which is entirely empty or in which one of the components is empty. For example, in the DN `cn=fred,ou=test,,o=ibm`, the two successive commas result in an empty component.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then reissue the operation.

R002007   **Incorrect syntax in '***name***' attribute value '***value***'**

Explanation: An LDAP operation or utility failed because it involves an attribute value that is zero-length or is not valid. See Using access control for more information about the syntax of values for **aclEntry** and **entryOwner** attributes.

In the message text:

name
  Attribute name

value
  Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the attribute are valid. Then reissue the operation or restart the utility.

R002008   **Permissions missing in aclEntry attribute value '***value***'**

Explanation: An LDAP operation or utility failed because it involves an **aclEntry** attribute value that specified an access class without permissions. For example, `cn=fred,o=ldbm:normal::rws` contains an access class (`normal`) without permissions. See Using access control for more information about the syntax of values for this attribute.

In the message text:

value
  Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the **aclEntry** attribute are valid. Then reissue the operation or restart the utility.

R002018   **An extraneous colon was found in aclEntry attribute value '*value*'**

Explanation: An LDAP operation or utility failed because it involves an **aclEntry** attribute value that contains an extra colon. For example, `cn=fred,o=ldbm:normal::` contains an extra colon, where the normal access permissions should be. See Using access control for more information about the syntax of values for this attribute.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the **aclEntry** attribute are valid. Then reissue the operation or restart the utility.

R002019   **An unsupported extensible filter was specified**

Explanation: An LDAP operation or utility failed because an extensible search filter was specified in an attribute value or on a search request. Extensible search filters are not supported in the z/OS LDAP server. Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute values.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that LDAP search operation or attribute value does not specify an extensible search filter. Then reissue the operation or restart the utility.

R002020   **An error occurred while base64-decoding attribute '*name*'**

Explanation: An LDAP operation or utility failed because a value for the attribute type could not be base64 decoded. The attribute value may already exist in the directory (for example Salted SHA, SHA-2, or Salted SHA-2 **userPassword** values) or was specified in an LDAP operation or utility input.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that attribute value specifies a value that is base64 encoded properly. If the attribute value exists in the directory, the value may need to be replaced with a valid value. Then reissue the operation or restart the utility.

R002021   **An incorrectly formatted '*name*' attribute value has been encountered**

Explanation: An LDAP operation or utility failed because a value for the attribute type is not correctly formatted. If the attribute type is **userPassword** or **ibm-slapdAdminPw** and the value is hashed or encrypted, verify the following:

- If the value has an *{MD5}* encryption tag, the length of data after the tag must be 16 bytes or 24 bytes long.
- If the value has an *{SHA}* encryption tag, the length of data after the tag must be 20 bytes or 28 bytes long.
- If the value has an *{SSHA}* encryption tag, the length of data after the tag must be at least 20 bytes long.
- If the value has an *{SHA224}*, *{SHA256}*, *{SHA384}*, or *{SHA512}* encryption tag, the length of data after the tag must be 40, 44, 64, 88 bytes long respectively.
- If the value has an *{SSHA224}*, *{SSHA256}*, *{SSHA384}*, or *{SSHA512}* encryption tag, the length of data after the tag must be at least 40, 44, 64, 88 bytes long respectively.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the attribute are valid. Then reissue the operation or restart the utility.

R002023 **Filter does not contain a filter component:** '*value*'

Explanation: An LDAP operation or utility failed because a filter is not specified or is not completely specified in an attribute value. A complete filter component consists of an attribute type and an attribute value, such as (*attrType=attrValue*). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute values. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (*attrType=attrValue*). Then reissue the operation or restart the utility.

R002024 **Filter is missing an AND, OR, or NOT filter:** '*value*'

Explanation: An LDAP operation or utility failed because a filter is missing an AND, OR, or NOT filter. An AND ('&'), OR ('|'), or NOT ('!') filter component must be immediately followed by a left parenthesis '(' and closed by a right parenthesis ')'. A valid AND filter example is: (&(*attrType1=attrValue1*)(*attrType2=attrValue2*)). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid AND, OR, or NOT filter component such as (&(*attrType1=attrValue1*)(*attrType2=attrValue2*)). Then reissue the operation or restart the utility.

R002025 **An item type is not specified in the filter:** '*value*'

Explanation: An LDAP operation or utility failed because a filter component is missing an attribute type and value pair. A complete filter component consists of an attribute type and an attribute value, such as (*attrType=attrValue*). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (*attrType=attrValue*). Then reissue the operation or restart the utility.

R002026 **An attribute description is not specified in the filter:** '*value*'

Explanation: An LDAP operation or utility failed because a filter component is missing an attribute type or description. A complete filter component consists of an attribute type and an attribute value, such as (*attrType=attrValue*). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (*attrType=attrValue*). Then reissue the operation or restart the utility.

R002027   Filter contains an embedded left parenthesis: '*value***'**

Explanation: An LDAP operation or utility failed because a filter component contains an embedded left parenthesis '(' which is not allowed in a filter component. A complete filter component consists of an attribute type and an attribute value, such as (*attrType=attrValue*). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that the embedded left parenthesis is removed from the filter component so that a complete and valid filter component is specified such as (*attrType=attrValue*). Then reissue the operation or restart the utility.

R002028   Filter contains incorrect extensible item syntax: '*value***'**

Explanation: An LDAP operation or utility failed because a filter component contains an extensible filter which is not supported by the z/OS LDAP server. Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, an extensible filter cannot be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a filter that does not use an extensible syntax. Then reissue the operation or restart the utility.

R002029   An attribute description and matching rule were not found for the filter: '*value***'**

Explanation: An LDAP operation or utility failed because a filter component contains an attribute type or description that does not have a matching rule in the schema. Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies an attribute type or description that has a corresponding matching rule in the schema. If the filter is correct, the schema may need to be updated to add the attribute type and appropriate matching rule. Then reissue the operation or restart the utility.

R002030   **Filter contains consecutive asterisks in a substring filter: '***value***'**

Explanation: An LDAP operation or utility failed because a filter component contains consecutive asterisks in a substring filter. The z/OS LDAP server does not support substring filters that contain consecutive asterisks. Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
     Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a substring filter that no longer specifies consecutive asterisks. If an asterisk must be looked for in the value, it must be escaped with a backslash ('\') in the value. Then reissue the operation or restart the utility.

R002031   **Filter is missing a right parenthesis: '***value***'**

Explanation: An LDAP operation or utility failed because a filter component is missing a matching right parenthesis ')'. A complete filter component consists of an attribute type and an attribute value, such as (`attrType=attrValue`). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute types. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** components respectively.

In the message text:

value
     Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that each filter component contains a matching right parenthesis ')' such as (`attrType=attrValue`). Then reissue the operation or restart the utility.

R002032   **Filter contains an attribute without a value: '***value***'**

Explanation: An LDAP operation or utility failed because a filter component contains an attribute type without an attribute value. A complete filter component consists of an attribute type and an attribute value, such as (`attrType=attrValue`). Search filters can be specified in **aclEntry**, **entryOwner**, and **memberURL** attribute values. If using ACL filters in **aclEntry** or **entryOwner** attribute values, a complete filter component must be specified in the **aclFilter** or **ownerFilter** respectively.

In the message text:

value
     Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation input so that it specifies a complete and valid filter component such as (`attrType=attrValue`). Then reissue the operation or restart the utility.

R002033   **IP address '***value***' is not valid**

Explanation: An LDAP operation or utility failed because an IP address specified in a search filter in an **aclEntry** or **entryOwner** attribute is not valid. The IP address is specified in an ACL filter when using the **ibm-filterIP** attribute. See Using access control for more information about the syntax of values for this attribute.

In the message text:

value
     IP address

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the **aclEntry** or **entryOwner** attribute are valid. Then reissue the operation or restart the utility.

R002034   **Attribute type '*name*' only supports a trailing wildcard**

Explanation: An LDAP operation or utility failed because an IP address in the specified attribute type only supports a trailing wildcard character (∗). If using the **ibm-filterIP** attribute type in an ACL filter, see Using access control for more information about the syntax of values for this attribute.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that all values for the attribute type are valid. Then reissue the operation or restart the utility.

R002035   **Unable to convert timestamp '*value*' to time_t**

Explanation: An LDAP operation or utility failed because an error occurred when attempting to convert the time stamp to a time_t structure. The time stamp value may be a password policy time stamp attribute type, **createTimestamp**, or **modifyTimestamp** attribute values.

In the message text:

value
    Timestamp value

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R003029   **The aclPropagate attribute requires the aclEntry attribute**

Explanation: An LDAP add or modify operation failed because it sets the **aclPropagate** attribute but the entry does not contain any **aclEntry** attribute values. The attribute to control propagation of the acl entry values cannot be specified if there are no acl entry values in the entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the **aclPropagate** attribute from the operation input. Then reissue the operation.

R003030   **The '*name*' attribute cannot be used in the entry distinguished name**

Explanation: An LDAP add operation failed because the distinguished name (DN) of the entry contains an attribute that is not allowed in a DN. In particular, the **aclEntry**, **aclPropagate**, **entryOwner**, and **ownerPropagate** attributes are not supported in a DN. Note that a modify DN operation may cause this error if it specifies an attribute that is not supported in the new relative distinguished name for the renamed entry.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the entry DN in the add input or from the new relative distinguished name in the modify DN input. Then reissue the operation.

R003032 **The ownerPropagate attribute requires the entryOwner attribute**

Explanation: An LDAP add or modify operation failed because it sets the **ownerPropagate** attribute but the entry does not contain any **entryOwner** attribute values. The attribute to control propagation of the entry owner values cannot be specified if there are no entry owner values in the entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the **ownerPropagate** attribute from the operation input. Then reissue the operation.

R003057 **Access denied because user does not have 'add' permission for the parent entry**

Explanation: An LDAP add operation failed because the requester does not have add permission in the parent entry for the entry being added. Add permission is required to create an entry under the parent entry. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the parent of the new entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant add permission to the parent entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the parent entry to give the requester add permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003062 **Access denied because user does not have 'write' permission for all attributes in the new entry**

Explanation: An LDAP add operation failed because the requester does not have write permission for all the attributes being added. Note that this includes the attributes in the relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the parent of the new entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the parent entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the parent entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003070 **Access denied because user does not have 'write' permission for all modified attributes**

Explanation: An LDAP modify operation failed because the requester does not have write permission for all the attributes being modified. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the entry being modified. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003076 **Access denied because user does not have 'delete' permission for the entry**

Explanation: An LDAP delete operation or a modify DN operation which is moving an entry to another subtree failed because the requester does not have delete permission for the parent of the entry being deleted or moved. Moving an entry involves deleting the entry from its current parent and adding the entry under its new parent. When deleting or moving an entry, the requester must have delete permission in the parent entry. The requester's

authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the parent entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant delete permission to the entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the entry to give the requester delete permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003082   **Access denied because user does not have 'write' permission for all attributes in the old name**

Explanation: An LDAP modify DN operation that specifies that the old relative distinguished name (RDN) attribute values should be removed from the renamed entry failed because the requester does not have the necessary access control permissions to do this. The requester must have write permission to all the attributes in the old RDN. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the entry before it is renamed.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant the necessary permissions to the entry or change the modify DN input to not delete the old RDN attribute value. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the entry to give the requester write permission to these values To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003095   **Access denied because user does not have 'compare' permission for the attribute**

Explanation: An LDAP compare operation failed because the requester does not have compare permission for the attribute being compared. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the entry that is the target of the compare operation. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant compare permission to the entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the entry to give the requester compare permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003119   **Access denied because user does not have 'write' permission for all attributes in the new name**

Explanation: An LDAP modify DN operation failed because it does not have write permission to add the attributes in the new relative distinguished name (the RDN is the leftmost part of the distinguished name) of the entry being renamed. The attribute values in the RDN must always be part of the entry and are automatically added by the LDAP server to the entry. The requester must have write permission for each of these attributes in the entry being renamed. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the entry. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the entry to give the requester write permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003125 **Access denied because user does not have 'add' permission for the new superior entry**

Explanation: An LDAP modify DN operation which is moving an entry to another subtree failed because the requester does not have add permission in the new parent of the entry being moved. Moving an entry involves deleting the entry from its current parent and adding the entry under its new parent. The requester must have delete permission in the current parent and add permission in the new parent. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with the current and new parent entries. See Using access control for more information about LDAP access control.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant add permission to the new parent entry. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for the new parent entry to give the requester add permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003128 **Unable to realign DN attributes because user does not have 'write' permission for attributes in '*name*'**

Explanation: An LDAP modify DN operation which includes the control to realign other distinguished name (DN) attributes failed because the requester does not have write permission for an attribute that is being realigned. Realignment results in changing the original DN of the entry being renamed to the new DN of the entry in all the entries where the original DN occurs in a value of an **aclEntry** attribute, **entryOwner** attribute, or attribute with Distinguished Name syntax. The requester must have write permission for each attribute being changed in those entries. The requester's authority is determined using the **aclEntry** and **entryOwner** attribute values associated with each of those entries. See Using access control for more information about LDAP access control.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to grant write permission to the entries affected by realignment. Then reissue the operation.

Administrator response: Modify the **aclEntry** values for each of the entries affected by realignment to give the requester write permission. To determine the authority that a bound user has in the directory, use the **GetEffectiveACL** extended operation in the **ldapexop** utility.

R003129 **Realigning DN attributes would result in duplicate values for attribute '*name*' in '*entry*'**

Explanation: An LDAP modify DN operation which includes the control to realign other distinguished name (DN) attributes failed because realigning an attribute value creates a duplicate value in some entry. Realignment results in changing the original DN of the entry being renamed to the new DN of the entry in all the entries where the original DN occurs in a value of an **aclEntry** attribute, **entryOwner** attribute, or attribute with Distinguished Name syntax. The new value must not already exist in the attribute.

In the message text:

name
    Attribute name

entry
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate attribute value from the entry. Then reissue the operation.

R003130   **Filter included with an aclEntry or entryOwner attribute is not valid: '***filter***'**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value is not valid. See Using access control for more information about the supported ACL search filters.

In the message text:

filter
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that the value is valid. Then reissue the operation or restart the utility.

R003131   **Access control filter attribute type '***name***' is not defined**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value contains attribute types that are not in the schema. See Using access control for more information about the supported ACL search filters.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003132   **Normalization failed for access control filter attribute type '***name***'**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value cannot be normalized. See Using access control for more information about the supported ACL search filters.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003133   **Normalization failed for access control filter substring type '***type***'**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value cannot be substring normalized. See Using access control for more information about the supported ACL search filters.

In the message text:

type
    Substring type

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003134   **Access control filter attribute type '*name*' does not have an equality matching rule**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value does not have an equality matching rule specified in the schema. See Using access control for more information about the supported ACL search filters.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003136   **Value specified for access control filter attribute type '*name*' is not valid**

Explanation: An LDAP operation or utility failed because an attribute type in an ACL filter specified in an **aclEntry** or **entryOwner** attribute value is not valid. See Using access control for more information about the supported ACL search filters.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003137   **Attribute type '*name*' cannot be specified within an access control filter**

Explanation: An LDAP operation or utility failed because an attribute type in an ACL filter specified in an **aclEntry** or **entryOwner** attribute value is not valid. See Using access control for more information about the supported ACL search filters.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then reissue the operation or restart the utility.

R003138   **Operation not specified or not valid in aclFilter '*filter*'**

Explanation: An LDAP operation or utility failed because the **aclFilter** component of an **aclEntry** value does not specify an operation or the operation specified is not valid. See Using access control for more information about the supported ACL search filters and operation types.

In the message text:

filter
     aclFilter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid operation is specified for the **aclFilter** component. Then, reissue the operation or restart the utility.

R003139   **Mode not specified or not valid in ownerFilter '*filter*'**

Explanation: An LDAP operation or utility failed because the **ownerFilter** component of an **entryOwner** value does not specify a mode or the mode specified is not valid. See Using access control for more information about the supported ACL search filters and operation types.

In the message text:

filter
    ownerFilter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid operation is specified for the **ownerFilter** component. Then, reissue the operation or restart the utility.

R003141   **Entry '*name*' is a referral entry. Effective ACL information cannot be retrieved for a referral**

Explanation: The **GetEffectiveAcl** extended operation failed because a referral entry is encountered and effective ACL information cannot be obtained for a referral entry.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the **GetEffectiveAcl** extended operation so that the effective ACL information is not retrieved for the referral entry. The **GetEffectiveAcl** extended operation must be run against the referral server to obtain the effective ACL information. Then, reissue the operation.

R003142   **Unable to build a filter string from a filtered value**

Explanation: An LDAP operation or utility failed because an ACL filter specified in an **aclEntry** or **entryOwner** attribute value cannot be normalized. See Using access control for more information about the supported ACL search filters.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid ACL filter is specified. Then, reissue the operation or restart the utility. If the problem persists, contact an LDAP administrator.

Administrator response: Use the information in server messages and ERROR debug trace output to help locate and correct the problem.

R003143   **Only an LDAP administrator can execute Get Effective ACL extended operation**

Explanation: A **GetEffectiveAcl** extended operation failed because it is only allowed to be ran by an LDAP root, schema, or server configuration administrator.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Authenticate as an LDAP root, schema, or server configuration administrator. Then reissue the operation or restart the utility.

R003144   **Bind DN not specified for SimpleCramDigestBind sequence**

Explanation: A **GetEffectiveAcl** extended operation failed because a bind distinguished name (DN) must be specified in the SimpleCramDigestBind sequence when simulating a CRAM-MD5 or DIGEST-MD5 bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the **GetEffectiveAcl** extended operation is properly encoded by the **ldapexop** utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003145   **Kerberos principal@realm not specified for gssApiBind sequence**

Explanation: A **GetEffectiveAcl** extended operation failed because a Kerberos principal must be specified in the gssApiBind sequence when simulating a GSSAPI (Kerberos) bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the **GetEffectiveAcl** extended operation is properly encoded by the **ldapexop** utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003146   **Certificate subject DN not specified for externalBind sequence**

Explanation: A **GetEffectiveAcl** extended operation failed because a certificate subject distinguished name (DN) must be specified in the externalBind sequence when simulating a SASL EXTERNAL bind.

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the **GetEffectiveAcl** extended operation is properly encoded by the **ldapexop** utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003147   **The value '*value*' passed to the Get Effective ACL extended operation is not valid**

Explanation: A **GetEffectiveAcl** extended operation failed because a value specified in the request is not valid. See the **GetEffectiveAcl** description for the **ldapexop** utility in Running and using the LDAP server utilities for more information about the options and their values.

In the message text:

value
    Extended operation value

System action: The LDAP server continues to run, but the utility ends.

User response: Correct the utility input. Then restart the utility.

R003148   **Decode of Get Effective ACL extended operation request failed.** *reason*

Explanation: A **GetEffectiveAcl** extended operation failed because the extended operation cannot be decoded. The format or contents of the extended operation are not valid.

In the message text:

reason
    Reason for decode failure

System action: The LDAP server continues to run, but the extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the **GetEffectiveAcl** extended operation is properly encoded by the **ldapexop** utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003149   **Encode of Get Effective ACL extended operation response failed.** *reason*

Explanation: A **GetEffectiveAcl** extended operation failed because the extended operation response cannot be encoded.

In the message text:

reason
    Reason for encode failure

System action: The LDAP server continues to run, but the extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Contact the service representative. Verify that the **GetEffectiveAcl** extended operation is properly encoded by the **ldapexop** utility. Provide the information in server messages and BER+ERROR debug trace output to help locate and correct the problem.

R003150   **A filtered '*name1*' value cannot be added or modified. Filtered '*name2*' values require minimum serverCompatLevel** *level*

Explanation: An LDAP operation or utility failed because a filtered attribute value was specified in an attribute type that requires a minimum server compatibility level.

In the message text:

name1
    Attribute name

name2
    Attribute name

level
    Minimum compatibility level

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Either correct the operation or utility input so that a filter is not specified in the attribute type or contact an LDAP administrator to update the server compatibility to the minimum level specified. Then reissue the operation or restart the utility.

Administrator response: If filtered attribute values are to be supported, update the **serverCompatLevel** option in the LDAP server configuration file to the minimum level specified in the message. Then restart the server or utility.

R003151   **Unknown access class found in aclEntry attribute value '*value*'**

Explanation: An LDAP operation or utility failed because an unknown access class was specified in an **aclEntry** attribute value. The supported access classes are: **normal**, **sensitive**, **critical**, **system**, and **restricted**. See Using access control for more information about **aclEntry** attribute values.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the operation or utility input so that a valid **aclEntry** attribute value is specified. Then reissue the operation or restart the utility.

R004017   **No attributes specified for entry '*name*'**

Explanation: An LDAP add operation failed because it does not contain any attributes to include in the entry. All entries must have at least the **objectClass** attribute.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Add the appropriate attributes to the add input. Then reissue the operation.

R004019   **Entry data is missing required RDN components**

Explanation: An LDAP modify operation failed because it changes or deletes attribute values that are in the relative distinguished name (RDN) of the entry. The RDN is the leftmost part of the distinguished name. Every attribute and value in the RDN must also be in the entry and cannot be removed unless the entry is renamed.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it does not remove the attribute values that are in the RDN. Then, reissue the operation.

R004020   **RDN contains duplicate values for attribute '*name*'**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) that contains the same attribute value twice in the relative distinguished name (RDN). The RDN is the leftmost part of the DN.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the search operation ends.

User response: Remove the duplicate attribute value from the distinguished name in the operation input. Then, reissue the operation.

R004022   **Parent not found for entry '*name*'**

Explanation: An LDAP operation failed because the parent entry could not be found in the backend. The parent entry must exist for the LDAP operation to succeed.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation ends.

User response: If the distinguished name (DN) of the entry is correct, add a parent entry. If the parent entry already exists, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the problem persists, contact the service representative with LDAP debug trace output.

R004026   **Entry '*name*' not found in database**

Explanation: An LDAP operation or utility failed because the entry could not be found in the backend.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation or utility ends.

User response: Verify that the distinguished name of the entry specified in the LDAP operation or the utility is correct. Then, reissue the operation or restart the utility.

R004028   **Search size limit exceeded**

Explanation: An LDAP search operation ended because it has returned the maximum number of entries allowed for the search. The search size limit restricts the number of entries that a search can return. For each search, it is determined using a combination of the size limit the requester can specify for the search, the size limit specified for the targeted backend in the LDAP server configuration file, and the size limits specified in LDAP groups to which the requester belongs. See the description of the **sizeLimit** server configuration option in Customizing the LDAP server configuration for more information.

System action: The LDAP server continues to run, but the operation ends.

User response: If additional search output is needed, increase the size limit specified on the search operation. Then, reissue the operation. If the search output is still limited, contact an LDAP administrator. After the problem is resolved, rebind to the server and reissue the operation.

Administrator response: Use either the **sizeLimit** option in the LDAP server configuration file or search limit groups to increase the search size limit for this requester. If the configuration option is changed, restart the server. If search limit groups are changed, then the requester must rebind to use the changed limits.

R004031   Search time limit exceeded

Explanation: An LDAP search operation ended because it has exceeded the maximum amount of time allowed for the search. The search time limit restricts the amount of time that a search can take. For each search, it is determined using a combination of the time limit the requester can specify for the search, the time limit specified for the targeted backend in the LDAP server configuration file, and the time limits specified in LDAP groups to which the requester belongs. See the description of the **timeLimit** server configuration option in Customizing the LDAP server configuration for more information.

System action: The LDAP server continues to run, but the search operation ends.

User response: If additional search output is needed, increase the time limit specified on the search operation. Then, reissue the operation. If the search output is still limited, contact an LDAP administrator. After the problem is resolved, rebind to the server and reissue the operation.

Administrator response: Use either the **timeLimit** option in the LDAP server configuration file or search limit groups to increase the search time limit for this requester. If the configuration option is changed, restart the server. If search limit groups are changed, then the requester must rebind to use the changed limits.

R004035   Attribute type '*name*' may not be added or modified by users

Explanation: An LDAP add, modify, or modify DN operation failed because it attempts to specify a value for an attribute that cannot be set by a user. This attribute is only set by the LDAP server. In general, an attribute which includes **NO-USER-MODIFICATION** in its schema definition falls into this category. Note that an add or modify DN operation may cause this error if the attribute is part of the new relative distinguished name (RDN) of the entry, because the LDAP server automatically adds the RDN attributes and values to the entry. The RDN is the leftmost part of the distinguished name.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the operation input. Then, reissue the operation.

R004038   Operation not allowed because backend is in read-only mode

Explanation: An LDAP add, modify, delete, or modify DN operation failed because the backend which is the target of the operation is running in read-only mode. In general, the backend cannot be updated when running in this mode. A backend can be configured to run in read-only mode using the **readOnly on** option in the LDAP server configuration file. While the server is running, the **BACKEND** LDAP operator modify command can be used to switch the backend between read-only mode and read/write mode. Also, some backends can be switched to read-only mode automatically by the LDAP server if it detects problems with updating entries in the backend.

System action: The LDAP server continues to run, but the operation fails.

User response: If update operations on the backend are required, contact an LDAP administrator. After the problem is resolved, reissue the operation. Otherwise, do not issue update operations to the backend.

Administrator response: If requested, use the **BACKEND** LDAP operator modify command to change the backend to read/write mode.

R004041   **Entry '*name*' is not a leaf and may not be deleted**

Explanation: An LDAP delete operation failed because it tries to delete an entry that has child entries. Only leaf entries (those with no entries below them) can be deleted.

In the message text:

name
   Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: First delete all the entries below the target entry, starting with those on the lowest level of the subtree hierarchy. Then reissue the operation.

R004051   **Entry '*name1*' does not contain attribute '*name2*'**

Explanation: An LDAP operation failed because the entry does not contain the attribute type.

In the message text:

name1
   Distinguished name of entry

name2
   Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute from the operation input or correct the distinguished name of entry in the operation input. Then reissue the operation.

R004054   **Invalid UTF-8 character found in string value '*value*'**

Explanation: An LDAP operation failed because a non-UTF8 character was detected in an attribute that is a string value.

In the message text:

value
   Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Remove or update the value so that it is a valid string value in the operation input. Then, reissue the operation.

R004060   **Entry does not contain a password**

Explanation: A CRAM-MD5 or DIGEST-MD5 bind operation failed because there are no values for the **userPassword** attribute in the entry that contains the user ID specified in the bind information. The entry must have **userPassword** values and the values must be either in the clear or encrypted using a two-way encryption algorithm.

System action: The LDAP server continues to run, but the operation fails.

User response: If a bind or authorization distinguished name (DN) is specified on the bind request, add the appropriate **userPassword** value to the entry. If a user ID is only specified in the CRAM-MD5 or DIGEST-MD5 bind request, do an LDAP search operation with the filter **uid=***name* to determine which entry contains the user ID specified in the bind request. Add the appropriate **userPassword** value to the entry. Then, reissue the operation.

R004062   **Credentials are not valid**

Explanation: An LDAP bind operation failed because the credentials specified on the request are not correct. The password specified on a simple, CRAM-MD5, or DIGEST-MD5 bind must match a **userPassword** value on the bind distinguished name entry. If SSL certificate mapping is activated and an EXTERNAL bind is performed, the certificate could not be mapped to an SAF user. See Support of certificate bind for more information.

System action: The LDAP server continues to run, but the operation fails.

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User response: If performing a simple, CRAM-MD5, or DIGEST-MD5 bind, update the bind distinguished name (DN), user ID, or password value specified on the bind request. If performing an EXTERNAL bind and SSL certificate mapping is active, verify that the correct certificate is being used, otherwise contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the user is performing an EXTERNAL bind, determine whether the user's certificate should be mapped to a RACF (SAF) user ID by doing an **RACDCERT MAP** command. Also, verify that the **sslMapCertificate** option settings are correct when SSL certificates cannot be mapped to a RACF or SAF user ID.

R004071   DN '*name*' does not exist

Explanation: An LDAP compare or search operation failed because the distinguished name (DN) in the request does not exist in the directory.

In the message text:

name
    Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the distinguished name in the request is correct. Then, reissue the operation.

R004073   Entry is not a leaf and cannot be modified to be a referral entry

Explanation: An LDAP modify or modify DN operation failed because it results in a referral entry that has child entries. A referral entry is one that contains the **referral** object class and the **ref** attribute. A referral entry must be a leaf entry. Thus, a modify operation that adds this object class to an entry must not be targeted to a non-leaf entry. Similarly, a modify DN operation cannot result in changing an entry to a referral entry if that entry has entries under it. This can occur if the object class and attribute are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not change a non-leaf entry to a referral entry. Then, reissue the operation.

R004077   DN '*name*' already exists

Explanation: An LDAP add or modify DN operation failed because there is already an entry with the distinguished name (DN) of the new entry. Every entry must have a unique DN.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Either change the operation input so that the distinguished name of the new entry is unique or delete the existing duplicate entry. Then, reissue the operation.

R004083   New superior is not allowed for an LDAP V2 request

Explanation: An LDAP modify DN operation failed because it specifies a value for new superior, but that parameter is not supported when the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support using the modify DN operation to move an entry to another subtree by specifying a new superior for the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the new superior value in the modify DN input or rebind using protocol version 3. Then, reissue the operation.

R004086   Entry '*name1*' already contains attribute '*name2*' with value '*value*'

Explanation: An LDAP modify operation failed because it attempts to add an attribute value that already exists in the entry. Each attribute value must be different. Note that the server 'normalizes' values before comparing them. This normalization depends on the syntax and equality matching rule specified in the attribute definition in the schema. For example, normalization using the **caseIgnoreMatch** matching rule removes extraneous spaces and changes all alphabetic characters to uppercase. See LDAP directory schema for more information. In particular, only the distinguished name or filter part of an **aclEntry** or **entryOwner** attribute value is used when comparing values for these attributes.

In the message text:

name1
> Distinguished name of entry

name2
> Attribute name

value
> Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the duplicate attribute value from the modify input. Then, reissue the operation.

R004091   **Non-IA5 data received for an LDAP V2 request**

Explanation: An LDAP operation failed because the client request is using LDAP Version 2 protocol and contains characters that are not valid IA5. The LDAP server checks that the client request contains only IA5 characters when the client is using LDAP Version 2 protocol, the **sendV3StringsOverV2As ISO8859-1** and **validateIncomingV2Strings on** configuration options are specified in the LDAP server configuration file. Note that **validateIncomingV2Strings on** is the default if the option is not specified in the configuration file. The requester established the protocol version to use during bind. IA5 characters are the 7-bit ASCII characters, from x'00' to x'7F'. Note that the null character (x'00') is a valid IA5 character.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the input to the operation so that it only contains characters that translate to the IA5 characters. Alternatively, rebind using LDAP Version 3 protocol. Then, reissue the operation. If LDAP Version 2 protocol is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, specify **validateincomingV2strings off** in the LDAP server configuration file. However, this setting should not be used because it can result in the LDAP server accepting data that is not valid. Then, restart the LDAP server.

R004096   **Entry '*name1*' does not contain attribute '*name2*' with value '*value*'**

Explanation: An LDAP modify operation failed because it attempts to delete an attribute value that does not exist in the entry. Note that the server 'normalizes' values before comparing them. This normalization depends on the syntax and equality matching rule specified in the attribute definition in the schema. For example, normalization of a value using the **caseIgnoreMatch** matching rule removes extraneous spaces and changes all alphabetic characters to uppercase. See LDAP directory schema for more information. In particular, only the distinguished name or filter part of an **aclEntry** or **entryOwner** attribute value is used when comparing values for these attributes.

In the message text:

name1
> Distinguished name of entry

name2
> Attribute name

value
> Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the attribute value from the modify input. Then, reissue the operation.

R004098   **Filtering on non-textual attribute '*name*' is not allowed**

Explanation: An LDAP search operation failed because the search filter contains an attribute type that is non-textual. The z/OS LDAP server does not support search filters that contain attributes that are non-textual. For example, a search filter of (userpassword=secret) is not supported in z/OS LDAP because the **userPassword** attribute has an octet string syntax.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not contain a search filter that contains a non-textual attribute. Then, reissue the operation.

R004099   **Parent of new entry '*name*' is a referral entry**

Explanation: An LDAP add or modify DN operation failed because it results in creating an entry under a referral entry. A referral entry is one that contains the **referral** object class and the **ref** attribute. A referral entry must be a leaf entry. Thus, an LDAP add operation cannot add an entry whose parent is a referral entry. Similarly, a modify DN operation cannot move an entry under a referral entry.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not add or move an entry under a referral entry. Then, reissue the operation.

R004108   **Native user ID '*name*' is either not defined or no UID is present in the OMVS segment**

Explanation: An LDAP operation involving a native authentication entry failed because the native user associated with the entry either does not exist in the z/OS Security Server or is not completely defined there. The operation can be a native authentication bind or a native password modify. When using RACF as the security server, the RACF user must have an OMVS segment containing a UID value.

In the message text:

name
    User ID

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to use a native authentication entry for which the associated native user is completely defined or modify the native user value within the native authentication entry to a native user that is completely defined. Then reissue the operation. If the native user is supposed to exist in the z/OS Security Server, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Ensure that the required native users are completely defined in the z/OS Security Server.

R004109   **The password has expired**

Explanation: An LDAP operation involving a native authentication entry failed because the password or password phrase of the native user associated with the entry is expired in the z/OS Security Server. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved,

Administrator response: Reset the native user password or password phrase in the z/OS Security Server.

R004110   **The user ID has been revoked**

Explanation: An LDAP operation involving a native authentication entry failed because the native user associated with the entry is revoked in the z/OS Security Server. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Reset the native user in the z/OS Security Server.

R004111   **The password is not correct**

Explanation: An LDAP operation involving a native authentication entry failed because the existing password or password phrase specified in the operation is not correct for the native user associated with the entry. The operation can be a native authentication bind or a native password modify.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the password in the operation input. Then reissue the operation.

R004112   **A bind argument is not valid**

Explanation: An LDAP bind operation failed because one of the values used during the bind is missing or is not valid. This error can also be caused by a modify of a native authentication password. When performing a native authentication bind or modify, the password lengths must be between within 1 to 100. If a new password is specified during native authentication bind using the *oldpassword/oldpassword* format, there can be only one unescaped forward slash. See Native authentication for more information about changing native authentication passwords.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input. Then reissue the operation.

R004113   **Native authentication cannot be performed when multiple uid values exist**

Explanation: An LDAP bind or modify operation involving a native authentication entry failed because the entry contains more than one value for the **uid** attribute. The LDAP server cannot determine which of the values to use to associate the native authentication entry with a native user in the z/OS Security Server.

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the native authentication entry so that the **uid** attribute has a single value, representing the z/OS Security Server user to be used. Then, reissue the operation.

R004114   **The modify-delete of the old password must occur before the modify-add of the new password**

Explanation: An LDAP native password modify operation failed because the input does not contain a **userPassword** attribute modification to delete the existing password or password phrase value before the **userPassword** modification to add the new password or password phrase value. Both modifications are needed and the delete must precede the add to change a native password or password phrase.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, add a delete modification for the existing **userPassword** value before the add modification of the new value. Then, reissue the operation.

R004115   **More than one password cannot be specified for a native authentication password update**

Explanation: An LDAP native password modify operation failed because the input either contains an add or delete **userPassword** attribute modification which specifies multiple values or contains multiple add modifications or multiple delete modifications. There must be a single delete modification with one value (the existing password or password phrase value) and a single add modification with one value (the new value), and the delete modification must precede the add modification.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, remove extraneous add and delete modifications for **userPassword** and ensure that there is one value in the add modification and one in the delete modification. Then, reissue the operation.

R004116   Password change not allowed because native updates are not enabled

Explanation: An LDAP native password modify operation failed because the targeted backend is not configured to support this. Native password modify is enabled by setting the **nativeUpdateAllowed** option to **on** or **reset** in the section for this backend in the LDAP server configuration file. If the option is not specified in the backend section or if the value is set to **off**, then native password modify is not permitted within the backend. See Customizing the LDAP server configuration for more information about the **nativeUpdateAllowed** configuration option.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Add the **nativeUpdateAllowed** option with a value of **on** or **reset** to the backend section of the LDAP server configuration file. Then, restart the server.

R004117   Native authentication replace is not allowed

Explanation: An LDAP native password modify operation failed because the input contained a replace modification for the **userPassword** value. This is not supported by native password modify. Instead, the input must contain a modification to delete the existing **userPassword** value followed by a modification to add the new **userPassword** value.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, remove the replace modification for the **userPassword** attribute and put in a delete of the existing value followed by an add of the new value. Then reissue the operation.

R004118   Native user ID '*name*' is either not defined or no UID is present in the OMVS segment

Explanation: An LDAP native password modify operation failed because the native user associated with the native entry either does not exist in the z/OS Security Server or is not completely defined there. When using RACF as the security server, the RACF user must have an OMVS segment containing a UID value.

In the message text:

name
    User ID

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input to use a native authentication entry for which the associated native user is completely defined or modify the native user value within the native authentication entry to a native user that is completely defined. Then reissue the operation. If the native user is supposed to exist in the z/OS Security Server, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Ensure that the required native users are completely defined in the z/OS Security Server.

R004119   A modify-add of the new password must follow the modify-delete of the old password

Explanation: An LDAP native password modify operation failed because the input does not contain a **userPassword** attribute modification to add the new password or password phrase value. This modification must follow the **userPassword** modification to delete the existing value. Both modifications are needed and the delete must precede the add to change a native password or password phrase.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, add an add modification for the new **userPassword** password or password phrase value after the delete modification of the existing value. Then reissue the operation.

R004120   **The userPassword attribute cannot be added because the entry uses native authentication**

Explanation: An LDAP add operation failed because the new entry is set up to use native authentication but a value for the **userPassword** attribute is specified. A native authentication entry cannot contain that attribute. See Native authentication for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the **userPassword** attribute from the add input. Then, reissue the operation.

R004121   **Entry is using native authentication but without a native userid**

Explanation: An LDAP modify operation failed because the modified entry is subject to native authentication but does not contain a **uid** or **ibm-nativeId** attribute value. Depending on how native authentication is configured, one of these values is required. See Native authentication for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input to add the appropriate **uid** or **ibm-nativeId** attribute value to the entry. Then, reissue the operation.

R004128   **Native authentication password change failed: The new password is not valid, or does not meet requirements**

Explanation: An LDAP native password modify operation failed because the new password is not specified (has zero length) or is not acceptable. The new native password is checked by the z/OS Security Server, not the LDAP server. The password must meet any password requirements of the z/OS Security Server, such as length, format, and change history.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the new password in the modify input is acceptable to the z/OS Security Server. Then, reissue the operation.

R004129   **New superior '*name*' does not exist**

Explanation: An LDAP modify DN operation failed because it attempts to move an entry under an entry that does not exist. When specifying a new superior entry to move the target entry under, the new superior entry must already exist unless the target entry is becoming a new suffix entry.

In the message text:

name
    Distinguished name of new superior

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the new superior is an existing entry. Then, reissue the operation.

R004130   **Time limit exceeded for Modify DN operation**

Explanation: An LDAP modify DN operation that includes the **IBMModifyDNTimelimitControl** control failed because the processing time exceeds the limit specified in the control. This can occur when the modify DN operation also specifies the **IBMModifyDNRealignDNAttributesControl** control, which results in the LDAP server searching the backend for attribute values that specify the renamed entry and updating each such value to the new name for the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Specify a larger time limit in the **IBMModifyDNTimelimitControl** control. Then, reissue the operation.

R004132   The new superior DN must exist in the same backend

Explanation: An LDAP modify DN operation failed because it tries to move an entry under an entry that is in a different backend. When specifying a new superior entry to move the target entry under, the new superior entry must be within the same backend (but not necessarily the same suffix) as the target entry. A modify DN operation cannot move an entry between backends.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the new superior is an entry in the same backend as the target entry. Then, reissue the operation.

R004133   The new superior DN is located in the subtree to be moved

Explanation: An LDAP modify DN operation failed because it tries to move an entry under itself. When specifying a new superior entry to move the target entry under, the new superior entry must not a lower entry in the target entry's subtree.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the new superior is not within the target entry's subtree. Then, reissue the operation.

R004141   New RDN '*name*' is not valid

Explanation: An LDAP modify DN operation failed because the new relative distinguished name (RDN) is not acceptable. The RDN must have a single component. For example, `cn=abc,ou=dept83` has two components, `cn=abc` and `ou=dept83`, thus is not a valid RDN.

In the message text:

name
    New relative distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the new relative distinguished name is valid. Then, reissue the operation.

R004153   Parent of new entry '*name*' is an alias entry

Explanation: An LDAP add or modify DN operation failed because it results in creating an entry under an alias entry. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute. An alias entry must be a leaf entry. Thus, an LDAP add operation cannot add an entry whose parent is an alias entry. Similarly, a modify DN operation cannot move an entry under an alias entry.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that an add does not try to add an entry under an alias entry and a modify DN does not try to move an entry under an alias entry. Then, reissue the operation.

R004154   Entry is not a leaf and cannot be modified to be an alias entry

Explanation: An LDAP modify or modify DN operation failed because it results in an alias entry that has child entries. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute. An alias entry must be a leaf entry. Thus, an LDAP modify operation that adds one of these object classes must not be targeted to a non-leaf entry. Similarly, a modify DN operation cannot result in changing an entry to an alias entry if that entry has entries under it. This can occur if the object class and attribute are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that a modify does not try to add an alias to a non-leaf entry and a modify DN does not try to change a non-leaf entry to an alias entry. Then, reissue the operation.

R004155   **Alias entry '*name*' points to itself**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an alias entry that specifies itself as its alias. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute. The **aliasedObjectName** value must be the distinguished name (DN) of some other entry. Note that a modify DN operation cannot rename an alias entry such that the entry DN becomes the same as the alias DN within the entry.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not result in an alias entry that points to itself. Then, reissue the operation.

R004158   **Cycle detected while dereferencing alias '*name*'**

Explanation: An LDAP search operation that is dereferencing aliases failed because it finds a chain of aliases that leads back to the first alias in the chain. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute.

In the message text:

name
     Initial alias value

System action: The LDAP server continues to run, but the operation fails.

User response: Starting from the initial alias value, analyze the alias chain and end the chain by removing or modifying the appropriate **aliasedObjectName** value. Then, reissue the operation.

R004159   **Dereferencing '*name*' failed because the resulting DN does not exist in this backend**

Explanation: An LDAP search operation that is dereferencing aliases failed because an alias points to an entry that is not in the same backend as the initial alias entry. Aliasing between backends is not supported. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute.

In the message text:

name
     Distinguished name of initial alias entry

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the entry so that the **aliasedObjectName** attribute value points to an entry within the same backend. Then, reissue the operation.

R004160   **Entry '*name*' cannot be both an alias and a referral**

Explanation: An LDAP add, modify, or modify DN operation failed because it results in an entry that is both an alias entry and a referral entry. An alias entry is one that contains the **alias** or **aliasObject** object class and the **aliasedObjectName** attribute. A referral entry is one that contains the **referral** object class and the **ref** attribute. An entry cannot be both an alias and a referral because during a search there is no way to decide whether search should dereference the entry or use it as a referral. Note that a modify DN operation may cause this error if the alias and referral object classes and attributes are part of the new relative distinguished name (RDN) of the renamed entry, because the LDAP server automatically adds the RDN attributes and values to the entry.

In the message text:

name
     Distinguished name of entry

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System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it does not result in an entry that is both an alias entry and a referral entry. Then, reissue the operation.

R004161   Persistent search terminated because search base entry has been deleted

Explanation: An LDAP persistent search operation ends because an LDAP delete or modify DN operation is deleting or renaming the search base entry.

System action: The LDAP server continues to run. The delete or modify DN operation continues but the persistent search operation ends.

User response: You might want to start a new persistent search using the renamed base when the modify DN operation completes.

R004162   Operation not allowed because backend is not the sysplex owner

Explanation: An LDAP operation failed because the LDAP server is not the sysplex owner of the backend or schema. The operation is only allowed when the LDAP server is the sysplex owner of the backend or schema.

System action: The LDAP server continues to run, but the operation fails.

User response: Retry the LDAP operation against the sysplex owner. If the problem persists, contact the service representative.

R004163   Dynamic group URL '*url*' is not valid

Explanation: An LDAP operation failed because the dynamic group URL in the **memberURL** attribute is not valid. The format of a dynamic group URL is: `ldap:///baseDN[??[searchScope][?searchFilter]]`. See Dynamic groups for more information.

In the message text:

url
    Dynamic group URL

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the value is valid for the **memberURL** attribute. Then, reissue the operation.

R004164   An unsupported value '*value*' is specified for attribute '*name*'

Explanation: An LDAP operation failed because it specifies a value that is not supported for an attribute.

In the message text:

value
    Unsupported value
name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the value is valid for the attribute. Then, reissue the operation.

R004165   *request* is not supported by plugin

Explanation: An LDAP operation failed because it is not supported by the plug-in.

In the message text:

request
    Unsupported operation

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue this request to the plugin.

R004166 **The LDAP server is shutting down**

Explanation: An LDAP operation failed because the LDAP server sysplex owner is in the process of ending and this LDAP server is unable to communicate with the sysplex owner. Another server in the sysplex group becomes the sysplex group owner.

System action: The LDAP server shutdown processing continues. The operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Check the other servers in the sysplex group and verify that another server becomes the sysplex owner.

R004177 **Parent entry must have an objectclass attribute value of '***value***'**

Explanation: An LDAP operation or utility failed because the parent entry does not have the appropriate **objectclass** value for advanced replication configuration. See Advanced replication for more information.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Update the **objectclass** value of the parent entry or the **objectclass** value of entry being added or modified while configuring advanced replication. Then reissue the operation.

R004178 **Entry of objectclass '***name***' not permitted with this level of replication**

Explanation: An LDAP operation or utility failed because an **objectclass** value in an entry is not supported by basic or advanced replication. If **useAdvancedReplication on** is specified in the CDBM backend section of the configuration file, basic replication entries with an **objectclass** value of **replicaObject** are not supported in the z/OS LDAP server. If **useAdvancedReplication off** is specified in the CDBM backend section of the configuration file, advanced replication entries with an **objectclass** value such as **ibm-replicationContext**, **ibm-replicaGroup**, **ibm-replicaSubEntry**, and **ibm-replicationAgreement** are not supported in the z/OS LDAP server. See Advanced replication and Basic replication for more information.

In the message text:

name
    Object class name

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Contact an LDAP administrator to verify whether basic or advanced replication entries are to be added to the LDAP server. Then, reissue or update the operation.

Administrator response: Verify the **useAdvancedReplication** option in the CDBM backend section of the LDAP server configuration file is correct. If it must be updated, restart the LDAP server.

R004179 **Refusing request, subtree '***name***' is quiesced**

Explanation: An LDAP add, modify, or modify DN operation failed because the subtree is quiesced. When a replication context is quiesced, only the master server distinguished name (DN) or LDAP root administrator with the **Server administration** control can update entries under a quiesced subtree; other users are only allowed to perform search or compare operations. See Advanced replication for more information.

In the message text:

name
    Distinguished name of subtree

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to unquiesce the subtree. Then, reissue the operation.

Administrator response: Verify that the subtree should be quiesced. Issue a **Quiesce or unquiesce context** extended operation to unquiesce the replication context.

R004180   Refusing request, access to replication topology is restricted

Explanation: An LDAP compare or search operation failed because access to advanced replication topology entries is restricted to an LDAP administrator. The **ibm-slapdReplRestrictedAccess** attribute value in the **cn=Replication,cn=configuration** entry indicates whether other users are allowed to update advanced replication topology entries. See CDBM backend configuration and policy entries for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: If update access to advanced replication topology entries is needed, contact an LDAP administrator to allow this access. Then, reissue the operation.

Administrator response: If necessary, update the **ibm-slapdRestrictedAccess** attribute value in the **cn=Replication,cn=configuration** entry.

R004181   An entry can not be moved into replication topology subtree '*name*'

Explanation: An LDAP modify DN operation failed because an entry cannot be moved under an advanced replication topology subtree.

In the message text:

name
    Distinguished name of subtree

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN operation to specify a different parent entry. Then, reissue the operation.

R004182   Timestamps indicate a modify conflict, requesting refresh of entry '*name*'

Explanation: An LDAP modify operation resulted in a modify conflict on this server. A refresh of the entry from the advanced replication supplier server is requested to synchronize the entry on both servers.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run and a refresh of the entry from the supplier server is requested to synchronize the entry on both servers.

R004183   Advanced replication is configured but not available

Explanation: An LDAP operation failed because advanced replication is configuring but not currently available. The advanced replication engine is loaded when the **useAdvancedReplication on** option is specified in the CDBM section of the LDAP server configuration file.

System action: The LDAP server continues, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use server ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R004185   Entry '*name*' contains attribute values currently in use and cannot be deleted or renamed

Explanation: An LDAP delete or modify DN operation failed because the entry contains attribute values that are currently in use by the LDAP server for features such as advanced replication and password policy.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues, but the operation fails.

User response: Update the request to no longer modify the attribute values in the distinguished entry. Then, reissue the operation.

R004186 **Unable to find specified password policy entry '***name***'**

Explanation: An LDAP add or modify operation failed because the individual or group password policy entry does not exist in the **cn=ibmpolicies** suffix of the CDBM backend.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues, but the operation fails.

User response: Update the request to specify a valid value for the **ibm-pwdGroupPolicyDN** or **ibm-pwdIndividualPolicyDN** attribute value. Then, reissue the operation.

R004187 **The '***name***' attribute value requires a minimum of** *number* **alphabetical characters**

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value does not contain enough alphabetic characters.

In the message text:

name
    Attribute name

number
    Minimum number of alphabetic characters

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004188 **The '***name***' attribute value requires a minimum of** *number* **non-alphabetical characters**

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value does not contain enough non-alphabetic characters (numbers and special characters).

In the message text:

name
    Attribute name

number
    Minimum number of non-alphabetic characters

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004189 **The '***name***' attribute value requires a minimum of** *number* **different characters**

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the new value does not contain enough characters that are different from the current attribute value.

In the message text:

name
    Attribute name

number
    Minimum number of different characters

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004190   **The '*name*' attribute value allows a maximum of** *number* **repeated characters**

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value specifies the same character too many times.

In the message text:

name
> Attribute name

number
> Maximum number of times a character can be used

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004191   **The '*name*' attribute value allows a maximum of** *number* **consecutive repeated characters**

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value specifies the same character too many times in a row (consecutively).

In the message text:

name
> Attribute name

number
> Maximum number of times a character can be used consecutively

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004192   **Password policy does not allow more than one password per entry**

Explanation: An LDAP add or modify operation failed because it results in more than one value for the **userPassword** attribute when password policy is enabled. An entry subject to password policy can have at most one value for the **userPassword** attribute.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input so that it does not specify multiple values for the **userPassword** attribute. Then, reissue the operation.

R004193   **Operation not allowed because backend (*name*) is unable to perform I/O at this time**

Explanation: An LDAP add, modify, modify DN, or delete operation failed because the targeted backend cannot write to the file system to save the update information. The file-based backend can perform search and compare operations, but operations that update the directory are rejected until the file system problem is resolved and the backend is restored to read/write mode. The backend name is specified on the **database** option in the LDAP server configuration file, or, if no name is specified, the name generated for that backend by the LDAP server when the server is started.

In the message text:

name
> Backend name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the file system problem. Then, use the **BACKEND** LDAP operator modify command to change the backend to read/write mode. The LDAP server does not have to be restarted.

R004194 **The 'name' attribute value requires a minimum of *number* characters**

Explanation: An LDAP add or modify operation of an attribute subject to password policy failed because the new value is too short.

In the message text:

name
    Attribute name

number
    Minimum length of value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the attribute value meets all password policy requirements. Then, reissue the operation.

R004195 **The account is locked**

Explanation: An LDAP operation failed because the user's account is locked because of excessive incorrect authentications or has been administratively locked by an LDAP administrator. The user is unable to successfully authenticate to the LDAP server.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See Overriding password policy and unlocking accounts for information about unlocking accounts.

R004196 **The 'name' attribute value has passed its maximum age of *number* seconds**

Explanation: An LDAP bind operation specifying an attribute value subject to password policy failed because the value has expired.

In the message text:

name
    Attribute name

number
    Maximum age of a value

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Reset the attribute value for the user.

R004197 **The encrypted 'name' attribute value cannot be validated**

Explanation: An LDAP operation specifying an attribute value subject to password policy failed because the syntax of the value cannot be checked. See Password policy for more information.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Either change the password policy to allow one-way hashed password values to bypass syntax checking (**pwdCheckSyntax**) or update the encryption method used to allow password syntax checking to work.

R004198   **User modification of the '*name*' attribute is not allowed**

Explanation: An LDAP modify operation of an attribute subject to password policy failed because password policy is configured to reject update of this attribute from this user.

In the message text:

name
> Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to update the attribute value. After the problem is resolved, reissue the operation.

Administrator response: Either update the attribute value or change the password policy to allow the user to do it

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R004199   **Current value for the '*name*' attribute must be supplied**

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the modify operation does not contain a delete modification of the current attribute value. A delete modification of the current value is required when password policy is configured to perform safe modifications of this attribute's values.

In the message text:

name
> Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Add a delete modification for the current attribute value to the modify input. Then reissue the operation.

R004200   **The '*name*' attribute value must be *number* seconds old before it can be changed**

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the current value is not yet old enough to be changed. Password policy tracks the last time that the attribute subject to the policy was changed in the **pwdChangedTime** attribute.

In the message text:

name
> Attribute name

number
> Minimum age of value

System action: The LDAP server continues to run, but the operation fails.

User response: Wait until the value is older than the minimum required age. Then, reissue the operation.

R004201   **The '*name*' attribute value exists in the history and may not be reused**

Explanation: An LDAP modify operation of an attribute subject to password policy failed because the value is a repeat of a value used in the past. Password policy tracks the past values in the **pwdHistory** attribute and requires that a value can only be reused after the attribute is changed a certain number of times.

In the message text:

name
> Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input so that the attribute value is not a repeat of a value used in the past. Then, reissue the operation.

R004202 **The password must be modified before any other operation can be performed**

Explanation: An LDAP operation failed because the bound user has a password that must be reset. The requester is allowed to bind using the password, but all operations other than a modify operation to update the **userPassword** value in the bound user's entry are rejected. When binding with native authentication, this can occur if the native password is expired. In this case, use the special native password delete-add modify operation to reset the native password.

System action: The LDAP server continues to run, but the operation fails.

User response: Issue the appropriate modify operation to reset the password. Then, reissue the operation.

R004203 **The DN '*name*' cannot be added to the admin group**

Explanation: An LDAP add or modify operation has failed because a duplicate was detected while attempting to add the distinguished name (DN) to an administrative group member entry. A duplicate is detected when:
- Multiple administrative group member entries (**ibm-slapdAdminMember** objectclass) have the same **ibm-slapdAdminDN** value.
- An **ibm-slapdAdminDN** value matches the **masterServerDN**, **peerServerDN**, or the **adminDN** options in the LDAP server configuration file.
- An **ibm-slapdAdminDN** value matches the **ibm-slapdMasterDN** value in an advanced replication supplier server credentials entry (**ibm-slapdSupplier** or **ibm-replicationConfiguration** objectclasses).
- An **ibm-slapdAdminDN** value matches the **member** value in the **cn=safadmingroup,cn=configuration** entry.

In the message text:

name
    Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the value is a different distinguished name. Then, reissue the operation.

R004204 **The value '*value*' for the '*name*' attribute is not a valid admin role**

Explanation: An LDAP add or modify operation to assign an administrator role value to an attribute failed because the value is not one of the supported administrative roles. See Administration groups and roles for more information about the supported administrative roles.

In the message text:

value
    Attribute value

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the value is a valid administrative role. Then, reissue the operation.

R004205 **The DN '*name*' cannot be added to the master server DN list**

Explanation: An LDAP add or modify operation has failed because a duplicate was detected while attempting to add the distinguished name (DN) to the **ibm-slapdMasterDN** in a consumer server credentials entry. A duplicate is detected when:
- An administrative group member entry (**ibm-slapdAdminMember** objectclass) has an **ibm-slapdAdminDN** with the same value.

*   An **ibm-slapdMasterDN** value matches the **masterServerDN**, **peerServerDN**, or the **adminDN** options in the LDAP server configuration file.
*   An **ibm-slapdMasterDN** value matches the **member** value in the **cn=safadmingroup,cn=configuration** entry.

In the message text:

name
> Distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the operation input so that the value is a different distinguished name. Then, reissue the operation.

R004206   Access denied because user does not have permission to lock an account

Explanation: An LDAP modify operation has failed because the user does not have the authority to lock a user's account. An LDAP password administrator does not have the authority to lock a user's account.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP root administrator to lock the user's account.

Administrator response: See Password policy for information about locking accounts.

R004207   Access denied because user does not have permission to update attributes that may result in a locked account

Explanation: An LDAP modify operation has failed because the user does not have the authority to update password policy operational attributes that may result in locking a user's account. An LDAP password administrator only has the authority to unlock a user's account and therefore does not have the authority to add **pwdFailureTime**, **pwdAccountLockedTime**, **pwdExpirationWarned**, or **pwdGraceUseTime** attributes.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP root administrator to lock the user's account.

Administrator response: See Password policy for information about locking accounts.

R004208   Objectclass '*value*' is not valid for entry '*name*'

Explanation: An LDAP add or modify operation has failed because the **objectclass** value is not valid for the entry. When adding or modifying entries under the **cn=SAFAdminGroup,cn=configuration** and **cn=AdminGroup,cn=configuration** entries, the only supported objectclass values are **top**, **ibm-slapdSAFAdminGroup**, **ibm-slapdConfigEntry**, and **ibm-slapdConfigEntry**.

In the message text:

value
> Object class name

name
> Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify an objectclass value that is valid for the entry. Then, reissue the operation.

R004209   New superior '*value*' is not valid for entry '*name*'

Explanation: An LDAP modify DN operation has failed because the new superior is not valid for the entry. An administrative group member entry is not allowed to be a parent or a superior entry.

In the message text:

value
> New superior value

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to no longer specify a new superior entry. Then, reissue the operation.

R004210   Objectclass '*value*' is required for entry '*name*'

Explanation: An LDAP add or modify operation has failed because a required **objectclass** value is missing for the entry.

In the message text:

value
    Object class name

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify the **objectclass** value. Then, reissue the operation.

R004211   Credentials are not valid for DN '*name*'

Explanation: An LDAP bind operation failed because the credentials specified on the request are not correct. The password specified on a simple, CRAM-MD5, or DIGEST-MD5 bind must match a **userPassword** value on the bind distinguished name entry. If SSL certificate mapping is activated and an EXTERNAL bind is performed, the certificate could not be mapped to an SAF user. See Support of certificate bind for more information.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: If performing a simple, CRAM-MD5, or DIGEST-MD5 bind, update the bind distinguished name (DN), user ID, or password value specified on the bind request. If performing an EXTERNAL bind and SSL certificate mapping is active, verify that the correct certificate is being used, otherwise contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the user is performing an EXTERNAL bind, determine whether the user's certificate should be mapped to a RACF (SAF) user ID by doing an **RACDCERT MAP** command. Also, verify that the **sslMapCertificate** option settings are correct when SSL certificates cannot be mapped to a RACF or SAF user ID.

R004212   Incorrect SAF ID length for the bind operation

Explanation: An LDAP bind operation using native authentication failed because the mapped SAF ID is too long. The SAF ID must be from 1 to 8 characters long.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact the LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Correct the **ibm-nativeID** or **uid** attribute value for the user entry.

R005001   Requested operation is not supported by the GDBM backend

Explanation: An LDAP operation to the GDBM backend failed because it is not allowed for this backend. GDBM only supports modify, delete, search, and compare operations. In particular, add operations are not allowed.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it is not targeted to a GDBM entry. Then, reissue the operation.

R005002   Only the base change log entry can be modified

Explanation: An LDAP modify operation to the GDBM backend failed because it tries to modify an entry other than the GDBM suffix entry (**cn=changelog**). The only GDBM entry that can be modified is the suffix entry and only the **aclEntry** and entryOwner attribute values can be changed.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it is targeted to the GDBM suffix entry, **cn=changelog**, and only includes the **aclEntry** and entryOwner attributes. Then, reissue the operation.

R005003   The base change log entry cannot be deleted

Explanation: An LDAP delete operation to the GDBM backend failed because it tries to delete the GDBM suffix entry (**cn=changelog**). The GDBM suffix entry is created by the LDAP server and cannot be deleted. GDBM changelog entries can be deleted.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the delete input so that it is targeted to a GDBM changelog entry. Then reissue the operation.

R005004   Only the aclEntry and entryOwner attributes can be modified

Explanation: An LDAP modify operation to the GDBM backend failed because it includes changes for attributes that cannot be modified. GDBM only supports modifying the **aclEntry** and **entryOwner** attributes in the GDBM suffix (**cn=changelog**).

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it is targeted to the GDBM suffix entry, **cn=changelog**, and only includes the **aclEntry** and entryOwner attributes. Then, reissue the operation.

R006001   LDAP Client API *api_name* **has returned an error code=***error_code* **with an error message='***error_text***'**

Explanation: An LDAP extended operation or utility failed because during its processing it invokes an LDAP client application programming interface (API) that does not succeed. See the description of the API in *z/OS IBM Tivoli Directory Server Client Programming for z/OS* for more information about the error.

In the message text:

api_name
   Name of the client interface

error_code
   Error code from the interface

error_text
   Error text corresponding to the error code

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Use the information in the reason code to resolve the problem. Then, reissue the extended operation or restart the utility.

R006003   A decoding error has been encountered while decoding attribute(s): *field***, rc=***return_code*

Explanation: An LDAP extended operation failed because it includes a field value that cannot be decoded. The most likely return codes are:
- 84 (LDAP_DECODING_ERROR): Some part of the extended operation data is not encoded correctly.
- 90 (LDAP_NO_MEMORY): The LDAP server ran out of storage.

In the message text:

field
   Field name

return_code
      Return code from decode routine

System action: The LDAP server continues to run, but the extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: If the problem is in the encoding, check that all the extended operation data is correctly encoded. Then, reissue the extended operation. If the problem is storage, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation.

Administrator response: For a storage problem, if running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then restart the LDAP server.

R006004   **An encoding error** *return_code* **has been encountered while encoding response**

Explanation: An LDAP operation failed because the response message could not be encoded by the LDAP server.

In the message text:

return_code
      Return code from encoding routine

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. Then reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R006006   **Unsupported or inappropriate critical control '***identifier***'**

Explanation: An LDAP operation failed because it includes a critical control that the LDAP does not support. Possible reasons for this are:

- The control is not supported at all.
- The control is specified for an operation that does not allow that control.
- The control is only supported for certain users.

See Supported server controls for more information about the supported controls.

In the message text:

identifier
      Control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the control from the operation. Then, reissue the operation.

R006009   **The extended operation request with OID=***oid1* **requires the critical control with OID=***oid2*

Explanation: An LDAP extended operation failed because it does not include a control that must be sent with the operation. The extended operation cannot be processed without the control. See Supported extended operations for more information about the extended operation.

In the message text:

oid1
      Extended operation identifier

oid2
      Control identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Add the required control to the extended operation. Then, reissue the operation.

R006010   **Unsupported extended operation '***identifier***'**

Explanation: An LDAP extended operation failed because it is not supported by the LDAP server. See Supported extended operations for more information about the supported extended operations.

In the message text:

identifier
   Extended operation identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Do not issue the extended operation.

R006011   **The extended operation request with OID=***oid1*** does not support the critical control with OID=***oid2*

Explanation: An LDAP extended operation failed because it includes a critical control that is not supported by the extended operation. See Supported extended operations for more information about the extended operation.

In the message text:

oid1
   Extended operation identifier

oid2
   Control identifier

System action: The LDAP server continues to run, but the extended operation fails.

User response: Remove the control from the extended operation. Then, reissue the operation.

R006023   **Required field (***name***) missing**

Explanation: An LDAP extended operation failed because it is missing a required field or the field value is a zero-length string. See Supported extended operations for more information about the extended operation.

In the message text:

name
   Field name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Specify an acceptable value for the field in the extended operation input. Then, reissue the extended operation.

R006024   **Connection to server (***url***) failed**

Explanation: An LDAP extended operation failed because it involves connecting to a remote server but cannot establish the connection.

In the message text:

url
   URL of a remote server

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that the remote server is active and accessible. Then, reissue the extended operation.

R006025   **Incorrect ldapURL specified (***url***)**

Explanation: An LDAP extended operation failed because it involves connecting to a remote server but the format of the URL identifying the remote server is not valid.

In the message text:

url
   URL of a remote server

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the format of the URL. Then, reissue the extended operation.

R006026   **ldap_search failed rc=***return_code*

Explanation: An LDAP **getDnForUserid** extended operation failed because there are no entries on the remote server that match the user ID that is specified in the extended operation. The most likely return code indicated in the reason code is 32 (LDAP_NO_SUCH_OBJECT).

In the message text:

return_code
    Return code from remote search

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that the remote server contains the appropriate entries for the user ID specified in the extended operation. Then, reissue the extended operation.

R006027   **Unsupported authorization type=***type*

Explanation: An LDAP extended operation failed because it involves connecting to a remote server but the authorization type specified for the bind is not supported by the extended operation. The most likely bind types indicated in the reason code are 128 (simple) and 163 (SASL). See Supported extended operations for more information about the extended operation.

In the message text:

type
    Type of authorization

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that a supported bind type is specified for the extended operation. Then, reissue the extended operation.

R006028   **Expected attribute** *name* **missing from entry**

Explanation: A **GetPrivileges** extended operation failed because the information returned from the remote server does not include all of the required attributes.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that the appropriate entries in the remote server contain all the required attributes. Then, reissue the extended operation.

R006029   **Empty sequence in extended operation request** *name*

Explanation: An extended operation failed because it includes an empty sequence, and thus it cannot be decoded.

In the message text:

name
    Extended operation name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Check that all the sequences in the extended operation input are correctly encoded. Contact an LDAP administrator to determine if there are any server messages or ERROR debug trace output generated during the extended operation process that might assist in locating and correcting the problem. Then, reissue the extended operation.

Administrator response: If requested, gather any server message and ERROR debug output created by the extended operation processing.

R006050   Extended operation request does not have an object identifier

Explanation: An LDAP extended operation failed because it does not contain an identifier indicating the type of extended operation.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Ensure that the appropriate extended operation identifier is included in the extended operation. Then, reissue the extended operation.

R006051   The *type* backend is not defined

Explanation: An LDAP extended operation or utility failed because it requires a backend that is not running. The backend can be the target of the operation or utility. Alternatively, it can be another backend needed to complete processing of the request. For example:

- The **GetDnForUserid** and **GetPrivileges** extended operations require that the EXOP backend be running.
- The **changeLogAddEntry** extended operation requires that the SDBM backend be running. This extended operation is used to log changes to RACF profiles.
- The **unloadRequest** extended operation requires the CDBM backend be running if a distinguished name of a filter entry (the **filterDN** field) is specified in the extended operation. This extended operation is used by the **ds2ldif** utility.

In the message text:

type
    Type of backend

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: For the **unloadRequest**, remove the **filterDN** field from the extended operation or do not specify the **-q** option for the **ds2ldif** utility. Then, reissue the extended operation or restart the utility. Alternatively, contact an LDAP administrator to configure the needed backend. After the problem is resolved, reissue the extended operation or restart the utility.

Administrator response: If requested, add the needed backend to the LDAP server configuration file. Then, restart the LDAP server.

R006052   Persistent search is allowed only when bound as an LDAP administrator with sufficient authority

Explanation: An LDAP search operation including the **PersistentSearch** control failed because the requester is not authorized to perform a persistent search. The requester must be an LDAP root or operational administrator.

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the **PersistentSearch** control from the search operation or rebind as an LDAP root or operational administrator. Then, reissue the operation.

R006053   Persistent search must specify LDAP_DEREF_NEVER or LDAP_DEREF_FINDING

Explanation: An LDAP search operation including the **PersistentSearch** control failed because the search involves dereferencing aliases. Alias dereferencing of any entry other than the base of the search is not supported for a persistent search.

System action: The LDAP server continues to run, but the operation fails.

User response: Either change the search input to specify LDAP_DEREF_NEVER or LDAP_DEREF_FINDING rather than LDAP_DEREF_SEARCHING or LDAP_DEREF_ALWAYS, or remove the **PersistentSearch** control. Then, reissue the operation.

R006054   Persistent search is not allowed using the Program Call interface

Explanation: An LDAP search operation including the **PersistentSearch** control failed because it is received over the local Program Call (PC) interface rather than over the network. Persistent searches are not supported using the PC interface.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a persistent search over the Program Call interface. The operation can be issued using network communications.

R006055   Persistent search is not allowed with paged or sorted results

Explanation: An LDAP search operation including the **PersistentSearch** control failed because it also includes either the **PageResults** or **SortKeyRequest** control. Paging and sorting are not supported for a persistent search.

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the **PersistentSearch** control or remove the **PageResults** and **SortKeyRequest** controls. Then, reissue the operation.

R006056   Persistent search is not supported by the backend

Explanation: An LDAP search operation including the **PersistentSearch** control failed because the backend containing the target of the search does not support persistent search. Only LDBM, TDBM, GDBM, and CDBM backends can process a persistent search. To enable the support in these backends, the **persistentSearch on** option must be specified in the backend section of the LDAP server configuration file.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the **PersistentSearch** control from the search if it is not needed. If it is needed, target the persistent search to an LDBM, TDBM, GDBM, or CDBM backend that has persistent search enabled. Then, reissue the operation. If the backend does not have persistent search enabled, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the **persistentSearch on** option to the appropriate backend section of the LDAP server configuration file. Then, restart the LDAP server.

R006057   Persistent search is not allowed for an internal request

Explanation: An LDAP search operation including the **PersistentSearch** control failed because it is received over an internal plugin request rather than over the network. Persistent searches are not supported using an internal plugin request.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a persistent search over an internal plugin request. The operation can be issued using network communications directly to the plugin.

R006058   Paged search results not allowed for an internal request

Explanation: An LDAP search operation including the **PagedResults** control failed because it is received over an internal plugin request rather than over the network. Paged searches are not supported using an internal plugin request.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue a paged search over an internal plugin request. The operation can be issued using network communications directly to the plugin.

R006060   Unload extended operation is allowed only when bound as administrator group member with the appropriate roles assigned

Explanation: An LDAP **unloadRequest** extended operation failed because the requester is not an LDAP administrator. This extended operation can only be performed by an LDAP root, directory, or schema (only if unloading the schema entry) administrator.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Rebind as an LDAP administrator. Then, reissue the extended operation.

R006061   **Unload extended operation found multiple LDBM, TDBM, or CDBM backends to unload**

Explanation: An LDAP **unloadRequest** extended operation failed because there is more than one backend to unload. When the extended operation does not include the **backendName** or **subtreeDN** fields, it looks in the LDAP server configuration file for an LDBM, TDBM, or CDBM backend to unload. If the configuration file does not contain any backend of these types or contains more than one, then processing ends.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Add either the **backendName** or the **subtreeDN** field (but not both) to the extended operation to indicate what entries to unload. Then, reissue the extended operation.

R006062   **Unload extended operation cannot find subtree DN '**_name_**' to unload**

Explanation: An LDAP **unloadRequest** extended operation failed because it specifies a distinguished name (DN) of a subtree to unload but either there is no backend that contains the DN or the backend containing the DN is not an LDBM, TDBM, or CDBM backend and the DN is not `cn=schema`. The subtree DN is specified in the **subtreeDN** field in the extended operation.

In the message text:

name
    Distinguished name of the subtree

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the **subtreeDN** value in the extended operation input by specifying an existing DN in an LDBM, TDBM, or CDBM backend or by specifying **cn=schema** (to unload the schema). Then, reissue the extended operation.

R006063   **Unload extended operation cannot find backend name '**_name_**' to unload**

Explanation: An LDAP **unloadRequest** extended operation failed because it specifies the name of a backend to unload but either there is no backend with that name or the backend with that name is not an LDBM, TDBM, GDBM, or CDBM backend. The backend name is specified in the **backendName** field in the extended operation. The name of each backend is established when the LDAP server is started and is either the name specified for the backend on its **database** option in the LDAP server configuration file, or, if no name is specified, a name generated for that backend by the LDAP server.

In the message text:

name
    Name of backend to unload

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input by specifying the name of an existing LDBM, TDBM, GDBM, or CDBM backend in the **backendName** field. Then, reissue the extended operation.

R006064   **Unload extended operation unable to open file '**_filename_**', errno=**_error_code_**, errstring=**_error_text_

Explanation: An LDAP **unloadRequest** extended operation failed because it cannot open the output file for write access. The file name is specified in the **outputFileName** field in the extended operation. See the description of **fopen()** in _z/OS XL C/C++ Runtime Library Reference_ for more information about the error. Note that the **unloadRequest** extended operation request can result from usage of the **ds2ldif** unload utility. The **-o** option of the utility corresponds to setting the **outputFileName** field.

In the message text:

filename
    Output file name

error_code
    Error code from **fopen()**

error_text
    Error text corresponding to the error code

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Ensure that the output file specified using the **outputFileName** value exists and can be opened for write access. For the **ds2ldif** utility, the file name is specified in the **-o** option. Then, reissue the extended operation or restart the utility.

R006065 **Unload extended operation has both backend name and subtree DN specified**

Explanation: An LDAP **unloadRequest** extended operation failed because it specifies both the name of a backend to unload and the DN of a subtree to unload. The extended operation does not support specifying both of these values. The backend name is specified in the **backendName** field in the extended operation. The subtree DN is specified in the **subtreeDN** field.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input by removing either the **backendName** value or the **subtreeDN** value. Then, reissue the extended operation.

R006066 **Unload extended operation cannot find any LDBM, TDBM, or CDBM backend in the LDAP server configuration file to unload**

Explanation: An LDAP **unloadRequest** extended operation failed because there is no backend to unload. When the extended operation does not include the **backendName** or **subtreeDN** fields, it looks in the LDAP server configuration file for an LDBM, TDBM, or CDBM backend to unload. If the configuration file does not contain any backend of these types or contains more than one, then processing ends.

System action: The LDAP server continues to run, but the extended operation fails.

User response: If there are multiple LDBM, TDBM, or CDBM backends in the LDAP server configuration file, add a **backendName** or **subtreeDN** value (but not both) to the extended operation input to indicate what to unload. Then, reissue the extended operation. If there are no eligible backends in the configuration file, do not issue the extended operation.

R006067 **Unload extended operation with a filter DN is only supported when advanced replication is activated in the CDBM backend**

Explanation: An LDAP **unloadRequest** extended operation failed because it tries to use filtering but advanced replication is not configured. Filtering is requested by including the **filterDN** field in the extended operation. Filtering requires that the CDBM backend be configured and the **useAdvancedReplication on** option be included in the CDBM section of the LDAP server configuration file. Note that the **unloadRequest** extended operation request can result from usage of the **ds2ldif** unload utility. The **-q** option of the utility corresponds to setting the **filterDN** field.

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Correct the extended operation input by removing the **filterDN** value. For the **ds2ldif** utility, remove the **-q** option. Then reissue the extended operation or restart the utility. If filtering is needed, contact an LDAP administrator. After the problem is resolved, reissue the extended operation or restart the utility.

Administrator response: If filtering is requested, ensure that CDBM is configured with the **useAdvancedReplication on** option in the LDAP server configuration file. Then, restart the server.

R006068 **Unload extended operation is not able to find valid filters in filter DN '*name*'**

Explanation: An LDAP **unloadRequest** extended operation failed because it tries to use filtering but there are no acceptable filter values in the specified filter entry. The distinguished name (DN) of the filter entry is specified in the **filterDN** field. Note that the **unloadRequest** extended operation request can result from usage of the **ds2ldif** unload utility. The **-q** option of the utility corresponds to setting the **filterDN** field. See Partial replication for more information about filters.

In the message text:

name
    Distinguished name of filter entry

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Correct the extended operation input by removing the **filterDN** value or by specifying the DN of an entry that contains acceptable filter values. For the **ds2ldif** utility, remove the **-q** option or change the value. Then, reissue the extended operation or restart the utility.

R006069   **Unload extended operation does not support filtering of the schema entry**

Explanation: An LDAP **unloadRequest** extended operation failed because it tries to use filtering when unloading the schema entry. This combination is not supported. If the **subtreeDN** field is set to cn=schema, then the **filterDN** field cannot be set. Note that the **unloadRequest** extended operation request can result from usage of the **ds2ldif** unload utility. The **-s** option of the utility corresponds to setting the **subtreeDN** field and the **-q** option corresponds to setting the **filterDN** field.

System action: The LDAP server continues to run, but the extended operation or utility fails.

User response: Remove the **filterDN** value from the extended operation input. For the **ds2ldif** utility, remove the **-q** option. Then, reissue the extended operation or restart the utility.

R006070   **Unload extended operation does not support subtreeDN with unload localhost set to TRUE**

Explanation: An LDAP **unloadRequest** extended operation failed because it tries to unload both a specific subtree and the localhost subtree. This combination is not supported. If the **unloadLocalhost** field is set to TRUE, then a value cannot be specified for the **subtreeDN** field.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Correct the extended operation input either by removing the **subtreeDN** value or by setting the **unloadLocalhost** field to FALSE. Then, reissue the extended operation.

R006071   **Only an LDAP administrator or account owner can execute '*name*' extended operation**

Explanation: An LDAP extended operation failed because the requester is not authorized to use the extended operation. Only an LDAP administrator or the user whose entry is the target of the extended operation are authorized.

In the message text:

name
    Extended operation name

System action: The LDAP server continues to run, but the extended operation fails.

User response: Either target the extended operation to your own entry or rebind as an LDAP administrator. Then, reissue the extended operation.

R006072   **Password policy is not available with native authentication**

Explanation: An LDAP **effectPasswordPolicy** or **acctStatus** extended operation failed because the target entry of the extended operation uses native authentication. Entries that use native authentication do not contain the **userPassword** attribute and are not subject to LDAP password policy.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Change the extended operation input to specify the distinguished name of an entry that does not use native authentication. Then, reissue the extended operation.

R007001   **SASL authentication requires the LDAP Version 3 protocol**

Explanation: An LDAP bind operation failed because it uses SASL authentication, but the requester is not using LDAP Version 3 protocol. Protocol levels below 3 do not support SASL authentication.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use SASL authentication or use LDAP Version 3 protocol. Then, reissue the operation.

R007002   **Unsupported SASL authentication method '*name*'**

Explanation: An LDAP bind operation failed because it specifies a SASL authentication method that is not allowed.

In the message text:

name
    Authentication method

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to use one of the supported authentication methods. Then, reissue the operation.

R007005   **Server is not configured for client authentication**

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because the LDAP server is not configured to do the client authentication used by this bind. EXTERNAL bind requires that the **sslAuth serverClientAuth** option appear in the global section of the LDAP server configuration file.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use the EXTERNAL authentication method. Then, reissue the operation. If EXTERNAL bind is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the **sslAuth serverClientAuth** option to the global section of the LDAP server configuration file. Then, restart the LDAP server.

R007006   **Client certificate is not available**

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because the LDAP server cannot obtain the client certificate or the certificate did not contain the CERT_DN_PRINTABLE field needed for authentication.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the client certificate is complete and available, or change the bind input to not use the EXTERNAL authentication method. Then, reissue the operation.

R007020   **User password is not available with native authentication**

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because the target entry is using native authentication, thus does not contain a password. The password for the target entry is in the z/OS Security Server. There is no **userPassword** attribute in the entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the bind input to not use the CRAM-MD5 or DIGEST-MD5 authentication method. Then, reissue the operation.

R007027   **TLS is not supported on the connection**

Explanation: An LDAP **Start TLS** extended operation failed because the LDAP server is not set up for SSL. Either the LDAP server is not configured to use SSL or SSL initialization failed. The **sslKeyRingFile** option must be specified in the global section of the LDAP server configuration file.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Do not issue the extended operation. Alternatively, contact an LDAP administrator to restart the LDAP server using SSL. After the problem is resolved, reissue the extended operation.

Administrator response: If requested, add the **sslKeyRingFile** option to the global section of the LDAP server configuration file. Then, restart the LDAP server.

R007028   SSL/TLS is already active on the connection

Explanation: An LDAP **Start TLS** extended operation failed because the LDAP server is already using SSL on this connection. The extended operation cannot switch the connection to use SSL.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Do not issue the extended operation.

R007029   Other operations are outstanding for the connection

Explanation: An LDAP **Start TLS** extended operation failed because the connection is in use by other operations. A connection cannot be switched to use SSL while it is in use.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Wait until all activity on the connection is complete. Then, reissue the extended operation.

R007030   Multiple '*name*' attributes found in DIGEST-MD5 response

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server finds multiple values for an attribute in the bind response from the client. The server does not know which value to use.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the encoded DIGEST-MD5 bind response does not contain multiple values for the attribute. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007031   Required '*name*' attribute not found in DIGEST-MD5 response

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server does not find a needed value in the bind response from the client.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the encoded DIGEST-MD5 bind response contains a required value for the attribute. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007032   Syntax error in DIGEST-MD5 response

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the LDAP server cannot parse the bind response from the client. The syntax of the bind response is not correct.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the DIGEST-MD5 bind response is encoded properly. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007033   Authorization DN in DIGEST-MD5 response does not match DN associated with user name

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because there is a mismatch in the bind information. The LDAP server uses the authorization distinguished name (DN) in the bind request to locate the target entry in the directory. If the user name does not exist as a **uid** attribute value in the authorization DN entry, the bind response is not successful.

System action: The LDAP server continues to run, but the operation fails.

User response: Update the bind input to specify the correct authorization DN or user name in the request. Then, reissue the operation.

R007034   BIND DN '*name1*' is not the same as authentication DN '*name2*'

Explanation: An LDAP bind operation using EXTERNAL (certificate), CRAM-MD5, DIGEST-MD5, or GSSAPI (Kerberos) failed because there is a mismatch between the distinguished name (DN) in the bind request and the resulting authentication DN. When a DN is specified in the bind request, it must match the resulting authentication DN.

In the message text:

name1
    Distinguished name from bind request

name2
    Distinguished name from resulting authentication

System action: The LDAP server continues to run, but the operation fails.

User response: Either correct the DN in the bind request to match the resulting authentication DN or remove it from the bind input. Then, reissue the operation.

R007035   The value of DIGEST-MD5 response attribute '*name*' is not valid

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because an attribute value in the bind response from the client is not acceptable.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the DIGEST-MD5 bind response attribute is valid. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007036   The DIGEST-MD5 authorization identifier is not a distinguished name

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the **authzid** value in the bind response from the client is not acceptable. The value must begin with dn: followed by a distinguished name of nonzero length.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the **authzid** attribute starts with dn:. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007037   DIGEST-MD5 response attribute '*name*' is not the same as the challenge value

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because a value in the bind response from the client is not the same as the value sent to the client in the server challenge. Certain values, such as for the **nonce** and the **realm**, must not be changed in the bind response.

In the message text:

name
    Attribute name

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System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the response attribute value is not changed. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007038   **Maximum DIGEST-MD5 buffer size must be at least 256 bytes**

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the **maxbuf** value in the bind response from the client is too small. The buffer size must be at least 256.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client so that the response **maxbuf** value is at least 256. See RFC 2831: *Using Digest Authentication as a SASL Mechanism* for more information about DIGEST-MD5. Then, reissue the operation.

R007047   **SASL EXTERNAL bind using the system identity requires the SDBM backend**

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because it is received over the local Program Call interface but the SDBM backend is not running in the LDAP server. The SDBM backend is required when performing EXTERNAL binds over the Program Call interface. The bind can be issued using network communications when SDBM is not configured.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Add an SDBM backend section to the LDAP configuration file. Then, restart the LDAP server.

R007051   **DIGEST-MD5 response URL '*value*' is incorrect or cannot be verified**

Explanation: An LDAP bind operation using DIGEST-MD5 authentication failed because the format of the **digest-uri** value in the bind response from the client is not valid or the value cannot be checked. The value format must be **ldap/***hostname* where *hostname* is the local host name or the realm name specified in the **digestRealm** configuration option.

In the message text:

value
    URL value

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. Then reissue the operation.

Administrator response: If the LDAP server is not able to determine the local host name from the Domain Name Server (DNS), update the **digestRealm** option to specify the *hostname* from the **digest-uri** value. Then, restart the LDAP server.

R007052   **LDAP server in maintenance mode; operations restricted to an LDAP administrator, masterServerDN and peerServerDN**

Explanation: An LDAP operation or extended operation failed because it is not allowed from this requester when the LDAP server is running in maintenance mode. Only requests from an LDAP administrator or from a peer or master server for this backend are allowed.

System action: The LDAP server continues to run, but the operation fails.

User response: Either rebind as a user authorized to perform operations while the server is in maintenance mode or contact an LDAP administrator to take the server out of maintenance mode. Then, reissue the operation.

Administrator response: If requested, use the **MAINTMODE OFF** operator modify command to change the server to normal operating mode.

R007060   **SASL bind is in progress**

Explanation: An LDAP operation or extended operation failed because a bind using a SASL authentication method is already in progress on the connection. The bind must complete before other operations can be performed.

System action: The LDAP server continues to run, but the operation fails.

User response: Wait until the bind has completed. Then, reissue the operation.

R007061   **No SASL mechanism specified**

Explanation: An LDAP bind operation failed because it indicates it is using a SASL authentication method but does not specify the method.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the bind input to specify the SASL authentication method. Then, reissue the operation.

R007062   **The EXTERNAL SASL mechanism is not available for the connection**

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because the connection is not set up to use SSL. SSL is required when performing an EXTERNAL bind.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client to use SSL when performing an EXTERNAL bind. Then, reissue the operation.

R007063   **Client credentials may not be specified for the EXTERNAL SASL mechanism**

Explanation: An LDAP bind operation using EXTERNAL (certificate) authentication failed because it included the client credentials. This is not supported when using EXTERNAL authentication.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the credentials from the bind input. Then, reissue the operation.

R007064   **Concurrent BIND requests are not supported**

Explanation: An LDAP bind operation failed because there is already a bind operation outstanding on the same connection. The previous bind operation must complete before a new one can be processed.

System action: The LDAP server continues to run, but the operation fails.

User response: Wait for the previous bind operation to complete. Then, reissue the operation.

R007065   **No SASL BIND credentials**

Explanation: An LDAP bind operation using a SASL authentication method failed because the bind data is missing in the initial bind request or in follow-up client bind responses.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the client to send the credentials information during the initial bind request or follow-up client bind responses. Then, reissue the operation.

R007066   **Unable to accept GSSAPI security context: Major 0x**_major_error_**, Minor 0x**_minor_error_ **-** _error_text_

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot accept the Kerberos security context. The call to **gss_accept_sec_context()** does not succeed. See the description of this routine in _z/OS Integrated Security Services Network Authentication Service Programming_ for more information about the error.

In the message text:

_major_error_
     Major error code from **gss_accept_sec_context()**

minor_error
   Minor error code from **gss_accept_sec_context()**

error_text
   Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code to help locate and correct the problem.

R007067   **Unexpected security token received for GSSAPI continuation**

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because a follow-up bind response contained additional data that the LDAP server cannot process.

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the client is not creating an additional GSSAPI security token. Then, reissue the operation. If the problem persists, contact the service representative.

R007068   **Unable to wrap GSSAPI response: Major 0x***major_error***, Minor 0x***minor_error* **-** *error_text*

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot encrypt (wrap) a server negotiation. The call to **gss_wrap()** does not succeed. See the description of this routine in *z/OS Integrated Security Services Network Authentication Service Programming* for more information about the error.

In the message text:

major_error
   Major error code from **gss_wrap()**

minor_error
   Minor error code from **gss_wrap()**

error_text
   Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code to assist in locating and correcting the problem.

R007069   **A GSSAPI authorization identity may not be specified**

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation includes an authorization identity field. The authorization identity must not be included in the client negotiation.

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the authorization identity from the client negotiation. Then, reissue the operation. If the problem persists, contact the service representative.

R007070   **Unable to unwrap GSSAPI response: Major 0x***major_error***, Minor 0x***minor_error* **-** *error_text*

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot decrypt (unwrap) a client negotiation. The call to **gss_unwrap()** does not succeed. See the description of this routine in *z/OS Integrated Security Services Network Authentication Service Programming* for more information about the error.

In the message text:

major_error
   Major error code from **gss_unwrap()**

minor_error
    Minor error code from **gss_unwrap()**

error_text
    Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Use the information in the reason code to resolve the problem. Then, reissue the operation.

R007071   **Requested GSSAPI security layer** *number* **is not supported**

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation specifies a security layer service that is not supported by the LDAP server. The supported security layer values are: 1 (no security layer), 2 (integrity protection), and 4 (confidentiality protection).

In the message text:

number
    Security layer service

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the security layer service in the client negotiation. Then, reissue the operation.

R007072   **Maximum GSSAPI receive length** *size* **is too small**

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the client negotiation specifies a maximum protocol message length that is too small. The message length must be at least 256.

In the message text:

size
    Maximum message length

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the maximum message length in the client negotiation. Then, reissue the operation.

R007073   **Unable to get GSSAPI wrap size limit: Major 0x***major_error***, Minor 0x***minor_error* **-** *error_text*

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot use the maximum protocol message length specified in the client negotiation. The call to **gss_wrap_size_limit()** does not succeed. See the description of this routine in *z/OS Integrated Security Services Network Authentication Service Programming* for more information about the error.

In the message text:

major_error
    Major error code from **gss_wrap_size_limit()**

minor_error
    Minor error code from **gss_wrap_size_limit()**

error_text
    Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code to help locate and correct the problem.

R007074   **Unable to obtain GSSAPI source name: Major 0x***major_error***, Minor 0x***minor_error* **-** *error_text*

Explanation: An LDAP bind operation using GSSAPI (Kerberos) authentication failed because the LDAP server cannot retrieve the bind identity. The call to **gss_display_name()** does not succeed. See the description of this routine in *z/OS Integrated Security Services Network Authentication Service Programming* for more information about the error.

In the message text:

major_error
  Major error code from **gss_display_name()**

minor_error
  Minor error code from **gss_display_name()**

error_text
  Error text corresponding to the error codes

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use the information in the reason code to help locate and correct the problem.

R007075   Unexpected SASL BIND credentials

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because one of the client bind interactions contains unexpected data. There must be no credentials contained in the initial CRAM-MD5 bind request or the third DIGEST-MD5 bind response from the client.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the bind requests so that they do not contain any credentials. Then, reissue the operation.

R007076   No digest realm name is available

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication because the LDAP server cannot determine the name of the digest realm. The digest realm name can be specified in the **digestRealm** option in the LDAP server configuration file. If the option is not set in the configuration file, then the fully qualified host name of the LDAP server is used if a Domain Name Server (DNS) is active on the system. Otherwise, the name of the host processor is used. See the description of the **digestRealm** option in the Customizing the LDAP server configuration for more information about setting the digest realm.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the DNS problem. The **digestRealm** option can be updated to specify a realm name if DNS is not active on the system. Then, restart the LDAP server.

R007077   No user name specified for SASL BIND request

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication because the client challenge response does not contain a user name and there is no bind distinguished name (DN) specified in the initial bind request. A name must be supplied in either the initial bind request or in the client challenge response.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the bind request processing so that it supplies either the bind DN, authorization DN, or the user name. Then, reissue the operation.

R007078   HMAC digest in SASL BIND request is not valid

Explanation: An LDAP bind operation using CRAM-MD5 authentication failed because the digest contained in the client challenge response cannot be converted. The value is not valid.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the digest in the client challenge response. Then, reissue the operation.

R007079   **The local Program Call interface supports just the EXTERNAL SASL mechanism**

Explanation: An LDAP bind operation received over the local Program Control (PC) interface failed because it does not use EXTERNAL authentication. Only EXTERNAL binds can be performed when using the local PC interface.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the bind input to use EXTERNAL authentication. Then, reissue the operation.

R007081   **Anonymous binds are not allowed and no bind distinguished name exists**

Explanation: An LDAP bind operation failed because the requester has not bound with a distinguished name and the LDAP server is configured to reject anonymous binds. The reason code can also occur when other operations and extended operations are requested from an unauthenticated client. The **allowAnonymousBinds** option in the LDAP server configuration file controls if anonymous binds are allowed and if operations can be performed from an unauthenticated client. See Customizing the LDAP server configuration for more information about this option.

System action: The LDAP server continues to run, but the operation fails.

User response: If binding, change the bind input to specify a distinguished name. Then, reissue the operation. If anonymous binds are needed, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, configure the LDAP server to allow anonymous binds by changing the value of the **allowAnonymousBinds** option to **on** in the LDAP server configuration file. Then, restart the LDAP server.

R007082   **An internal SSL error has been encountered**

Explanation: An LDAP operation failed because the LDAP server detects a problem when using SSL. This can occur when trying to map a certificate used in an EXTERNAL (certificate) bind operation to a RACF user.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any messages and ERROR debug trace output to help locate and correct the problem. If certificate mapping is not needed, set the **sslMapCertificate** option to **off** in the LDAP server configuration file. Then, restart the LDAP server. If the problem persists, contact the service representative.

R007083   **Authentication with a reserved bind DN is not allowed**

Explanation: An LDAP bind operation failed because the requester tries to bind using a DN that is reserved for usage by the LDAP server. In particular, a bind using EXTERNAL (certificate) authentication cannot specify a bind DN such as cn=this.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the bind input to not use a reserved DN. Then, reissue the operation.

R008001   **LDBM backend database is disabled**

Explanation: An LDAP operation failed because the LDBM backend is in disabled state. This state can occur when the LDBM backend cannot recover from a problem.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Then, restart the LDAP server. If the problem persists, contact the service representative.

R008003   **Multiple entries contain uid '*userid*'**

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because there is more than one entry in an LDBM backend that contains the user ID specified in the bind information. The LDAP server does not know which entry to use for bind processing.

In the message text:

userid
    User ID used in the bind operation

System action: The LDAP server continues to run, but the operation fails.

User response: Use an LDAP search operation with the filter **uid=***userid* to determine which entries in the LDBM backend contain the indicated user ID. Modify the **uid** attribute in the entries so that only the entry you want to bind with has the indicated value. Then, reissue the operation.

R008004   Clear password is not available

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because it cannot decrypt a value for the **userPassword** attribute in the entry that contains the bind distinguished name (DN) or user ID specified in the bind information. The **userPassword** values in the entry must be either in the clear or encrypted using a two-way encryption algorithm.

System action: The LDAP server continues to run, but the operation fails.

User response: If a user ID is only specified in the bind information, use an LDAP search operation with the filter **uid=***userid* to determine which entry contains the indicated user ID. Modify the entry to remove all the **userPassword** values that are not in the clear or encrypted using a two-way algorithm. Then, reissue the operation.

R008005   Nested group recursion detected for group '*name***'**

Explanation: An LDAP operation or utility failed because a nested group loop has been detected in the backend. For example, a nested group loop is detected when group A includes group B as an **ibm-memberGroup** value while group B also includes group A as an **ibm-memberGroup** value. See Nested groups for more information.

In the message text:

name
    Distinguished name of group

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Either remove or update the **ibm-memberGroup** attribute value to avoid introducing a nested group loop in the operation or utility input. Then, reissue the operation.

R008006   Dynamic group search filter '*value***' is not valid**

Explanation: An LDAP operation or utility failed because it involves a dynamic group whose filter value is not acceptable. See Dynamic groups for more information.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the filter value in the operation or utility input. Then, reissue the operation.

R008008   No base entry specified in dynamic group URL '*url***'**

Explanation: An LDAP operation or utility failed because the **memberURL** attribute value specifying the dynamic group search expression does not contain a base entry. A base entry is required in a dynamic group URL. The format of a dynamic group URL is: `ldap:///baseDN[??[searchScope][?searchFilter]]` See Dynamic groups for more information.

In the message text:

url
    Dynamic group URL

System action: The LDAP server continues to run, but the operation fails.

User response: Update the **memberURL** attribute value to specify a baseDN in the operation or utility input. Then, reissue the operation.

R008009   An internal LDBM backend error has occurred

Explanation: An LDAP operation failed because the LDAP server has detected an internal programming error in the LDBM backend.

System action: The LDAP server continues, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008010   Subtree move is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a subtree to another subtree but a replica of the LDAP server does not support this type of rename. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move subtrees. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree move, restart the replica with that capability enabled. The replica server must return 1.3.18.0.2.32.33 as one of the values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008011   Subtree rename is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to rename a subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not rename a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that rename subtree entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree rename, restart the replica with that capability enabled. The replica server must return 1.3.18.0.2.32.34 as one of the values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008012   New superior is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a leaf entry to another subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for the leaf entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move leaf entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with leaf or subtree move, restart the replica with either or both of those capabilities enabled. The replica server must return 1.3.18.0.2.32.35 or 1.3.18.0.2.32.33 (or both) as values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008013   DN attribute realignment is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because the **IBMModifyDNRealignDNAttributesControl** control to realign other DN attributes is included in the operation but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not include the control. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support realignment. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support realignment of other DN attributes, restart the replica with this capability enabled. The replica server must return 1.3.18.0.2.10.11 as a value of the **supportedControl** attribute when searching the root DSE entry.

R008014   **Value** *value* **for attribute** *name* **is not valid**

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies an attribute value that is not valid. A basic replica entry is one that contains the **replicaObject** object class. See Basic replication for more information.

In the message text:

value
    Attribute value

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input to specify a value that is valid for the attribute. Then, reissue the operation.

R008015   **Value** *value* **for attribute** *name* **is out of range**

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies an attribute value that is not valid. A basic replica entry is one that contains the **replicaObject** object class. In particular, the **replicaPort** attribute value must be within 0 to 65535. See Basic replication for more information.

In the message text:

value
    Attribute value

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the add or modify input to specify a value that is valid for the attribute. Then, reissue the operation.

R008016   **SSL support is not configured**

Explanation: An LDAP add or modify operation involving a basic replica entry failed because it specifies **replicaUseSSL true** for the entry but the LDAP server is not configured to use SSL. A basic replica entry is one that contains the **replicaObject** object class. The **sslKeyRingFile** option in the LDAP server configuration file is used to configure the LDAP server to use SSL.

System action: The LDAP server continues to run, but the operation fails.

User response: If using SSL with the replica server is not required, change the add or modify input to specify **replicaUseSSL false**. Then, reissue the operation. If SSL is required, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, add the **sslKeyRingFile** option with an appropriate value to the LDAP server configuration file. Then restart the LDAP server.

R008017   **Password policy entry '*name*' is in use and cannot be deleted**

Explanation: An LDAP delete operation failed because the entry is a password policy entry that is in use by a user or a group. A password policy entry can only be deleted when it is no longer referenced from another entry.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Determine which entries are referencing the password policy entry by searching the server using the filter (|(ibm-pwdIndividualPolicyDN=*name*)(ibm-pwdGroupPolicyDN=*name*)). Remove or change these values in these attributes in the entries. Then, reissue the operation.

R008018   **Value for attribute '*name*' must be positive**

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute. The value must be a number greater than or equal to 0.

In the message text:

name
     Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the attribute value in the operation input. Then, reissue the operation.

R008019   **Value for attribute '*name*' must be less than *value***

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute. The attribute value must be a number less than the maximum value.

In the message text:

name
     Attribute name

value
     Maximum value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the attribute value in the operation input. Then, reissue the operation.

R008020   **Value for attribute '*name1*' must be less than value for attribute '*name2*'**

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The value of *name1* must be less than the value of *name2*.

In the message text:

name1
     First attribute name

name2
     Second attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the first attribute value is smaller than the second one. Then, reissue the operation.

R008021   Value for attribute '*name1*' cannot be greater than value for attribute '*name2*'

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The value of *name1* must be less than or equal to the value of *name2*.

In the message text:

name1
    First attribute name

name2
    Second attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the first attribute value is not larger than the second one. Then, reissue the operation.

R008022   passwordMinAlphaChars plus passwordMinOtherChars must be less than pwdMinlength

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with other attributes in the entry. The values must be set so that the sum of the **passwordMinAlphaChars** and **passwordMinOtherChars** values is less than the **pwdMinLength** value.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the values are appropriate. Then, reissue the operation.

R008023   Must allow a user to change their password if they are required to change their password

Explanation: An LDAP add or modify operation failed because it tries to set an attribute value that is not valid for the attribute when used with another attribute in the entry. The **pwdAllowUserChange** attribute value cannot be **FALSE** when the **pwdMustChange** attribute value is **TRUE**.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that the values are appropriate. Then, reissue the operation.

R008024   Password policy entry '*name*' is in use and cannot be renamed

Explanation: An LDAP modify DN operation failed because the entry is a password policy entry that is in use by a user or a group. A password policy entry can only be renamed when it is no longer referenced from another entry.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Determine which entries are referencing the password policy entry by searching using the filter `(|(ibm-pwdIndividualPolicyDN=name)(ibm-pwdGroupPolicyDN=name))<\xph>`. Remove or change these values in these attributes in the entries. Then reissue the operation.

R008025   Password policy entry '*name*' is in use and cannot have objectclass pwdpolicy removed

Explanation: An LDAP modify operation failed because it changes the entry from a password policy entry to a non-password policy entry, but the entry is in use by a user or a group. A password policy entry can only be changed to a non-password policy entry when it is no longer referenced from another entry.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Determine which entries are referencing the password policy entry by searching using the filter (|(ibm-pwdIndividualPolicyDN=*name*)(ibm-pwdGroupPolicyDN=*name*)). Remove or change these values in these attributes in the entries. Then, reissue the operation.

R008101 **TDBM backend database is disabled**

Explanation: An LDAP operation involving a TDBM backend failed or partially failed because the TDBM backend is not enabled. TDBM cannot process the operation.

System action: The LDAP server continues to run. If the operation is targeted to the TDBM backend, the operation fails. For a bind to a different backend, the bind succeeds but the disabled TDBM backend is skipped when determining the groups to which the bound user belongs. Also, for a Kerberos bind, the disabled TDBM backend is not used to map the Kerberos identity to a TDBM distinguished name.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help determine why the TDBM backend is not active. If necessary, restart the LDAP server.

R008103 **Multiple entries contain uid '*userid*'**

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because there is more than one entry in a TDBM backend that contains the user ID specified in the bind information. The LDAP server does not know which entry to use for bind processing.

In the message text:

userid
    User ID used in the bind operation

System action: The LDAP server continues to run, but the operation fails.

User response: Use an LDAP search operation with the filter **uid=***userid* to determine which entries in the TDBM backend contain the indicated user ID. Modify the **uid** attribute in the entries so that only the entry you want to bind with has the indicated value. Then, reissue the operation.

R008104 **Clear password is not available**

Explanation: An LDAP bind operation using CRAM-MD5 or DIGEST-MD5 authentication failed because it cannot decrypt a value for the **userPassword** attribute in the entry that contains the bind distinguished name (DN) or user ID specified in the bind information. The **userPassword** values in the entry must be either in the clear or encrypted using a two-way encryption algorithm.

System action: The LDAP server continues to run, but the operation fails.

User response: If a user ID is only specified in the bind information, use an LDAP search operation with the filter **uid=***userid* to determine which entry contains the indicated user ID. Modify the entry to remove all the **userPassword** values that are not in the clear or encrypted using a two-way algorithm. Then, reissue the operation.

R008106 **Dynamic group search filter '*value*' is not valid**

Explanation: An LDAP operation or utility failed because it involves a dynamic group whose filter value is not acceptable. See Dynamic groups for more information.

In the message text:

value
    Filter value

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Correct the filter value in the operation or utility input. Then, reissue the operation.

R008107   Non-numeric object identifier '*identifier***' is not allowed when using a TDBM database with DB_VERSION less than 4.0**

Explanation: An LDAP schema modify operation failed because a non-numeric object identifier is used in an object class or attribute modification but a TDBM backend is running at a level that only supports usage of numeric identifiers. The value of the DB_VERSION column in the DIR_MISC table in the TDBM DB2 database must be 4.0 or higher to allow usage of non-numeric identifiers.

In the message text:

identifier
    Non-numeric identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Specify a value of at least **4** for the **srvCompatLevel** option in the LDAP server configuration file. Then, restart the LDAP server. Alternatively, update DB_VERSION value directly in DB2 after the LDAP server has been stopped. Then, restart the LDAP server.

R008108   No base entry specified in dynamic group URL '*url***'**

Explanation: An LDAP operation or utility failed because the **memberURL** attribute value specifying the dynamic group search expression does not contain a base entry. A base entry is required in a dynamic group URL. The format of a dynamic group URL is: `ldap:///baseDN[??[searchScope][?searchFilter]]` See Dynamic groups for more information.

In the message text:

url
    Dynamic group URL

System action: The LDAP server continues to run, but the operation or utility fails.

User response: Update the **memberURL** attribute value to specify a baseDN in the operation or utility input. Then, reissue the operation.

R008109   Unable to connect to DB2 subsystem '*name***'**

Explanation: An LDAP operation failed because a connection could not be established with the DB2 subsystem. This may occur because the DB2 subsystem is down or the DB2 connections have been exhausted. The DB2 subsystem is required when communicating with the TDBM or DB2-based GDBM backend while the LDAP server is running.

In the message text:

name
    DB2 subsystem name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the DB2 subsystem is down, the subsystem must be brought back up. If the DB2 subsystem is running, verify that there are enough DB2 connections. See Installing and setting up DB2 for TDBM and GDBM (DB2-based) for more information. If there are enough DB2 connections, use any server messages and server debug ERROR+PERF+TDBM trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008110   Unable to read an entry from the DB2 database

Explanation: An LDAP operation failed because the entry could not be read from the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and

correct the problem. If the problem persists, contact the service representative.

R008111   **Unable to update an entry in the DB2 database**

Explanation: An LDAP operation failed because the entry could not be updated in the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008112   **Unable to add an entry to the DB2 database**

Explanation: An LDAP operation failed because the entry could not be added to the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008113   **Unable to delete an entry from the DB2 database**

Explanation: An LDAP operation failed because the entry could not be deleted from the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008114   **Unable to commit the changes to the DB2 database**

Explanation: An LDAP operation failed because the changes could not be committed to the TDBM or DB2-based GDBM backend.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008115   **An internal TDBM backend error has occurred**

Explanation: An LDAP operation failed because the LDAP server has detected an internal programming error in the TDBM backend.

System action: The LDAP server continues, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+PERF+TDBM debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R008116   **DB2 subsystem '**_name_**' is not available**

Explanation: An LDAP operation failed because the DB2 subsystem is down or a connection cannot be established. The DB2 subsystem is required when communicating with the TDBM or DB2-based GDBM backend when the LDAP server is running.

In the message text:

name
    DB2 subsystem name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the DB2 subsystem is down, the subsystem must be brought back up. If the DB2 subsystem is running, use any server messages and ERROR+PERF+TDBM debug trace output to assist in locating and correcting the problem. If the problem persists, contact the service representative.

R008117   **Attribute object identifier '**_identifier_**' is longer than 200 characters**

Explanation: An LDAP schema modify operation failed because an attribute object identifier that is too long for usage in TDBM appears in a modification. The maximum length of an object identifier in TDBM is 200.

In the message text:

identifier
    Attribute identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Change the identifier in the modify input to have an acceptable length. Then, reissue the operation.

R008118   **Object class name '**_name_**' is longer than 200 characters**

Explanation: An LDAP schema modify operation failed because an object class name that is too long for usage in TDBM appears in a modification. The maximum length of an object class name in TDBM is 200.

In the message text:

name
    Object class name

System action: The LDAP server continues to run, but the operation fails.

User response: Change the object class name in the modify input to have an acceptable length. Then, reissue the operation.

R008119   **DN '**_name_**' exceeds the maximum length of** _size_

Explanation: An LDAP add or modify DN operation failed because a distinguished name (DN) involved in the operation is too long for usage in TDBM. This DN can be the target of the operation or, for a modify DN, another DN affected by renaming the target DN. The maximum DN length in TDBM is the size set for the DN column in the DIR_ENTRY table when TDBM DB2 database is created.

In the message text:

name
    Distinguished name

size
    Maximum length of a distinguished name

System action: The LDAP server continues to run, but the operation fails.

User response: For an add operation, change the DN in the input so that the length is acceptable. For a modify DN operation, ensure that the rename does not create distinguished names that are too long for TDBM. Note that a subtree rename affects the DN of each entry within the subtree. Then, reissue the operation. If the maximum DN length is too small, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, the size of the DN column in the DIR_ENTRY table can be changed to increase the maximum size of a DN in TDBM. See the instructions in the **DSTDBMDB** member of the **GLD.SGLDSAMP** data set for more information. The LDAP server must be stopped when changes are made to the TDBM DB2 database. Then, restart the LDAP server.

R008120   Subtree move is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a subtree to another subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move subtrees. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree move, restart the replica with that capability enabled. The replica server must return `1.3.18.0.2.32.33` as one of the values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008121   Subtree rename is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to rename a subtree but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not rename a subtree entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that rename subtree entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with subtree rename, restart that capability enabled. The replica server must return `1.3.18.0.2.32.34` as one of the values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008122   New superior is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because it tries to move a leaf entry to another subtree, but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not specify a new superior for the leaf entry. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support modify DN operations that move leaf entries. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support modify DN operations with leaf or subtree move, restart the replica with either or both of those capabilities enabled. The replica server must return `1.3.18.0.2.32.35` or `1.3.18.0.2.32.33` (or both) as values of the **ibm-enabledCapabilities** attribute when searching the root DSE entry.

R008123   DN attribute realignment is not supported by the replica servers

Explanation: An LDAP modify DN operation failed because the **IBMModifyDNRealignDNAttributesControl** control to realign other DN attributes is included in the operation but a replica of the LDAP server does not support this type of modify DN. This operation is only allowed if all the server replicas support it.

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify DN input so that it does not include the control. Then, reissue the operation. Alternatively, contact an LDAP administrator to change the replica servers so that they support realignment. After the problem is resolved, reissue the operation.

Administrator response: If the replica server can support realignment of other DN attributes, restart the replica with

this capability enabled. The replica server must return 1.3.18.0.2.10.11 as a value of the **supportedControl** attribute when searching the root DSE entry.

R008124   **Changelog root must have an explicit and propagating ACL**

Explanation: An LDAP modify operation to a DB2-based GDBM failed because it deletes the **aclEntry** or **entryOwner** attribute in the change log suffix entry (cn=changelog). The change log suffix entry must always have explicit values for these attributes when GDBM is DB2-based. These values are always propagated to the entries in the change log to provide access control for these entries.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify input so that it does nor remove all the values for the **aclEntry** or **entryOwner** attribute. Then, reissue the operation.

R008125   **Matching rule '*rule*' is not supported for syntax '*syntax* (*description*)' when using a TDBM database with DB_VERSION less than 4.0**

Explanation: An LDAP schema modify operation failed because a modified attribute includes a matching rule and syntax combination that is not supported in a TDBM backend. The TDBM backend is running at an older level that does not allow the combination. The combinations that are not supported by a TDBM backend running at an older level are:

- integerFirstComponentMatch equality rule with Integer syntax
- objectIdentifierFirstComponentMatch equality rule with Object Identifier syntax
- generalizedTimeMatch equality rule with UTC Time syntax

In the message text:

rule
   Matching rule name

syntax
   Syntax numeric identifier

description
   Syntax description

System action: The LDAP server continues to run, but the operation fails.

User response: Change the modify input so that the matching rule and syntax combination is acceptable to the TDBM backend. Then, reissue the operation.

R008126   **Exhausted all unique keys**

Explanation: An LDAP operation failed because the TDBM or DB2-based GDBM backend is unable to assign a unique entry identifier (EID) because all unique keys have been exhausted in the partition.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See message GLD3344E for information about recovering from the error.

R008127   **DB2 database is no longer in a consistent state**

Explanation: An LDAP operation failed because the TDBM or DB2-based GDBM backend is no longer in a consistent state. The DIR_EID table has been modified while the LDAP server is running.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: See message GLD3343E for information about recovering from the error.

| R010001 | Invalid character in descriptor '*descriptor*' |

Explanation: An LDAP operation failed because it involves a descriptor value that contains a character that is not allowed in a descriptor. A text descriptor consists of letters, numbers, dash, underscore, and semicolon, while an object identifier descriptor consists of digits separated by periods. An object identifier can optionally be prefixed with `oid`. When used within a schema definition, a text descriptor cannot contain a semicolon and must start with a letter.

In the message text:

descriptor
    Descriptor that is not valid

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the descriptors are valid. Then, reissue the operation.

| R010002 | Missing attribute type in DN component '*component*' |

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value without an attribute. For example, in the DN `cn=fred,=test,o=ibm`, the `=test,o=ibm` component contains a value (`test`) without an attribute.

In the message text:

component
    Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then, reissue the operation.

| R010003 | Missing attribute value in DN component '*component*' |

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute without a value. For example, in the DN `cn=fred,ou=,o=ibm`, the `ou=,o=ibm` component contains an attribute (`ou`) without a value.

In the message text:

component
    Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are complete. Then, reissue the operation.

| R010004 | No equality matching rule for DN attribute '*name*' |

Explanation: An LDAP operation failed because it involves a distinguished name (DN) which contains an attribute whose schema definition does not include an equality matching rule.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that every DN uses attributes that have an equality matching rule. Then, reissue the operation.

R010005   **No matching rule defined for string value '***value***'**

Explanation: An LDAP operation such as a compare or search failed because it involves a comparison using a value for an attribute whose schema definition does not include a matching rule that allows comparing the value. In particular, some matching rules, such as **booleanMatch**, do not support using a value in a substring filter.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that it uses attribute values that are supported for the type of usage. Then, reissue the operation.

R010006   **UTC Time value '***value***' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the UTC Time syntax of the attribute. The format of a UTC Time value is

- *yymmddhhmmss.ffffff* for local time
- *yymmddhhmmss.ffffff*Z for Greenwich Mean Time
- *yymmddhhmmss.ffffff-hhmm* for time zone west of GMT
- *yymmddhhmmss.ffffff+hhmm* for time zone east of GMT

where *yy* is year, *mm* is month, *dd* is day, *hh* is hour, *mm* is minutes, *ss* is seconds, and *ffffff* is microseconds. The seconds (*ss*) and microseconds (*ffffff*) can be omitted and default to 0.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the UTC Time syntax. Then, reissue the operation.

R010007   **Invalid IA5 character found in string value '***value***'**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the IA5 String syntax of the attribute. The characters that can be used in an IA5 String are those that translate to the 7-bit ASCII characters. Note that the null character (x'00') is a valid IA5 String character.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the IA5 String syntax. Then, reissue the operation.

R010008   **Bit string value '***value***' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the bit string syntax of the attribute. A complete bit string value must be a series of 0 and 1 characters enclosed in single quotation marks and suffixed with b or B. The value must contain at least one 0 or 1. An example is '01011'B. A substring value used in a substring filter can be any part of the complete value, and does not have to contain a 0 or 1. An example is 1'.

In the message text:

value
    Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the bit string syntax. Then, reissue the operation.

R010009   **Boolean value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a value that is not allowed by the Boolean syntax of the attribute. A Boolean value must be TRUE or FALSE, with case ignored.

In the message text:

value
     Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Boolean syntax. Then, reissue the operation.

R010011   **Telephone number value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Telephone Number syntax of the attribute. The characters that can be used in a Telephone Number value are: letters, numbers, double quotation mark, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space. Note that the quotation mark character is not allowed for a Telephone Number value.

In the message text:

value
     Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Telephone Number syntax. Then, reissue the operation.

R010012   **UUID value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the IBM Entry UUID syntax of the attribute. A complete IBM Entry UUID value is a 36-character string composed of groups of hexadecimal digits separated by hyphens in the following format: *8_digits-4_digits-4-digits-4-digits_12_digits*. An example is 55A4C000-B93F-1A5C-86B3-402084027431. A substring value used in a substring filter can be any part of the complete value. An example is 4C000-B93F-1A.

In the message text:

value
     Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the IBM Entry UUID syntax. Then, reissue the operation.

R010014   **Country string value '*value*' is not valid**

Explanation: An LDAP operation failed because an attribute value involved in the operation contains a character that is not allowed by the Country String syntax of the attribute. A complete Country String value must consist of exactly two of the following characters: letters, numbers, quote, open parens, close parens, plus sign, comma, dash, period, forward slash, colon, question mark, and space. A substring value used in a substring filter can be one or two of those characters.

In the message text:

value
     Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the value used in the operation input so that it is valid for the Country String syntax. Then, reissue the operation.

R010015   **No backend for DN '***name***'**

Explanation: An LDAP operation (or extended operation) failed because the distinguished name (DN) of the target of the operation either does not fall under any backend in the LDAP server or falls under a backend which does not support that operation. The backend is determined using the suffix part of the DN of the target of the operation. In particular, the **GetEffectiveAcl** extended operation is only supported by LDBM, TDBM, GDBM, CDBM, and schema backends. Similarly, the **Effective password policy** and **Account status** extended operations are not supported by the SDBM backend.

In the message text:

name
    Distinguished name of target

System action: The LDAP server continues to run, but the operation fails.

User response: Change the target of the operation to be in an existing backend that supports the operation. Then, reissue the operation.

R010016   **Backend initialization failed for DN '***name***'**

Explanation: An LDAP operation or utility failed because the backend to which it is directed did not complete initialization, thus cannot process the operation. The backend is determined using the suffix part of the distinguished name (DN) of the target of the operation. For a change log request, the target is the GDBM backend (suffix is `cn=changelog`).

In the message text:

name
    Distinguished name of target

System action: The LDAP server continues to run, but the operation fails.

User response: Change the target of the operation to be in a backend that is active. Then, reissue the operation or restart the utility. If the unavailable backend is needed, contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help determine why the backend did not complete initialization. Then, restart the LDAP server.

R010017   *operation* **is not supported by the** *type* **backend**

Explanation: An LDAP operation failed because the backend to which it is targeted does not support that type of operation. In particular, the schema (suffix is `cn=schema`), root DSE (suffix is zero-length string, `""`), and monitor (suffix is `cn=monitor`) backends are limited in the operations they allow. The schema backend is restricted to modify and search operations. The root DSE and cn=monitor backends are restricted to search operations.

In the message text:

operation
    Operation name

type
    Backend type

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue the unsupported operation for this type of backend.

R010018   **Search with null base DN requires either scope=base (for root DSE search) or scope=subtree (for null based subtree search)**

Explanation: An LDAP search operation using the null based distinguished name (search target is the zero-length string, or "") failed because the search scope is not base or subtree. The scope of a null based search must be either `base` or `sub`. A `base` scope search retrieves the attributes in the root DSE entry. This search requires that the filter is `objectclass=*`. A `sub` scope search retrieves all the entries in the LDBM, TDBM, and CDBM backends of the LDAP server. Any search filter can be used with this scope.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the null based search input. Then reissue the operation.

R010019   **Search with null base DN requires filter (objectclass=*)**

Explanation: An LDAP search operation using the null based distinguished name (search target is the zero-length string, or "") and scope `base` failed because the search filter is not `objectclass=*`. This is the only filter supported when using a null based search to retrieve the attributes of the root DSE entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the null based search input. Then, reissue the operation.

R010020   **Schema search requires scope=base**

Explanation: An LDAP search operation for the schema entry failed because the search scope specified in the operation is not base. To search the schema entry, specify a target of `cn=schema`, a scope of `base`, and a filter of `objectclass=*` or `objectclass=`*name*, where *name* is `ibmsubschema`, `subentry`, `subschema`, or `top`.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the schema search input. Then, reissue the operation.

R010021   **Schema search requires an object class presence or equality filter**

Explanation: An LDAP search operation for the schema entry failed because the search filter is not supported when searching the schema. To search the schema entry, specify a target of `cn=schema`, a scope of `base`, and a filter of `objectclass=*` or `objectclass=`*name* where *name* is `ibmsubschema`, `subentry`, `subschema`, or `top`.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the schema search input. Then, reissue the operation.

R010022   **Binary option is not supported by the** *type* **backend**

Explanation: An LDAP search operation failed because the search specifies attributes to be returned with the binary option but the backend to which the search is targeted does not support the binary option. The binary option is specified by appending **;binary** to the attribute to be returned, for example `cn;binary`. In particular, the schema (suffix is `cn=schema`), root DSE (suffix is zero-length string, ""), and monitor (suffix is `cn=monitor`) backends do not support using the binary option.

In the message text:

type
   Backend type

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the binary option from the attributes to be returned in the search input. Then, reissue the operation.

R010023   LDAP protocol version 3 is required for server controls

Explanation: An LDAP operation failed because it contains server controls that cannot be processed when the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support server controls.

System action: The LDAP server continues to run, but the operation fails.

User response: Either do not specify controls on operations or rebind using protocol version 3. Then, reissue the operation.

R010024   Unable to decode value for control '*identifier*'

Explanation: An LDAP operation failed because the operation contains a server control whose contents cannot be decoded. The format or contents of the control are not correct for the type of control. The reason code can also be received when running the **ldif2ds** utility with input that contains controls that cannot be decoded.

In the message text:

identifier
    Server control identifier

System action: The LDAP server continues to run, but the operation fails. For the **ldif2ds** utility, the utility skips the rest of this entry in the input and continues the check phase with the next complete entry. No entries are prepared or loaded.

User response: Either remove the control from the operation or utility input or ensure that the control is properly encoded. Contact an LDAP administrator for assistance with the problem. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and resolve the control encoding problems.

R010025   No value provided for control '*identifier*'

Explanation: An LDAP operation failed because the operation contains a server control that must contain a value but did not.

In the message text:

identifier
    Server control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Either remove the control from the operation input or ensure that there is a properly encoded control value. Then, reissue the operation.

R010027   Control '*identifier*' is specified multiple times

Explanation: An LDAP operation failed because the operation contains the same server control more than once. Some controls cannot be specified multiple times.

In the message text:

identifier
    Server control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the extra server controls from the operation input. Then, reissue the operation.

R010028   Critical control '*identifier*' cannot be processed

Explanation: An LDAP operation failed because the operation contains a server control sent as critical but an error occurs when the server tries to process the control. An operation is rejected if the server cannot use a critical control. For example, a search containing the **SortedResults** control (identifier is `1.2.840.113556.1.4.473`) fails if there is a problem decoding the sort keys and the control is critical.

In the message text:

identifier
    Server control identifier

System action: The LDAP server continues to run, but the operation fails.

User response: If sorting is needed, ensure that the control contents are valid. If sorting is not needed, remove the control or send it as non-critical. Then, reissue the operation.

R010029   **Maximum of** *size* **paged result sets has been exceeded**

Explanation: An LDAP search operation failed because it requests paged results, but the requester already has the maximum number of concurrent paged search requests allowed by the server. When a search contains the **PagedResults** control (identifier is 1.2.840.113556.1.4.319) sent as critical and the server limit is already reached for the requester, the search is rejected. Note that the **-q** option of the z/OS **ldapsearch** client utility always sends the **PagedResults** control as critical. The limit on paged search requests is specified in the **ibm-slapdPagedResLmt** attribute in the **cn=configuration** entry in the CDBM backend. If the attribute value is set to 0, then no paging of search output is performed. Critical requests are rejected and non-critical requests are processed as non-paged searches.

In the message text:

size
    Maximum number of paged search requests

System action: The LDAP server continues to run, but the operation fails.

User response: Finish outstanding paged search requests. Then reissue the operation. If the maximum number of concurrent paged search requests allowed is too low, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If requested, increase the limit on the number of concurrent paged search requests for each requester by modifying the value of the **ibm-slapdPagedResLmt** attribute in the **cn=configuration** entry. The server does not need to be restarted.

R010030   **Unable to compute search message digest**

Explanation: An LDAP search operation failed because the server cannot create a digest representing the search parameters (base, scope, filter, controls, and so on). This is used to ensure that each successive search operation for the next page of results matches the original search criteria.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR debug trace output to help locate and solve the problem. If the problem persists, contact the service representative.

R010031   **Page size of zero is not valid for initial request**

Explanation: An LDAP search operation failed because it requests paged results with an initial page size of 0 in the **PagedResults** control (identifier is 1.2.840.113556.1.4.319). The initial page size must be greater than 0. The last continuation search can specify a page size of 0 to end the paged search. Note that specifying 0 as the first value for the **-q** option on the z/OS **ldapsearch** client utility results in a paged search request with an initial page size of 0.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the paged search input so that the initial page size in the **PagedResults** control is not 0. Then, reissue the operation.

R010032   **Paged search results not found**

Explanation: An LDAP search operation to obtain the next page of results for a search failed because the server cannot find the search results identified in the **PagedResults** control (identifier is 1.2.840.113556.1.4.319) in the continuation search request.

System action: The LDAP server continues to run, but the operation fails,

User response: Specify a valid cookie on the paged search request. To obtain the next page of search results, the cookie specified on the paged search request must be the cookie returned by the previous paged search response. Then reissue the operation.

R010033 **Continuation search request not same as initial request**

Explanation: An LDAP search operation to obtain the next page of results for a search failed because the search criteria (base, scope, filter, controls, and so on) are not the same as for the initial search. The continuation search request must match the initial search request.

System action: The LDAP server continues to run, but the operation fails.

User response: Specify a paged search request with all values identical to the initial request, except for the message ID, the cookie, and optionally a modified pageSize. Then, reissue the operation.

R010034 **Unknown LDAP message type** *type*

Explanation: An LDAP operation failed because the type of operation is not supported by the LDAP server.

In the message text:

type
Message or operation type

System action: The LDAP server continues to run, but the operation fails.

User response: Do not issue this type of operation to the LDAP server.

R010035 **Binary attribute type '***name***' not allowed in DN**

Explanation: An LDAP operation failed because a distinguished name (DN) involved in the operation contains a binary attribute. Binary attributes cannot be used within a DN. A binary attribute has one of the following syntaxes: Binary, Certificate, Certificate List, Certificate Pair, Fax, JPEG, or Octet String.

In the message text:

name
Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the binary attribute from the distinguished name. Then, reissue the operation.

R010036 **No value provided for attribute '***name***'**

Explanation: An LDAP operation failed because an attribute without a value is included in the operation. This can occur, for example, if an add or modify operation does not specify any value for an attribute being added or replaced (note that a value does not need to be specified for an attribute being deleted - this deletes the entire attribute).

In the message text:

name
Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a value where appropriate for all attributes. Then, reissue the operation.

R010037 **Binary transfer is not supported for non-binary attribute type '***name***'**

Explanation: An LDAP operation failed because an attribute involved in the operation specifies binary transfer but the attribute is not a binary attribute. The server can only use binary transfer when processing a binary attribute. Binary transfer is specified by appending **;binary** to the attribute, for example `cn;binary`. An attribute is binary if it has one of the following syntaxes: Binary, Certificate, Certificate List, Certificate Pair, Fax, JPEG, or Octet String. This

error can occur when specifying the attribute in the operation input, including in the filter of a search operation.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Remove the binary transfer option from the attribute in the operation input. Then, reissue the operation.

R010039   **Incorrect ASN.1 encoding in DN component '***component***'**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value which begins with a number sign (#) but is not a valid ASN.1 encoded value. A number sign is used at the beginning of an attribute value in a DN to indicate that the value is an ASN.1-encoded value. The number sign must be followed by an even number of hexadecimal digits representing the encoding of each of the octets of the BER encoding of the value.

In the message text:

component
    Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are acceptable. Then, reissue the operation.

R010040   **Unsupported ASN.1 type in DN component '***component***'**

Explanation: An LDAP operation failed because it involves a distinguished name (DN) in which one of the components has an attribute value which is not supported. This can occur if the value is ASN.1 encoded (it begins with a number sign (#)) but the underlying value syntax is not supported by the server. It can also result from using an attribute which has generalizedTimeMatch or utcTimeMatch as its equality matching rule. The server does not allow using attributes with these matching rules in a DN.

In the message text:

component
    Component of the DN

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input so that all the distinguished names that it uses are acceptable. Then, reissue the operation.

R010041   **Server control does not have an object identifier**

Explanation: An LDAP operation failed because the operation contained a server control that does not contain an identifier. The server does not know how to decode the control.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that all controls are correctly specified in the operation input. Then, reissue the operation.

R010042   **Definition has no components:** *definition*

Explanation: An LDAP schema modify operation failed because there is no value after a left parenthesis in the definition of an attribute, object class, or ibmattributetypes. The part of the definition that is in error is indicated in the reason code. See LDAP directory schema for more information about the format for the definitions of the various elements of the schema. The reason code may also occur on an entry add or modify operation when adding a value that has no characters after the beginning left parenthesis for an attribute that is defined with the **integerFirstComponentMatch** matching rule. In this case, the value is indicated in the reason code.

In the message text:

definition
    Attribute or object class definition or value

System action: The LDAP server continues to run, but the operation fails.

User response: For a schema modify operation, check the input to ensure that all the definitions are correctly formatted. For an entry add or modify operation, add characters after the left parenthesis at the beginning of the value for the attribute defined with the **integerFirstComponentMatch** matching rule. Then, reissue the operation.

R010043   **Substring filter for attribute '*name*' has no value**

Explanation: An LDAP search operation failed because it uses a substring filter in which one of the substring parts has no value. Every part of a substring filter must contain a nonzero length string.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search input so that every part of the substring filter has a value. Then, reissue the operation.

R010044   **Substring filter type *type* is used incorrectly**

Explanation: An LDAP operation failed because part of a substring filter involved in the operation is out of order. Each part of a substring filter is tagged as initial (type 0), any (type 1), or final (type 2) and the substring parts must be sequenced in that order. In this substring filter, either a substring part typed as initial is not the first part or a substring part typed as final is not the last part.

In the message text:

type
    Substring filter part type

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search filter so that the parts of the substring filter are in the correct sequence. Then, reissue the operation.

R010045   ***type* filter has an empty filter set**

Explanation: An LDAP search operation failed because some part of the filter involved in the operation is missing. This can occur, for example, if an **AND** filter is missing the attribute value to search on.

In the message text:

type
    Filter type

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the search input so that all parts of the filter are completely specified. Then, reissue the operation.

R010047   **The new entry DN must exist in the same backend**

Explanation: An LDAP modify DN operation failed because it attempts to create an entry under a referral entry. A referral entry is one that contains the **referral** object class and the **ref** attribute. A referral entry refers to a different entry and cannot be the parent of any entry.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that it does not attempt to move entries under a referral entry. Then, reissue the operation.

R010048   **The specified permissions are not allowed for the access class in aclEntry attribute value '***value***'**

Explanation: An LDAP modify or add operation failed because it includes a value for the **aclEntry** attribute that is not valid. The value specifies the wrong type of permissions for an access class. The acceptable permissions for the **object** access class are **a** and **d**. The acceptable permissions for all other access classes are **r**, **w**, **s**, and **c**.

In the message text:

value
   Attribute value

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the **aclEntry** value in the add or modify input. Then, reissue the operation.

R010049   *name* **failed with return code** *return_code*, **reason code** *reason_code*

Explanation: An LDAP operation or utility failed because an attribute value cannot be hashed, encrypted, or decrypted. The attribute is encrypted or hashed based on the **pwEncryption** or **secretEncryption** option in the LDAP server configuration file. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPw**, or **ibm-slapdMasterPw**.

In the message text:

name
   Routine name

return_code
   Return code from routine

reason_code
   Reason code from routine

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the routine indicated is **CRYPT**, see the description of **crypt()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error. If an ICSF routine is indicated, see the description of the routine in *z/OS Cryptographic Services ICSF Application Programmer's Guide* for more information about the error. If the problem persists, contact the service representative.

R010050   **Label '***name***' is not defined**

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be encrypted or decrypted. During encryption, the AES or DES key label specified in the **pwEncryption** or **secretEncryption** option in the LDAP server configuration file must match a key label in the **LDAPKEYS** data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPw**, or **ibm-slapdMasterPw**.

In the message text:

name
   Label name

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If the AES or DES key label indicated in the message is not present in the **LDAPKEYS** data set or the ICSF CKDS, add the label and key. If the error occurs during decryption, the original AES or DES key label that was used for encryption of the value must be added to the **LDAPKEYS** data set or the ICSF CKDS to allow successful AES or

DES decryption. If using the **LDAPKEYS** data set with the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

R010051   ICSF services are not available

Explanation: An LDAP operation or utility failed because ICSF is not running while hashing, encrypting, or decrypting an attribute value set up to use AES, DES, SHA-2, or salted SHA-2. This error can also occur while performing AES or DES encryption or decryption and the key label does not reside in the **LDAPKEYS** data set. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw**.

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to assist in locating and correcting the problem.
- If performing AES or DES decryption of an attribute value and the key label resides in the ICSF CKDS, verify that ICSF is started.
- If performing AES or DES decryption of an attribute value and the key label resides in the **LDAPKEYS** data set, verify that the **LDAPKEYS DD** card in the LDAP server procedure is correct and contains the key label. If using the **ds2ldif** utility, use the **-k** option to specify the location of the **LDAPKEYS** data set.
- If performing AES or DES encryption, verify that the key label specified on the **pwEncryption** option is in the ICSF CKDS or the **LDAPKEYS** data set. If using the **ldif2ds** utility and the key label resides in the **LDAPKEYS** data set, use the **-k** option to specify the location of the **LDAPKEYS** data set.
- If the attribute value is hashed in SHA-2 or salted SHA-2, verify that ICSF is started.

If the problem persists, contact the service representative.

R010052   Incorrect key length for label '*name*'

Explanation: An LDAP operation or utility failed because an attribute value is set up to use AES or DES encryption with a key in the **LDAPKEYS** data set that is not the correct length. During encryption, the AES or DES key label specified in the **pwEncryption** or **secretEncryption** option in the LDAP server configuration file must match a key label in the **LDAPKEYS** data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. A DES key in the **LDAPKEYS** data set must be 8, 16, or 32 bytes long and have odd parity. In a DES key, the lower-order bit of each byte is the parity bit. The parity bit must be set so that there is an odd number of 1's in each byte, but the bit is not used for encryption. An AES key in the **LDAPKEYS** data set must be 32 bytes long. See Symmetric encryption keys for more information.

In the message text:

name
      Label name

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Update the AES or DES key in the **LDAPKEYS** data set to have a valid length. If using the LDAP server, then restart the LDAP server.

R010053   Incorrect key parity for label '*name*'

Explanation: An LDAP operation or utility failed because an attribute value is set up to use DES encryption with a key in the **LDAPKEYS** data set that does not have odd parity. During encryption, the DES key label specified in the **pwEncryption** or **secretEncryption** option in the LDAP server configuration file must match a key label in the **LDAPKEYS** data set or the ICSF CKDS. The same is true during decryption for the key label contained in the encrypted attribute value. A DES key in the **LDAPKEYS** data set must be 8, 16, or 32 bytes long and have odd parity. In a DES key, the lower-order bit of each byte is the parity bit. The parity bit must be set so that there is an odd

number of 1's in each byte, but the bit is not used for encryption. See Symmetric encryption keys for more information.

In the message text:

name
   Label name

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Update the DES key in the **LDAPKEYS** data set to specify a valid key. If using the LDAP server, then restart the LDAP server.

R010054   **Encryption type *type* is not supported**

Explanation: An LDAP operation or utility failed because an attribute value cannot be hashed or encrypted by the method specified in the **pwEncryption** or **secretEncryption** option in the LDAP server configuration file. The hashing or encryption method specified in the **pwEncryption** or **secretEncryption** option is not recognized by the LDAP server or utility because an internal programming error occurred. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw**.

In the message text:

type
   Numeric hashing or encryption type

System action: The LDAP server continues to run, but the operation fails. The **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. If using the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

R010055   **Encryption tag '*value*' is not supported**

Explanation: An LDAP operation or utility failed because the encryption tag specified in an attribute value is not valid. The attribute is usually one of the following: **userPassword** or **ibm-slapdAdminPw**. The server compatibility level must be 6 or greater to use Salted SHA-1 ({SSHA}) tagged attribute values. The server compatibility level must be 7 or greater to use SHA-2 or Salted SHA-2 tagged attribute values.

In the message text:

value
   Tag value

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** or **ldif2ds** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Verify that the **serverCompatLevel** option is set to the correct value and the encryption tag is recognized by the LDAP server or utility. See the **pwEncryption** option in Customizing the LDAP server configuration for more information. If necessary, restart the LDAP server. If the problem persists, contact the service representative.

R010056   **Encrypted data length is not a multiple of *number***

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be decrypted because the encrypted data is not a valid length. The length of the encrypted data must be a multiple of the length indicated in the reason code. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw**.

In the message text:

number
   Data length multiplier

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. The attribute value may need to be replaced with a new value because the encrypted data is corrupted. If the problem persists, contact the service representative.

R010057   **Incorrect key value for label '*name*'**

Explanation: An LDAP operation or utility failed because an attribute value set up to use AES or DES encryption cannot be decrypted. During decryption, the AES or DES key label is specified in the encrypted attribute value. The AES or DES key is unable to decrypt the AES or DES encrypted data. The attribute is usually one of the following: **userPassword**, **ibm-slapdAdminPw**, **secretKey**, **replicaCredentials**, **ibm-replicaKeyPwd**, or **ibm-slapdMasterPw**.

In the message text:

name
   Label name

System action: The LDAP server continues to run, but the operation fails. The **ds2ldif** utility ends.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation or restart the utility.

Administrator response: Use any server messages and ERROR debug trace output to help locate and correct the problem. Restore the original AES or DES key in the ICSF CKDS or the **LDAPKEYS** data set to allow AES or DES decryption to occur. If using the **LDAPKEYS** data set with the LDAP server, then restart the LDAP server. If the problem persists, contact the service representative.

R010058   **Old and new password values were not supplied**

Explanation: An LDAP native password modify operation failed because the input contains a **userPassword** attribute add or delete modification which does not contain a value. The delete modification must specify the existing password or password phrase value and the add modification must specify the new value. The delete modification must precede the add modification.

System action: The LDAP server continues to run, but the operation fails.

User response: In the modify input, specify the existing password or password phrase value in the delete modification for **userPassword** and the new value in the add modification. Then reissue the operation.

R010060   **LDAP protocol version 3 is required for extended operations**

Explanation: An LDAP extended operation failed because the requester is not using LDAP protocol version 3. The requester established the protocol version to use during bind. Protocol levels below 3 do not support extended operations.

System action: The LDAP server continues to run, but the extended operation fails.

User response: Either do not use extended operations, or rebind using protocol version 3 and then reissue the extended operation.

R010061   **Only GetDnForUserid and GetPrivileges extended operations are supported**

Explanation: An LDAP operation failed because this connection to the LDAP server is restricted to usage for Policy Director. Only the Policy Director extended operations, **GetDnForUserid** and **GetPrivileges** can be processed on this connection.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not use this connection for any operations other than the Policy Director extended operations.

R010062   **Unable to communicate with cross-system group owner**

Explanation: An LDAP operation failed because the sysplex replica server is unable to communicate with the sysplex owner server over XCF (Cross System Facility)

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Verify that XCF is still running. Use any server messages and ERROR debug trace output to help locate and solve the problem. If the problem persists, contact the service representative.

R010064   **cn=monitor search requires filter (objectclass=*)**

Explanation: An LDAP search operation of the monitor backend failed because the search filter specified in the operation is not `objectclass=*`. To search the monitor backend, specify a target of `cn=monitor` and a filter of `objectclass=*`.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the filter in the search input. Then, reissue the operation.

R010065   **Unable to format attribute type '*attribute*' and value in entry '*name*'**

Explanation: The LDAP **ds2ldif** utility failed because it is unable to unload the entry because the attribute type and value for the entry could not be formatted into LDIF format. This formatted data is written to an internal buffer before it is written to the output LDIF file.

In the message text:

attribute
    Attribute name (and sometimes its value)

name
    Distinguished name of the entry

System action: The LDAP server continues to run, but the utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, restart the utility.

Administrator response: Verify that the attribute values for the entry contain the appropriate data so that they can be properly formatted to the output LDIF file. If necessary, perform an LDAP search request to retrieve the entry and the attribute values to verify them. Then, reissue the operation.

R010066   **Unable to write to file '*file_name*':** *error_code*/*reason_code* **- '*error_string*'**

Explanation: The **ds2ldif** utility or the LDAP server encountered an error while attempting to write a record to the output file. The output file is either a z/OS UNIX System Services file, a partitioned data set, or a sequential data set. The file name is specified on **-o** option of the **ds2ldif** utility. The error code, reason code, and error text indicated in the reason code are returned from one of the following: **fputs()**, **fflush()**, or **fclose()**. See the descriptions of these routines in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

file_name
    Output file name

error_code
    Error code from function

reason_code
    Reason code from function

error_string
    Text corresponding to the error code

System action: The LDAP server continues to run, but the utility fails.

User response: Contact an LDAP administrator. After the problem is resolved, restart the utility.

Administrator response: Use the information in the reason code to resolve the problem.

R010067   **No referrals defined for read only replica, unable to update entry '*name*'**

Explanation: An LDAP add, modify, delete, or modify DN operation failed because the targeted LDAP server is a read-only replica or consumer server that does not know to what master or supplier server it should resend the operation. A read-only replica or consumer server cannot perform operations that update the directory. For basic replication, it uses the **masterServer** configuration option to determine the master server, otherwise it uses the **referral** configuration option. For advanced replication, it uses the servers specified in the **ibm-replicaReferralURL** attribute value of the replication context entry. See Basic replication and Advanced replication for more information.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: For basic replication, ensure that the appropriate values are specified for the **masterServer** and **referral** options in the LDAP server configuration file. Then, restart the LDAP server. For advanced replication, ensure that the appropriate values are specified for the **ibm-replicaReferralURL** attribute value of the replication context entry.

R010068   **Paged search is allowed only when bound as an LDAP administrator**

Explanation: An LDAP search operation failed because a user that is not an LDAP administrator specified the **PagedResults** control (identifier is `1.2.840.113556.1.4.319`). Paged searches are only supported when bound as an LDAP administrator.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not specify the **PagedResults** control on the search request. If a paged search is needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If non-administrators need to issue paged searches, set the **ibm-slapdPagedResAllowNonAdmin** attribute value to **true** in the **cn=configuration** entry.

R010069   **Sorted search is allowed only when bound as an LDAP administrator**

Explanation: An LDAP search operation failed because a user that is not an LDAP administrator specified the **SortKeyRequest** control (identifier is `1.2.840.113556.1.4.473`). Sorted searches are only supported when bound as an LDAP administrator.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not specify the **SortKeyRequest** control on the search request. If a sorted search is needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If non-administrators need to issue sorted searches, set the **ibm-slapdSortSrchAllowNonAdmin** attribute value to **true** in the **cn=configuration** entry.

R010070   **Paged search support is disabled**

Explanation: An LDAP search operation failed because the **PagedResults** control (identifier is `1.2.840.113556.1.4.319`) was specified in the request but paged searches are not enabled in the LDAP server. Paged searches are enabled in the LDAP server when the **ibm-slapdPagedResLmt** attribute value in the **cn=configuration** entry is greater than 0.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not specify the **PagedResults** control (identifier is `1.2.840.113556.1.4.319`). If a paged search is needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If paged search is needed, update the **ibm-slapdPagedResLmt** attribute value in the **cn=configuration** entry to have a value greater than 0.

R010071   Sorted search support is disabled

Explanation: An LDAP search operation failed because the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473) was specified in the request but sorted searches are not enabled in the LDAP server. Sorted searches are enabled in the LDAP server when the **ibm-slapdSortKeyLimit** attribute value in the **cn=configuration** entry is greater than 0.

System action: The LDAP server continues to run, but the operation fails.

User response: Do not specify the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473). If a sorted search is needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If sorted search is needed, update the **ibm-slapdSortKeyLimit** attribute value in the **cn=configuration** entry to have a value greater than 0.

R010072   Maximum of *size* sorted search keys has been exceeded

Explanation: An LDAP search operation failed because the number of sort keys in the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473) exceeded the maximum number of sort keys allowed by the LDAP server. The number of sort keys that are allowed to be specified on a sorted search request is controlled by the **ibm-slapdSortKeyLimit** attribute value in the **cn=configuration** entry.

In the message text:

size
    Maximum number of sorted search keys

System action: The LDAP server continues to run, but the operation fails.

User response: Reduce the number of sort keys in the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473). If all sort keys are needed, contact an LDAP administrator. Then, reissue the operation.

Administrator response: If the maximum allowed number of sort keys must be increased, update the **ibm-slapdSortKeyLimit** attribute value in the **cn=configuration** entry.

R010073   Sort key matching rule is inappropriate

Explanation: An LDAP search operation failed because the ordering rule specified in the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473)is not appropriate for the schema syntax. See LDAP directory schema for information about the appropriate matching or ordering rules with the schema syntax.

System action: The LDAP server continues to run, but the operation fails.

User response: Update the ordering rule in the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473) to use an appropriate ordering rule for the schema syntax. Then, reissue the operation.

R010074   Sort key attribute specified more than once

Explanation: An LDAP search operation failed because an attribute type was specified more than once in the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473).

System action: The LDAP server continues to run, but the operation fails.

User response: Update the **SortKeyRequest** control (identifier is 1.2.840.113556.1.4.473) to specify each sort key attribute type once. Then, reissue the operation.

R010500   Unable to retrieve normalized values for attribute '*name*'

Explanation: An LDAP operation failed because the normalized attribute values could not be retrieved for the attribute type.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails to be replicated.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

R010501	Unable to retrieve the next change ID for replication context with DN '*name*'

Explanation: An LDAP operation failed because the next change identifier could not be obtained for the replication context.

In the message text:

name
    Distinguished name of context

System action: The LDAP server continues to run, but the operation fails to be replicated.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

R010502	More than one replication agreement exists for DN '*name*' and consumer URL '*url*'

Explanation: An LDAP add or modify operation failed because more than one replication agreement entry with the same consumer server URL (**ibm-replicaURL**) was found under the replication context entry.

In the message text:

name
    Distinguished name

url
    Consumer URL

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to specify a different consumer server URL for the **ibm-replicaURL** attribute value in the replication agreement entry. Then, reissue the operation input.

R010503	The '*name1*' and '*name2*' attributes are not allowed on DN '*name3*'

Explanation: An LDAP add operation failed because the attribute types are not allowed to be in the distinguished name (DN) entry.

In the message text:

name1
    First attribute name

name2
    Second attribute name

name3
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Update the distinguished name entry to remove the attribute types from the entry or operation input. Then, reissue the operation input.

R010504	DN '*name*' cannot be a replication context

Explanation: An LDAP add or modify operation failed because the distinguished name (DN) is not allowed to be a replication context entry. The **cn=localhost**, **cn=pwdpolicy,cn=ibmpolicies**, and **cn=configuration** entries are not allowed to be replication contexts.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer specify an objectclass value of **ibm-replicationContext** in the entry. Then, reissue the operation input.

R010505   **Unable to find replication context for DN '*name*'**

Explanation: An LDAP operation failed because the replication context entry could not be found.

In the message text:

name
    Distinguished name of context

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that a replication context entry is specified in the request. If it is a replication context entry, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

R010506   **Gateway server must be a Master server**

Explanation: An LDAP operation failed because a gateway server must be configured as a master server. The **ibm-replicationServerIsMaster** attribute value in the replica subentry must be set to **true** to designate this server as a master server.

System action: The LDAP server continues to run, but the operation fails.

User response: Modify the replica subentry to set the **ibm-replicationServerIsMaster** attribute to **true**. Then, reissue the operation input.

R010507   **Credential objectclass not found**

Explanation: An LDAP operation failed because the credentials entry referenced by the **ibm-replicaCredentialsDN** in the replication agreement does not have a valid objectclass value. A credentials entry must have an objectclass value of **ibm-replicationCredentialsSimple** or **ibm-replicationCredentialsExternal**.

System action: The LDAP server continues to run, but the operation fails

User response: Either update the **ibm-replicaCredentialsDN** attribute value in the replication agreement entry or modify the existing entry to specify an objectclass value of **ibm-replicationCredentialsSimple** or **ibm-replicationCredentialsExternal**.

R010508   **No objectclass attribute found in entry**

Explanation: An LDAP operation failed because does not have an objectclass attribute value.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. Then reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and resolve the problem. If the problem persists, contact the service representative.

R010509   **Credential DN '*name*' is in use and cannot be deleted**

Explanation: An LDAP delete operation failed because the supplier server credentials entry is in use by a replication agreement entry.

In the message text:

name
    Distinguished name of credential entry

User response: If the credentials entry must be deleted, all references to the entry in the **ibm-replicaCredentialsDN** attribute value of replication agreement entries must be removed. To find all references to the credentials entry, use an LDAP search operation with the filter: **ibm-replicaCredentialsDN=***dn* Update those entries to reference another credentials entry or delete those entries. Then, reissue the operation.

R010510   Filter DN '*name***' is in use and cannot be deleted**

Explanation: An LDAP delete operation failed because the replication filter entry is in use by a replication agreement entry.

In the message text:

name
    Distinguished name of filter entry

User response: If the replication filter entry must be deleted, all references to the entry in the **ibm-replicationFilterDN** attribute value of replication agreement entries must be removed. To find all references to the replication filter entry, use an LDAP search operation with the filter: **ibm-replicaFilterDN=***dn* Update those entries to reference another filter entry, remove the **ibm-replicaFilter** value, or delete those entries. Then, reissue the operation.

R010511   Adding an ibm-replicationContext to DN '*name***' is not allowed**

Explanation: An LDAP modify operation failed because the distinguished name (DN) is not allowed to be a replication context entry. The **cn=localhost**, **cn=pwdpolicy,cn=ibmpolicies**, and **cn=configuration** entries are not allowed to be replication contexts.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer specify an objectclass value of **ibm-replicationContext** in the entry. Then, reissue the operation.

R010512   Modification of the replication subentry's '*name***' attribute is not allowed**

Explanation: An LDAP modify operation failed because modification of the replica subentry is not allowed. The **ibm-replicaServerID** attribute value cannot be modified after this entry is created. If this attribute value must be changed, all entries under the replica subentry must be deleted and then readded.

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to no longer update the attribute in the replica subentry. Then, reissue the operation.

R010513   Modification is not valid. Replication context entry is no longer a replication context entry

Explanation: An LDAP modify operation failed because modifying a replication context entry to no longer be a replication context is not allowed when replica group, replica subentry, or replication agreement entries still exist under the replication context entry. Other replication topology entries must be modified or deleted before modifying this entry to no longer be a replication context.

System action: The LDAP server continues to run, but the operation fails.

User response: If the advanced replication topology is no longer needed, delete all advanced replication topology entries that reside under the replication context. Then, reissue the operation.

R010514   **Cannot rename a replication topology entry**

Explanation: An LDAP modify DN operation failed because renaming of a replication topology entry is not allowed. Replication topology entries that are not allowed to be changed include replication contexts, replica subentry, and replication agreements. See Advanced replication for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that it does not rename a replication topology entry. Then, reissue the operation.

R010515   **Agreement with DN '*name*' does not support realignment**

Explanation: An LDAP modify DN operation with realignment failed because the consumer server does not support attribute value realignment.

In the message text:

name
    Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that it does not perform realignment of attributes that have DN syntax. Then, reissue the operation.

R010516   **Resulting entry is not in same replication context as target entry**

Explanation: An LDAP modify DN operation failed because the resulting name of the entry results in it being in a different replication context. Modify DN operations are supported by advanced replication as long the renamed entry resides in the same replication context.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the modify DN input so that the rename resides in the same replication context. Then, reissue the operation.

R010517   **Unable to parse URL for attribute '*name*'**

Explanation: An LDAP modify operation failed because the attribute value did not specify a valid URL. The URL format is: `ldap[s]://[IP_address|hostname][:portNumber]`

In the message text:

name
    Attribute name

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the URL attribute value so that it has a valid format. Then, reissue the operation.

R010518   **User does not have authority to create/update a replication topology entry**

Explanation: An LDAP add, modify, or delete operation failed because the user does not have the appropriate authority to add, modify, or delete a replication topology entry. An LDAP root, directory data, or replication administrator or the master server distinguished name (DN) are allowed to administer replication topology entries.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator or the master server DN to create or update replication topology entries.

R010519   **Cannot modify a replication topology entry**

Explanation: An LDAP modify operation failed because a replica group, replica subentry, or replication agreement entry was attempted to be modified into a replication context entry. These replication topology entries are not allowed to have dual roles in a replication topology.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to no longer modify the entry into a replication context entry. Then, reissue the operation.

R010750   **No request data is found**

Explanation: An LDAP extended operation failed because there was no data to process in the request. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Verify that the extended operation is properly encoded. Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010751   **Decoding error occurs when processing extended operation**

Explanation: An LDAP extended operation failed because the request could not be decoded. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Verify that the extended operation is properly encoded. Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010752   **The syntax of the replication context DN is not valid**

Explanation: An LDAP extended operation failed because the syntax of the replication context distinguished name (DN) is not valid.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication context DN that exists and is a valid DN. Then, reissue the operation.

R010753   **The backend for entry '*name*' does not replicate**

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request is not participating in a replication topology.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication context or replication agreement DN that participates in a replication topology. Then, reissue the operation.

R010754   **The entry '*name*' does not exist or is not a replication context**

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist or is not a valid replication context.

In the message text:

name
    Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid DN that exists and is a replication context. Then, reissue the operation.

R010755   **User does not have the authority to perform this extended operation**

Explanation: An LDAP extended operation failed because the bound user does not have the authority to perform the extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator to issue the extended operation or grant authorization for you to issue the extended operation. Then, reissue the operation.

R010756   **Error encountered when normalizing the DN**

Explanation: An LDAP extended operation failed because the syntax of the distinguished name (DN) of the replication topology entry is not valid and could not be normalized.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication topology DN. Then reissue the operation.

R010757   **Unexpected error occurs while processing the extended operation**

Explanation: An LDAP extended operation failed because the LDAP server detects an internal programming error during processing.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010758   **The action specified on the extended operation input is not valid**

Explanation: An LDAP extended operation failed because the *action* field encoded in the request is not valid. The *action* field is used in the **Cascading control replication**, **Control replication queue**, and **Control replication** extended operations. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid integer for the *action* field. Then, reissue the operation.

R010759   **The timeout value specified on the extended operation input cannot be negative**

Explanation: An LDAP extended operation failed because the *timeout* field encoded in the request is a negative number that is not valid. The *timeout* field is used in the **Cascading control replication** and **Replication topology** extended operations and must be zero or greater. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid integer for the *timeout* field. Then, reissue the operation.

R010760   The requested option specified for the error log extended operation is not valid

Explanation: An LDAP extended operation failed because the *errorOption* field encoded in the request is not valid. The *errorOption* field is used in the **Control replication error log** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid integer for the *errorOption*. Then, reissue the operation.

R010761   No replication agreement DN is specified

Explanation: An LDAP extended operation failed because the replication agreement distinguished name (DN) is not encoded in the request. The replication agreement DN must be encoded in the **Control replication error log** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a replication agreement DN. Then, reissue the operation.

R010762   The syntax of the replication agreement DN is not valid

Explanation: An LDAP extended operation failed because the syntax of the replication context distinguished name (DN) is not valid. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication agreement DN that exists and is a valid DN. Then, reissue the operation.

R010763   The entry '*name*' does not exist or is not under a replication context

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist or is not under a valid replication context entry. See Supported extended operations for more information about the extended operations.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid DN that exists and is under a replication context. Then, reissue the operation.

R010764   The entry '*name*' does not exist, is not an agreement, or is not serviced by this server

Explanation: An LDAP extended operation failed because the distinguished name (DN) specified in the request does not exist, is not a valid replication agreement, or the entry is managed by another server. See Supported extended operations for more information.

In the message text:

name
     Distinguished name of entry

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid DN that exists, is a replication agreement, and is managed by this server. Then, reissue the operation.

R010765   **The failure ID '***identifier***' exists but is not logged for '***name***'**

Explanation: An LDAP extended operation failed because the *failureId* field encoded in the request exists in the directory but is not present in the replication agreement entry. The *failureId* field is used in the **Control replication error log** extended operation. See Supported extended operations for more information.

In the message text:

identifier
     Failure identifier

name
     Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Update the operation input to specify the correct replication agreement entry and failure ID. The multi-valued **ibm-replicationFailedChanges** attribute specifies the valid failure IDs for the replication agreement entry. Then reissue the operation.

R010766   **Data for the requested failure ID '***identifier***' cannot be retrieved or formatted**

Explanation: An LDAP extended operation failed because the *failureId* field encoded in the request cannot be retrieved or formatted. The *failureId* field is used in the **Control replication error log** extended operation. See Supported extended operations for more information.

In the message text:

identifier
     Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the correct *failureId* is specified. If the problem persists, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010767   **The scope specified on the extended operation input is not valid**

Explanation: An LDAP extended operation failed because the *scope* field encoded in the request is not valid. The *scope* field is used in the **Control replication** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid *scope* value. Then, reissue the operation.

R010768   **No replication agreement found for the context entry '***name***'**

Explanation: An LDAP extended operation failed because the replication context distinguished name (DN) encoded in the request does not have at least one valid replication agreement entry. The replication context is used in the **Control replication error log** and **Replication topology** extended operations. See Supported extended operations for more information.

In the message text:

name
     Distinguished name of context

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a replication context DN that has at least one replication agreement entry. Then, reissue the operation.

R010769   **Change ID is not specified or is not valid with skip single option**

Explanation: An LDAP extended operation failed because the *changeId* field encoded in the request is not valid when skipping a single replication change. The *changeId* field is used in the **Control replication queue** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid change ID or update the operation input to skip all replication changes. Then, reissue the operation.

R010770   **Error encountered while retrieving the list of changes**

Explanation: An LDAP extended operation failed because the list of replication changes or updates cannot be retrieved when performing the **Control replication queue** extended operation.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010771   **Requested change ID '***identifier1***' does not match next change ID '***identifier2***'**

Explanation: An LDAP extended operation failed because the *changedId* field encoded in the request does not match the next change identifier in the replication agreement. The *changeId* field is used in the **Control replication queue** extended operation and must match the next pending change in the replication queue. See Supported extended operations for more information.

In the message text:

identifier1
    Requested change identifier

identifier2
    Next change identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify the next pending change ID. The next pending change ID can be found in the multi-valued **ibm-replicationPendingChanges** attribute type. Then, reissue the operation.

R010772   **Error encountered when server is updating the replication status**

Explanation: An LDAP extended operation failed because an error was encountered while updating the replication status. The replication status is updated while performing the **Control replication queue** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010773   **There are no pending changes to skip**

Explanation: An LDAP extended operation did not find any pending changes in the replication queue that needed to be skipped. Pending replication changes can be skipped by using the **Control replication queue** extended operation. The extended operation has completed successfully since there are no pending changes to skip in the replication queue. See Supported extended operations for more information.

System action: The LDAP server continues to run.

R010774　　　**Context DN is required but not specified**

Explanation: An LDAP extended operation failed because a replication context distinguished name (DN) is required but has not been specified. A replication context DN is required in the **Replication topology** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication context DN. Then, reissue the operation.

R010775　　　**Replication agreement entry '*name*' was deleted**

Explanation: An LDAP extended operation failed because the replication agreement distinguished name (DN) entry has been deleted. The **Replication topology** extended operation requires a valid and existing replication agreement entry. See Supported extended operations for more information.

In the message text:

name
　　Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication agreement DN. Then, reissue the operation.

R010776　　　**Failed to contact target '*host*:*port*' using replication agreement '*name*'**

Explanation: An LDAP extended operation failed because the LDAP server is not able to connect to the consumer server identified in the replication agreement entry.

In the message text:

host
　　Host name

port
　　Host port

name
　　Distinguished name of replication agreement

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the replication agreement entry has the correct host name, port number, and credentials entry specified for the consumer server. If the replication agreement entry is correct, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the server is not already running on the specified host or port numbers, start the server. Verify that the credentials entries on the supplier and consumer servers are using the same bind distinguished name and password values.

R010777　　　**Replication extended operation timed out**

Explanation: An LDAP extended operation failed because the *timeout* field encoded in the request has been exceeded. The *timeout* field is used in the **Cascading control replication** and **Replication topology** extended operations. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Increase the *timeout* value field to allow enough time for the extended operation to complete. Then, reissue the operation.

R010778　　　*number1* **servers synchronized successfully out of** *number2* **attempts**

Explanation: An LDAP extended operation was able to successfully synchronize the replication topology entries. Replication topology entries are synchronized by using the **Replication topology** extended operation. See Supported extended operations for more information.

In the message text:

number1
Number of successful synchronizations

number2
Total number of attempted synchronizations

System action: The LDAP server continues to run. If the number of successful synchronizations equals the total number of attempted synchronizations, then the operation was successful. If the number of successful synchronizations does not equal the total number of attempted synchronizations, then the operation either fails or is only partially successful.

User response: If the operation is not successful, verify that all replication topology entries that are being synchronized are correct. In particular, verify that the credentials entries used on the supplier and consumer servers are using the bind distinguished name (DN) or password values with a simple bind credentials entry or the same SSL certificate with an SASL EXTERNAL bind credentials entry. Then, reissue the operation.

R010779   **Replication topology extended operation failed**

Explanation: An LDAP extended operation failed because an error occurred while attempting to synchronize replication topology entries. Replication topology entries are synchronized by using the **Replication topology** extended operation. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: If the operation is not successful, verify that all replication topology entries that are being synchronized are correct. In particular, verify that the credentials entries used on the supplier and consumer servers are using the bind distinguished name (DN) or password values with a simple bind credentials entry or the same SSL certificate with an SASL EXTERNAL bind credentials entry. Then, reissue the operation.

R010780   **Server '*host*:*port*' skipped because there is no connection to it**

Explanation: An LDAP extended operation skipped the consumer server indicated in the message because there is no current connection to it. The **Cascading control replication** extended operation provides the ability for an operation to be passed to all replication agreements under the replication context. See Supported extended operations for more information.

In the message text:

host
Host name

port
Host port

System action: The LDAP server continues to run, but the operation to the specified server fails.

User response: Verify that the indicated server is running. If there is not a configured server running on the indicated host name and port numbers, delete or modify the replication agreement entry that has the specified host and port number in the **ibm-replicaURL** attribute value. Then reissue the operation.

R010781   **Server '*host*:*port*' skipped because it is on hold**

Explanation: An LDAP extended operation skipped the consumer server indicated in the message because replication is on hold or suspended. The **Cascading control replication** extended operation provides the ability for an operation to be passed to all replication agreements under the replication context. However, a replication agreement is skipped if replication is already on hold or suspended. See Supported extended operations for more information.

In the message text:

host
Host name

port
Host port

System action: The LDAP server continues to run, but the operation to the specified server fails.

User response: Verify that replication for the indicated server is on hold or suspended by requesting the **ibm-replicationOnHold** attribute in the replication agreement entry. Modify the replication agreement entry with the specified host and port number if replication should not be on hold or suspended. Then, reissue the operation.

R010782   **Replication context is already quiesced/unquiesced**

Explanation: An LDAP extended operation failed because the replication context is already quiesced or unquiesced. The **Cascading control replication** and **Quiesce or unquiesce context** extended operations allow a replication context to be quiesced or unquiesced. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: If the replication context is not already in the wanted state, correct the operation input to specify the opposite value. Then, reissue the operation.

R010783   **Failure ID '*identifier*' was not successfully removed**

Explanation: An LDAP extended operation failed because the *failureId* encoded in the request was not successfully removed from the replication agreement entry. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify the correct failure ID is specified in the request by requesting the **ibm-replicationFailedChanges** attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010784   **Failure ID '*identifier*' successfully removed**

Explanation: An LDAP extended operation successfully removed the *failureId* encoded in the request. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run.

R010785   **The replication extended operation will not continue since the target server is a master server**

Explanation: An LDAP extended operation failed because the target server is a master server and it does not support the replicated request. The replicated extended operation request is not supported by the master server.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to no longer target a master server with the extended operation. Then, reissue the operation.

R010786   **Failed to quiesce supplier**

Explanation: An LDAP extended operation failed because the supplier server was not able to be quiesced. The **Replication topology** extended operation is used to quisece a supplier server. See Supported extended operations for more information.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010787   **Failed to build '*type*' list**

Explanation: An LDAP extended operation failed because an internal list could not be built.

In the message text:

type
> Type of list

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010788   **Consumer server down or not accepting updates from supplier. Retry for failure ID '*identifier*' failed**

Explanation: An LDAP extended operation failed because an error occurred while trying the request again in the replication agreement entry for the *failureId* encoded in the request. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
> Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the consumer server is running and the backend containing the replication topology successfully started. Then, reissue the operation.

R010789   **Target server '*host*:*port*' skipped by gateway**

Explanation: An LDAP extended operation skipped the server indicated in the message because requests are not forwarded from one gateway server to another gateway server. The **Cascading control replication** extended operation enables an operation to be passed to all replication agreements under the replication context. See Supported extended operations for more information.

In the message text:

host
> Host name

port
> Host port

System action: The LDAP server continues to run, but the operation to the specified server is skipped.

R010790   ***number* changes were skipped**

Explanation: An LDAP extended operation successfully skipped the number of changes in the replication queue. The **Control replication queue** extended operation enables you to skip pending replication changes.

In the message text:

number
> Number of changes

System action: The LDAP server continues to run.

R010791   **Error occurs while parsing data for change ID '*identifier*' for replica '*name*'**

Explanation: An LDAP extended operation failed because an error occurred while parsing and retrieving data from the replication agreement entry for the *failureId* encoded in the request. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

name
    Replica name

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010792   **Error occurs while applying filter to replication operation**

Explanation: An LDAP extended operation failed because an error occurred while applying a replication filter to the entries being replicated. The replication filter entry used by a replication agreement entry is specified in the **ibm-replicationFilterDN** attribute value.

System action: The LDAP server continues to run, but the operation fails.

User response: Verify that the replication filters in use by the replication agreement are valid. Ensure that the replication filters in use do not exclude any required attribute types from being replicated to a consumer server. If necessary, remove the **ibm-replicationFilterDN** attribute value from the replication agreement or update the replication filters. Then, reissue the operation.

R010793   **Failed to retrieve data for failure ID '*identifier*'**

Explanation: An LDAP extended operation failed because an error occurred while parsing and retrieving data from the replication agreement entry for the *failureId* encoded in the request. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify the correct failure ID is specified in the request by requesting the **ibm-replicationFailedChanges** attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010794   **Unable to remove failure ID '*identifier*' from the replication error log**

Explanation: An LDAP extended operation failed because an error occurred while removing the *failureId* encoded in the request from the replication agreement entry. The *failureId* field is used in the **Control replication error log** extended operation to delete, display, or retry a replication failure. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: Verify the correct failure ID is specified in the request by requesting the **ibm-replicationFailedChanges** attribute in the replication agreement entry. If the correct failure ID is specified, contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010795   The target server '*host*:*port*' does not support replication topology entries

Explanation: An LDAP extended operation failed because the target server does not support advanced replication topology entries.

In the message text:

host
    Host name

port
    Host port

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Verify that the target server supports advanced replication topology entries by ensuring that **useAdvancedReplication on** is specified in the CDBM backend section of the target server's configuration file. If a non-z/OS IBM Tivoli Directory Server is used for the target server, ensure that it is 6.0 or later.

R010796   Failed to add the context DN as a suffix to the config file of the target server '*host*:*port*'

Explanation: An LDAP extended operation failed because the target server does not have a required suffix in its configuration file and does not support the non-z/OS IBM Tivoli Directory Server **Dynamic update requests** extended operation to automatically update the server configuration file. The **Replication topology** extended operation attempted to synchronize replication topology entries on the target server but it does not have the appropriate suffix. It also does not support the non-z/OS IBM Tivoli Directory Server **Dynamic update requests** extended operation to automatically update the server configuration file.

In the message text:

host
    Host name

port
    Host port

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Update the configuration file of the target server to specify the suffix used by the replication context or replication agreement entry in an LDBM or TDBM backend. Then, restart the target server.

R010797   The target server '*host*:*port*' does not have a needed suffix and it does not support config file update

Explanation: An LDAP extended operation failed because the target server does not have a required suffix in its configuration file and does not support the non-z/OS IBM Tivoli Directory Server **Dynamic update requests** extended operation to automatically update the server configuration file. The **Replication topology** extended operation attempted to synchronize replication topology entries on the target server but it does not have the appropriate suffix. It also does not support the non-z/OS IBM Tivoli Directory Server **Dynamic update requests** extended operation to automatically update the server configuration file.

In the message text:

host
    Host name

port
    Host port

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Update the configuration file of the target server to specify the suffix used by the replication context or replication agreement entry in an LDBM or TDBM backend. Then, restart the target server.

R010798   **Unable to quiesce the target server**

Explanation: An LDAP extended operation failed because the distinguished name specified in the request does not exist or is not a valid replication context entry. The **Replication topology** extended operation attempted to synchronize replication topology entries on the target server.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a valid replication context entry. Then, reissue the operation.

R010799   **Unable to update the topology entries on the target server**

Explanation: An LDAP extended operation failed because the replication topology entries could not be added, modified, or deleted from the target server. The **Replication topology** extended operation attempted to synchronize replication topology entries on the target server.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: Use any server messages and ERROR+REPL debug trace output to help locate and correct the problem. If the problem persists, contact the service representative.

R010800   *number1* **failures removed successfully,** *number2* **remain**

Explanation: An LDAP extended operation successfully removed replication failures from the replication error log. The **Control replication error log** extended operation enables you to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

number1
    Number of failures removed

number2
    Number of failures remaining

System action: The LDAP server continues to run.

User response: If there are still failures remaining, do a search of the replication agreement entry and request the **ibm-replicationFailedChanges** operational attribute to determine the remaining failures. See Monitoring and diagnosing advanced replication problems for more information.

R010801   *number1* **failures retried successfully,** *number2* **remain**

Explanation: An LDAP extended operation successfully retried replication failures from the replication error log. The **Control replication error log** extended operation enables you to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

number1
    Number of failures retried

number2
    Number of failures remaining

System action: The LDAP server continues to run.

User response: If there are still failures remaining, do a search of the replication agreement entry and request the **ibm-replicationFailedChanges** operational attribute to determine the remaining failures. See Monitoring and diagnosing advanced replication problems for more information.

R010802   **Failure ID '***identifier***' was not successfully retried**

Explanation: An LDAP extended operation failed because the failure ID could not be successfully retried. The **Control replication error log** extended operation enables you to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run, but the operation fails.

User response: If there are still failures remaining, do a search of the replication agreement entry and request the **ibm-replicationFailedChanges** operational attributes to determine the remaining failures. See Monitoring and diagnosing advanced replication problems for more information.

R010803   **Failure ID '***identifier***' successfully retried**

Explanation: An LDAP extended operation was able to successfully retry the failure ID from the replication error log. The **Control replication error log** extended operation provides the ability to delete, display, or retry replication failures. See Supported extended operations for more information.

In the message text:

identifier
    Failure identifier

System action: The LDAP server continues to run and the replication failure is removed from the replication error log.

R010804   **The target server '***host***:***port***' does not support the extended operation**

Explanation: An LDAP extended operation failed because the target server does not support the request. See Supported extended operations for the supported extended operations.

In the message text:

host
    Host name

port
    Host port

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a supported extended operation. Then, reissue the operation.

R010805   **Extended operation failed since target server is not a master server for the context '***name***'.**

Explanation: An LDAP extended operation failed because the target server is not a master server for the replication context distinguished name (DN).

In the message text:

name
    Distinguished name of context

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to target the extended operation against the master or supplier server in the replication topology. Then, reissue the operation.

Remote crypto plug-in reason codes

This section lists the reason codes that are issued by the remote crypto plug-in and their diagnostic information. These reason codes have a prefix of "RC".

RC00001   **Unable to allocate storage**

Explanation: The remote crypto operation failed because the plug-in is unable to allocate the necessary storage to continue processing the request.

System action: The remote crypto operation fails.

Operator response: Increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the request.

Administrator response: Contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

RC00002   **Unable to decode** *field* **from request, rc=***return_code*

Explanation: The remote crypto extended operation failed because the plug-in is unable to decode the request. The most likely return code is:

- 2 (LDAP_PROTOCOL_ERROR): Some part of the extended operation request data is not encoded correctly and could not be decoded.

In the message text:

field
    Request field

return_code
    Return code from decode routine

System action: The remote crypto extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: If the problem is in the encoding, verify that the extended operation is correctly encoded. See the Remote crypto plug-in for more information about the extended operation encoding. Then reissue the extended operation request. If the problem is a storage issue, contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

RC00003   **Unable to encode** *field***, rc=***return_code*

Explanation: The remote crypto extended operation failed because the plug-in is unable to encode the response. The most likely return code is:

- 80 (LDAP_OTHER): Some part of the extended operation response data could not be encoded correctly.

In the message text:

field
    Response field

return_code
    Return code from encode routine

System action: The remote crypto extended operation fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then restart the LDAP server. If the problem persists, contact the service representative.

RC00004   **Unable to set pblock parameter** *arg*, **errno=***errno*

Explanation: The remote crypto extended operation failed because the plug-in is unable to set a value in the internal plug-in parameter block.

In the message text:

arg
    arg specified on **slapi_pblock_set()**

errno
    errno set by **slapi_pblock_set()**

System action: The remote crypto extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Using the arg and errno values from the error text, see the description of **slapi_pblock_set()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

RC00005   **Unable to get pblock parameter** *arg*, **errno=***errno*

Explanation: The remote crypto extended operation failed because the plug-in is unable to get a value from the internal plug-in parameter block.

In the message text:

arg
    arg specified on **slapi_pblock_get()**

errno
    errno set by **slapi_pblock_get()**

System action: The remote crypto extended operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: Using the arg and errno values from the error text, see the description of **slapi_pblock_get()** in *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information about the error. When the problem is resolved, restart the LDAP server. If the problem persists, contact the service representative.

RC00006   **Specified hexadecimal value** *value* **for variable** *variable* **is not valid**

Explanation: The remote crypto extended operation failed because the hexadecimal value for the field is not valid. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

value
    Value of variable

variable
    Variable name

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00007   Unable to decode required element *field* **from request**

Explanation: The remote crypto extended operation failed because the plug-in is unable to decode a required ASN.1 element from the input request value. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
> Request field

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00008   Encountered an unexpected hexadecimal tag value *tagValue* **while trying to decode** *field*

Explanation: The remote crypto extended operation failed because the plug-in has encountered an unexpected tag value on a request field. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

tagValue
> Tag value that is not valid

field
> Request field

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00009   Value specified for *field* **is not valid.**

Explanation: The remote crypto extended operation failed because the crypto plug-in has encountered a value for a field that is not valid. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
> Request field

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00010   Unable to create mutex: *error_code/reason_code* **-** *error_text*

Explanation: The remote crypto operation failed because the plug-in is unable to create a mutex. See the description of **pthread_mutex_init()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
> Error code from **pthread_mutex_init()**

reason_code
> Reason code from **pthread_mutex_init()**

error_text
> Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

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

RC00011   **Unable to acquire mutex:** *error_code*/*reason_code* **-** *error_text*

Explanation: The remote crypto operation failed because the plug-in is unable to acquire a mutex. See the description of **pthread_mutex_lock()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
     Error code from **pthread_mutex_lock()**

reason_code
     Reason code from **pthread_mutex_lock()**

error_text
     Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

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

RC00012   **Unable to release mutex:** *error_code*/*reason_code* **-** *error_text*

Explanation: The remote crypto operation failed because the plug-in is unable to release a mutex. See the description of **pthread_mutex_unlock()** in *z/OS XL C/C++ Runtime Library Reference* for more information about the error.

In the message text:

error_code
     Error code from **pthread_mutex_unlock()**

reason_code
     Reason code from **pthread_mutex_unlock()**

error_text
     Error text corresponding to the error code

System action: The remote crypto operation fails.

User response: Contact an LDAP administrator. After the problem is resolved, reissue the extended operation request.

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

RC00013   **No SAF identity found for DN='**_dn_**'**

Explanation: The remote crypto extended operation failed because the user has not bound to the LDAP server or has not bound to the LDAP server with credentials that result in an SAF identity. The remote crypto operation requires an LDAP bind done in one of following manners:

- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM or TDBM binds that are not using native authentication do not result in a SAF identity being used. See the Remote crypto plug-in for more information.

In the message text:

dn   Distinguished name bound to the connection

System action: The remote crypto extended operation fails.

User response: Perform a supported bind and reissue the extended operation.

RC00014 **Length is not valid:** *field* **(***length***)**

Explanation: The remote crypto extended operation failed because the length of a value is not valid. The request field indicates a length field of type integer whose value was not valid, or a string field whose encoded length was not valid. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
    Request field

length
    Length specified

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00015 **Value specified for rule array count (***count***) is not consistent with the length of the rule array (***length***)**

Explanation: The remote crypto extended operation failed because the rule array count value is larger than the number of rules the rule array can hold. Note that each rule is 8 bytes in length and the total length of the rule array must be a multiple of 8. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

count
    Rule array count specified

length
    Length of the rule array specified

System action: The remote crypto extended operation fails.

User response: Correct the rule array count value or rule array, then reissue the extended operation request.

RC00016 **A bind to the LDAP server is required before attempting this function**

Explanation: The remote crypto extended operation failed because the user has not bound to the LDAP server. The remote crypto operation requires an LDAP bind done in one of following manners:
- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM or TDBM binds that are not using native authentication do not result in a SAF identity being used. See the Remote crypto plug-in for more information.

System action: The remote crypto extended operation fails.

User response: Perform a supported bind and reissue the extended operation.

RC00017 **Length of value specified for** *field* **(***length***) is not valid. A minimum of** *min_length* **bytes is required**

Explanation: The remote crypto extended operation failed because the length of a value is too short. See the Remote crypto plug-in for more information about the extended operation encoding.

In the message text:

field
    Request field

RC00018

length
    Length of the value specified

min_length
    Required minimum length of the value

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

RC00018   **Length of value specified for** *field* **(***length***) is not valid. Data contents indicate a minimum of** *min_length* **bytes is required**

Explanation: The remote crypto extended operation failed because the length of a value is too short based on data within the request field. This error is issued for token identifiers whose length is defined by the data contents of the token identifier itself. Either the amount of data supplied is smaller than the length defined in the data, or it is smaller than the number of bytes needed to determine the defined length. See the Remote crypto plug-in for more information about the extended operation encoding. See *z/OS Cryptographic Services ICSF Application Programmer's Guide* for more information about ICSF token identifier formats.

In the message text:

field
    Request field

length
    Length of the value specified

min_length
    Required minimum length of the value based on its contents

System action: The remote crypto extended operation fails.

User response: Correct the input data and reissue the extended operation request.

ICTX plug-in reason codes

This section lists the reason codes that are issued by the ICTX plug-in and their diagnostic information. These reason codes have a prefix of "ITYXOR".

ITYXOR00   LDAP server is out of storage

Explanation: An LDAP operation failed because the LDAP server is unable to allocate the necessary storage to continue processing the request.

System action: Depending on the severity of the storage problem, the LDAP server might continue or might end. The LDAP operation fails.

Operator response: Increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If running the 31-bit LDAP server (GLDSRV31), consider using the 64-bit LDAP server (GLDSRV64) to use the additional storage available in a 64-bit address space. Then, restart the LDAP server.

ITYXOR01   Server is not program controlled

Explanation: An LDAP operation failed because a call to **__passwd()** returned EMVSERR indicating that the function is not supported in an address space where a load was done from an uncontrolled library.

System action: The LDAP server continues to run, but the operation fails.

User response: Contact the LDAP administrator. After the problem is resolved, reissue the operation.

Administrator response: If the BPX.DAEMON facility class profile is defined, then all modules within the address space must be loaded from a controlled library. This includes all modules in the application and runtime libraries. See *z/OS UNIX System Services Planning* for more information about checking program control. If the problem persists, contact the service representative.

ITYXOR03   Password is incorrect, or userID is undefined/revoked

Explanation: An LDAP bind operation to the ICTX plug-in failed. Either the password that is specified in the bind does not match the password of the z/OS Security Server user that is associated with the bind DN or the z/OS Security Server user definition is not defined or is revoked. For RACF, the password can be a password or a password phrase. Also, for RACF, the user profile must be defined, with a password or password phrase, and a UID value in the OMVS segment.

System action: The LDAP server continues to run, but the operation fails.

User response: If the password (or password phrase) is not correct, reissue the bind request with the correct value. If the user is not defined in the z/OS Security Server, contact a z/OS Security Server administrator.

ITYXOR04   DN is not a valid RACF bind DN

Explanation: An LDAP operation to the ICTX plug-in failed because it involved a distinguished name (DN) that is not a valid ICTX DN.

System action: The LDAP server continues to run, but the operation fails.

User response: Correct the operation input to specify a DN value that is a valid ICTX DN. In particular, the format of an ICTX DN is **racfid=x,cn=ictx**. For the racfid that is part of this DN, the **racfid** value must be from 1 to 8 characters long. The value must not contain a space or a comma, and the value cannot be an asterisk (*). Then, reissue the LDAP operation.

ITYXOR08   Request OID not supported by ICTX

Explanation: An extended operation request to the ICTX plug-in failed because the ICTX plug-in does not support the extended operation OID. The ICTX plug-in does not contain any processing for the requested OID.

System action: The LDAP server continues to run, but the operation fails.

User response: Ensure that the correct OID is specified in the operation input. See *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for the OIDs of the extended operations that the ICTX plug-in supports. Then, reissue the operation.

ITYXOR14   Failure decoding request value

Explanation: The ICTX request failed because it includes a sequence that is not valid and cannot be decoded.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Verify that the ICTX extended operation input is correctly encoded. See *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Contact an LDAP administrator to determine if there are any server messages or ERROR debug trace output generated during the ICTX request processing that might help locating and correcting the problem. Then, reissue the ICTX extended operation.

Administrator response: If requested, gather any server message and ERROR debug output that is created by the ICTX processing.

ITYXOR15   Request version is not found

Explanation: The ICTX request failed because it did not include a version.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Update your ICTX input to include a version. Check that all the sequences in the ICTX operation input are correctly encoded. See *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Then, reissue the ICTX extended operation.

ITYXOR16   Itemlist is not found

Explanation: The ICTX request failed because it did not include an itemlist.

System action: The LDAP server continues to run, but the ICTX request fails.

User response: Update your ICTX input to include an itemlist. Check that all the sequences in the ICTX operation input are correctly encoded. See *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for the ASN.1 syntax of the extended operations that the ICTX plug-in supports. Then, reissue the ICTX extended operation.

ITYXOR17   Failure getting plugin parameter block value

Explanation: The ICTX extended operation failed because it was unable to get a value from the internal plug-in parameter block.

System action: The LDAP server continues to run, but the ICTX request fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

ITYXOR18   Failure setting plugin parameter block value

Explanation: The ICTX extended operation failed because it was unable to set a value in the internal plug-in parameter block.

System action: The LDAP server continues to run, but the ICTX request fails.

Operator response: For a storage problem, increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

User response: Contact the operator and an LDAP administrator. After the problem is resolved, reissue the extended operation request.

Administrator response: For a storage problem, contact the operator to increase the storage available for use by the LDAP server. Then, restart the LDAP server. If the problem persists, contact the service representative.

ITYXOR19   Unsupported bind mechanism

Explanation: The LDAP bind operation to the ICTX plug-in failed because it specifies an authentication method that is not allowed.

System action: The LDAP server continues to run, but the operation fails.

User response: The ICTX operation requires an LDAP bind that is done in one of following manners:
- An SASL EXTERNAL bind where the certificate is mapped to a SAF identity.
- An LDBM or TDBM native authentication bind.
- A Kerberos (GSSAPI) bind.
- An SDBM bind with a user entry.
- A simple bind to the ICTX plug-in, which has a suffix of cn=ICTX. The bind distinguished name is in the following format: racfid=userid,cn=ICTX.

Anonymous binds, identities that are defined in the LDAP server configuration file, and LDBM, CDBM, or TDBM binds that are not using native authentication, do not result in a SAF identity being used. See *z/OS IBM Tivoli Directory Server Plug-in Reference for z/OS* for more information. Change the bind input to use one of the supported authentication methods. Then, reissue the operation.

Appendix. Accessibility

Accessible publications for this product are offered through IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

If you experience difficulty with the accessibility of any z/OS information, send a detailed message to the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html) or use the following mailing address.

IBM Corporation
Attention: MHVRCFS Reader Comments
Department H6MA, Building 707
2455 South Road
Poughkeepsie, NY 12601-5400
United States

Accessibility features

Accessibility features help users who have physical disabilities such as restricted mobility or limited vision use software products successfully. The accessibility features in z/OS can help users do the following tasks:

- Run assistive technology such as screen readers and screen magnifier software.
- Operate specific or equivalent features by using the keyboard.
- Customize display attributes such as color, contrast, and font size.

Consult assistive technologies

Assistive technology products such as screen readers function with the user interfaces found in z/OS. Consult the product information for the specific assistive technology product that is used to access z/OS interfaces.

Keyboard navigation of the user interface

You can access z/OS user interfaces with TSO/E or ISPF. The following information describes how to use TSO/E and ISPF, including the use of keyboard shortcuts and function keys (PF keys). Each guide includes the default settings for the PF keys.

- *z/OS TSO/E Primer*
- *z/OS TSO/E User's Guide*
- *z/OS V2R2 ISPF User's Guide Vol I*

Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users who access IBM Knowledge Center with a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line because they are considered a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that the screen reader is set to read out

punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1) are mutually exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The * symbol is placed next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element *FILE with dotted decimal number 3 is given the format 3 * FILE. Format 3* FILE indicates that syntax element FILE repeats. Format 3* * FILE indicates that syntax element * FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol to provide information about the syntax elements. For example, the lines 5.1*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, it indicates a reference that is defined elsewhere. The string that follows the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 means that you must refer to separate syntax fragment OP1.

The following symbols are used next to the dotted decimal numbers.

? indicates an optional syntax element
The question mark (?) symbol indicates an optional syntax element. A dotted decimal number followed by the question mark symbol (?) indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that the syntax elements NOTIFY and UPDATE are optional. That is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.

! indicates a default syntax element
The exclamation mark (!) symbol indicates a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicate that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the dotted decimal number can specify the ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the

default option for the FILE keyword. In the example, if you include the FILE keyword, but do not specify an option, the default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, the default FILE(KEEP) is used. However, if you hear the lines 2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE), the default option KEEP applies only to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.

* indicates an optional syntax element that is repeatable
The asterisk or glyph (*) symbol indicates a syntax element that can be repeated zero or more times. A dotted decimal number followed by the * symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line 5.1* data area, you know that you can include one data area, more than one data area, or no data area. If you hear the lines 3* , 3 HOST, 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

Notes:

1. If a dotted decimal number has an asterisk (*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.

2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.

3. The * symbol is equivalent to a loopback line in a railroad syntax diagram.

+ indicates a syntax element that must be included
The plus (+) symbol indicates a syntax element that must be included at least once. A dotted decimal number followed by the + symbol indicates that the syntax element must be included one or more times. That is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the * symbol, the + symbol can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the * symbol, is equivalent to a loopback line in a railroad syntax diagram.

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Various z/OS elements, such as DFSMS, HCD, JES2, JES3, and MVS™, contain code that supports specific hardware servers or devices. In some cases, this device-related element support remains in the product even after the hardware devices pass their announced End of Service date. z/OS may continue to service element code; however, it will not provide service related to unsupported hardware devices. Software problems related to these devices will not be accepted

for service, and current service activity will cease if a problem is determined to be associated with out-of-support devices. In such cases, fixes will not be issued.

Minimum supported hardware

The minimum supported hardware for z/OS releases identified in z/OS announcements can subsequently change when service for particular servers or devices is withdrawn. Likewise, the levels of other software products supported on a particular release of z/OS are subject to the service support lifecycle of those products. Therefore, z/OS and its product publications (for example, panels, samples, messages, and product documentation) can include references to hardware and software that is no longer supported.

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Product Number: 5650-ZOS

Printed in USA