

FR_LMI Messages

The following are Frame Relay Local Management Interface (LMI) messages.

Error Message

`%FR_LMI-3-INCORRECT_IE: Enhanced LMI not configured, incorrect IE`

Explanation An unexpected LMI information element has been received.

Recommended Action Ensure that the configuration for enhanced LMI on the switch matches the configuration on the router.

FR_VCB Messages

The following are Frame Relay VC bundle messages.

Error Message

`%FR_VCB-3-BUMPING: Bumping error - vcb [chars] - [chars]`

Explanation An error occurred while traffic in a VC bundle was being bumped.

Recommended Action Reconfigure the VC bundle to avoid bumping.

Error Message

`%FR_VCB-3-CONFIG: Configuration error - vcb [chars] - [chars]`

Explanation An error occurred while a VC bundle configuration was being interpreted.

Recommended Action Reconfigure the VC bundle.

Error Message

`%FR_VCB-3-FIBSW_MISSING_TABLE_ENTRY: FIB switching error - vc-bundle [chars]`

Explanation An error occurred while the FIB was switching packets across the VC bundle.

Recommended Action Delete the VC bundle and employ a PVC to substitute for the VC bundle.

Error Message

`%FR_VCB-3-PROCESS_SWITCHING: Switching error - vcb [chars] - [chars]`

Explanation An error occurred while packets were being switched across the VC bundle.

Recommended Action Delete the VC bundle and employ a PVC to substitute for the VC bundle.

Error Message

%FR_VCB-5-UPDOWN: FR VC-Bundle [chars] changed state to [chars]

Explanation The state of a Frame Relay VC bundle has changed from “up” to “down.”

Recommended Action No action is required.

FRATM Messages

The following are Frame Relay ATM messages.

Error Message

%FRATM-3-CONFIG_ERROR: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%FRATM-2-INTERNAL_CRITICAL: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%FRATM-3-INTERNAL_ERROR: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%FRATM-4-INTERNAL_WARNING: [chars]

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

FREEDM Messages

The following are CT3 trunk card Freedm messages.

Error Message

%FREEDM-3-BUSYTIMEOUT: Freedm [chars] busy bit of register [hex] never cleared

Explanation The driver has timed out while waiting for the Freedm to acknowledge a request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FREEDM-2-FATALEVENT: Freedm [chars] fatal event occurred: [hex]

Explanation A catastrophic Freedm error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FREEDM-3-FREEDM_PCI_PERR: PCI PERR on FREEDM [dec] interrupt status reg: [hex]

Explanation A PCI parity error was detected on Freedm. It is not a problem if this error is the result of an on-line removal.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter <https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl>. Enter the show tech-support command to gather data that may help identify the nature of the error. Also perform a search of the Bug Toolkit <http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%FREEDM-3-FREEDM_PCI_SERR: PCI SERR on FREEDM [dec] interrupt status reg: [hex]
```

Explanation A PCI system error was detected on Freedm. It is not a problem if this error is the result of an on-line removal.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error using the Output Interpreter <https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl>. Enter the `show tech-support` command to gather data that may help identify the nature of the error. Also perform a search of the Bug Toolkit <http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%FREEDM-3-HDLC_ALLOC_FAIL: Freedm [chars]: Allocation of HDLC controller [dec] for channel [dec] failed
```

Explanation Allocation of an HDLC controller has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%FREEDM-3-HDLC_INUSE: Freedm [chars]: HDLC controller [dec] already in use on channel [dec]
```

Explanation An attempt was made to use an HDLC controller that was already in use.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%FREEDM-2-INIT_FAIL: [chars]: Initialization failed.
```

Explanation Initialization of the Freedm device has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the `show tech-support` command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the `show tech-support` command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%FREEDM-3-INITFAIL: Freedm [chars] initialization failed: [chars]

Explanation The Freedm device has failed initialization.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FREEDM-3-REG_READ_TIME_OUT: Busy Out Error of FREEDM [dec] [chars]

Explanation An attempt was made to read the Freedm internal RAM. The busy bit is still set for more than 10 seconds.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

FS_IPHC Messages

The following are Fast IP Header Compression messages.

Error Message

%FS_IPHC-4-IPC_NO_CHUNK: IPC Chunk pool empty, slot [dec] VIP junked RSP msg

Explanation The IP compression private memory pool for IPC messages has been exhausted.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FS_IPHC-2-LC_CONTEXT_INIT_FAIL: Failed to initialise or allocate memory for TX/RX contexts

Explanation The IP compression context tables have not been created because of a lack of memory resources. The line card cannot allocate memory for an IP header compression context.

Recommended Action Reduce the number of contexts that are configured on all interfaces on the affected line card by using the **ip rtp compression-connections** interface configuration.

Error Message

%FS_IPHC-3-LC_INVALID_MSG: Received IPC message of unknown type

Explanation The IP compression on the line card has received an unknown message from the RP.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FS_IPHC-4-LC_IPCSENDFAIL: LC unable to send IPHC msg to RP

Explanation A line card was unable to send an IP header compression information message to the Route Processor.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **debug ip rtp head** and **debug ip tcp head** commands for the period during which this message appeared, if possible. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%FS_IPHC-2-LC_IPHC_SETUP_FAIL: Failed to initialise or allocate memory for IP Compression database.

Explanation The IP Compression main database could not be created because of a lack of memory resources. The line card cannot allocate memory for an IP Compression database.

Recommended Action If possible, add more memory to the VIP. Allocate additional free memory on the VIP by reducing features that are used for buffer allocations. Reduce the number of contexts configured on all interfaces on the affected line card by entering the **ip rtp compression-connections** command in interface configuration mode.

Error Message

%FS_IPHC-2-LC_IPHCDB_SETUP_FAIL: Failed to initialise or allocate memory for IP Compression database.

Explanation The IP compression main database has not been created because of a lack of memory resources. The line card cannot allocate memory for an IP compression database.

Recommended Action Add more memory if possible to the VIP. Free memory on the VIP by reducing features used or buffer allocations. Reduce the number of contexts configured on all interfaces on the affected line card by using the **ip rtp compression-connections** interface configuration.

Error Message

`%FS_IPHC-4-LC_NOIPCBUFFER: Unable to malloc IPC msg buffer on line card. Send Message failed.`

Explanation The line card did not have enough memory in its private memory pool to send IPHC information to the RP.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%FS_IPHC-2-LC_PROC_INIT: Line Card Failed to initialise distributed IP Hdr Comp Process`

Explanation The IP compression process was not created on the line card, possibly because of a lack of memory resources.

Recommended Action Check the memory allocation on the line card and either upgrade the line card memory or reduce the feature burden in the interface configurations for the line card.

Error Message

`%FS_IPHC-3-MSG_TOO_LARGE: Received IPC message too large to handle`

Explanation The IP compression has received an IPC message of a size larger than expected.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

`%FS_IPHC-4-RP_IPCSENDFAIL: RP unable to send IPHC msg to Line Card`

Explanation The Route Processor was unable to send an IP header compression configuration message to a line card interface.

Recommended Action Copy the error message exactly as it appears, and report it to your Cisco technical support representative. If possible, also provide the output of the **debug ip rtp head** and **debug ip tcp head** commands for the period during which this message had appeared.

Error Message

`%FS_IPHC-2-RP_NOLCINFO: Unable to malloc state table for Line Card`

Explanation An internal data structure is missing because of a lack of memory resources.

Recommended Action The Route Processor is dangerously low on memory resources. Free up memory by removing unwanted feature configuration or upgrade the memory on the Router Processor.

Error Message

%FS_IPHC-3-SEQ_ERROR: Received out of sequence IPC message

Explanation IP compression has received an out-of-sequence IPC message.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

FTC_TRUNK Messages

The following are Cisco 3801 platform messages.

Error Message

%FTC_TRUNK-3-CID_IN_USE: [chars] connection-id [dec] is busy, try other cid

Explanation When setting up a new session trunk, an operator has attempted to use a connection ID that is already assigned and in use. The selected connection ID cannot be used for this session trunk.

Recommended Action Try to set up the new session trunk with a connection ID that is not already in use.

Error Message

%FTC_TRUNK-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The MPC860/PowerQUICC CPU was unable to access the memory it requires to carry out its functions. Here are some possible causes. The network is large, requiring a lot of memory for routing tables, and so on. The router configuration has many features enabled, each of which require a certain amount of memory. A software error (memory leak) exists.

Recommended Action Reduce system activity to ease the memory demand, or upgrade to a larger memory configuration.

Error Message

%FTC_TRUNK-1-RELOAD: Must reload to config Interface [chars] as ftc-trunk again

Explanation If the operator first configures an interface based on the use of the **encapsulation ftc-trunk** command and later reconfigures the interface to some other encapsulation, such as HDLC, and then attempts to reconfigure it based on the **encapsulation ftc-trunk** command, this error message is displayed to notify the operator that the **reload** command must be first entered before using the **encapsulation ftc-trunk** command again.

Recommended Action Enter the **reload** command.

Error Message

```
%FTC_TRUNK-3-TOOMANY: Cannot config more than [dec] ftc-trunks
```

Explanation When the operator enters the **encapsulation ftc-trunk** configuration command, if there are already four interfaces configured for the **encapsulation ftc-trunk** command, this message is displayed to indicate that no more interfaces can be configured using this command.

Recommended Action Free up one of the other interfaces first or, if conditions warrant, upgrade to a larger configuration with more interfaces.

Error Message

```
%FTC_TRUNK-3-TOOMANY_SESSION: Cannot config more than [dec] session-trunks
```

Explanation When the operator enters the **encapsulation ftc-trunk** configuration command, if there are already four interfaces configured using the **encapsulation ftc-trunk** configuration command, this message is displayed to indicate that no more interfaces can be configured using this command.

Recommended Action Free up one of the existing interfaces first or, if conditions warrant, upgrade to a larger configuration with more interfaces.

FTPSERVER Messages

The following are FTP server processes messages.

Error Message

```
%FTPSERVER-6-CONNCLOSED: Connection closed after [dec] seconds. '[chars]'
```

Explanation The FTP connection to a client was closed after five minutes of inactivity.

Recommended Action Client inactivity will cause the server to close the connection. Restart FTP.

Error Message

```
%FTPSERVER-6-CWDFAILED: setcwd failed ([chars]).
```

Explanation An FTP client request has failed to change to the requested directory.

Recommended Action Verify the correct path for the desired directory.

Error Message

```
%FTPSERVER-6-NETRDFAILED: FTP control connection / tcp_read failed.
```

Explanation An error occurred while the command line from the FTP client was being read.

Recommended Action Verify the network connection from the client to the server. Verify the FTP client operation.

Error Message

%FTPSEVER-6-NETWRTF FAILED: FTP Server:connection / tcp_write failed.

Explanation A TCP write failed while an FTP command reply was being sent to the client.

Recommended Action Verify network connection from the client to the server. Verify the FTP client operation.

Error Message

%FTPSEVER-6-NEWCONN: FTP Server - new connection made.

Explanation A new FTP server connection has opened.

Recommended Action To disable the new FTP server connection, use the **no ftp-server enable** command.

Error Message

%FTPSEVER-6-REPLYLOGN: (REPLY) [dec]

Explanation An FTP login has occurred.

Recommended Action This is an informational message only. Informational messages can be disabled by changing the logging level.

Error Message

%FTPSEVER-6-REPLYLOGTEXT: [dec] [chars]

Explanation This text was sent to the FTP client.

Recommended Action This is an informational message only. Informational messages can be disabled by changing the logging level.

Error Message

%FTPSEVER-6-TOPDIRTEST: Input path failed Top-dir([chars]) test.

Explanation An operation has attempted to use a path that was not within the tree under the **ftp-server topdir** command configuration parameter.

Recommended Action Reconfigure the **ftp-server topdir** command parameter, or select another path.

Error Message

%FTPSEVER-4-XFER_WARNING: File may not have transferred correctly

Explanation Extra linefeeds were received in ASCII mode.

Recommended Action If the file is not error-free, try using a different FTP client.

FTSP Messages

The following are Fax Telephony Server Provider subsystem messages.

Error Message

%FTSP-6-FAX_CONNECT: [chars]

Explanation A fax carrier has been detected.

Recommended Action No action is required.

Error Message

%FTSP-6-FAX_DISCONNECT: [chars]

Explanation A fax call has disconnected.

Recommended Action No action is required.

Error Message

%FTSP-4-FMAIL_FAILED_AUTHENTICATION: Authentication for > [chars] < failed \n

Explanation An attempt to authenticate the specified user has failed.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FTSP-4-FMAIL_NO_ACCOUNTING: FAXMAIL- Accounting \n for tty([dec]) failed

Explanation Accounting has failed for the specified tty.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FTSP-4-HARDWARE_ERROR: tty ([dec])

Explanation A hardware interface had not been configured before a fax call was answered or attempted.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FTSP-2-INTERNAL_ERROR: Internal software error. [chars]

Explanation An internal software error has occurred.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FTSP-1-NOMEMORY: Unit [dec], no memory for [chars]

Explanation The requested operation could not be accomplished because of a low memory condition.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%FTSP-4-UNEXPECTEDEVENT: Bad event received \n[dec], [dec]

Explanation An unexpected event was received.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

FW Messages

The following are inspection subsystem messages.

Error Message

%FW-4-ALERT_OFF: [chars], count ([dec]/[dec]) current 1-min rate: [dec]

Explanation Either the number of half-open connections or the new connection initiation rate has gone below the **max-incomplete low** threshold. This message indicates that the rate of incoming new connections has slowed and is issued only when the **max-incomplete low** threshold is crossed.

Recommended Action This message is for informational purposes only, but it may indicate that an attack has stopped.

Error Message

%FW-4-ALERT_ON: [chars], count ([dec]/[dec]) current 1-min rate: [dec]

Explanation Either the **max-incomplete high** threshold of half-open connections or the new connection initiation rate has been exceeded. This error message indicates that an unusually high rate of new connections is coming through the firewall, and a DOS attack may be in progress. This message is issued only when the **max-incomplete high** threshold is crossed.

Recommended Action This message is for informational purposes only, but it may indicate a security problem.

Error Message

%FW-2-BLOCK_HOST: Blocking new TCP connections to host [IP_address] for [dec] minute[chars] (half-open count [dec] exceeded).

Explanation Any subsequent new TCP connection attempts to the specified host will be denied because the **max-incomplete host** threshold of half-open TCP connections is exceeded, and the blocking option is configured to block the subsequent new connections. The blocking will be removed when the configured block time expires.

Recommended Action This message is for informational purposes only, but it may indicate that a SYN flood attack was attempted.

Error Message

%FW-6-DROP_PKT: Dropping [chars] pkt [IP_address]:[int] => [IP_address]:[int]

Explanation A packet has been dropped during a firewall inspection operation.

Recommended Action This message is for informational purposes only. No action is required.

Error Message

%FW-5-EMAIL_DROP_FRAGMENT: [chars]Dropping [chars] command fragment from initiator ([IP_address]:[dec])

Explanation The CBAC code detected a pipelined POP3/IMAP command fragment in the inspected POP3 connection. This message indicates that a suspicious violation was detected that may be an attack to the mail server system. The fragment was immediately dropped by the firewall.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message

%FW-3-FTP_NON_MATCHING_IP_ADDR: Non-matching address [IP_address] used in [chars]
-- FTP client [IP_address] FTP server [IP_address]

Explanation A suspicious violation was detected while an attempt was made to modify the security policy in the firewall. An FTP client attempted to use a **port** command, or the FTP server attempted to use the response to a **pasv** command, to trick the firewall into opening access to a third-party host

that is different from the two hosts engaged in the FTP connection. The command is rejected, and the connection has been reset by the firewall. This message is for informational purposes only, but may indicate that an attempt was made to grant or open access to unauthorized hosts.

Recommended Action If you suspect that an attempt was made to grant or open access to unauthorized hosts, perform actions to block this attempt.

Error Message

```
%FW-3-FTP_PRIV_PORT: Privileged port [dec] used in [chars] -- FTP client  
[IP_address] FTP server [IP_address]
```

Explanation An FTP client has attempted to use a PORT command or the FTP server has attempted to use the response to a PASV command to trick the firewall into opening access to a privileged port. This message indicates that a suspicious violation was detected from the FTP client or server that is attempting to modify the security policy in the firewall. The command is rejected, and the connection is reset by the firewall.

Recommended Action This message is for informational purposes only, but it may indicate that an attempt was made to gain access to privileged ports.

Error Message

```
%FW-3-FTP_SESSION_NOT_AUTHENTICATED: Command issued before the session is  
authenticated -- FTP client [IP_address] FTP server [IP_address]
```

Explanation An FTP client has attempted to use the PORT command or an FTP server has attempted to use the response to a PASV command to open a data channel in the firewall prior to the client's successful authentication with the server. This is a suspicious attempt by the client or server to trick the firewall into opening a hole so that outside attackers can take advantage of the firewall opening. This message indicates that a suspicious violation was detected, and the PORT or PASV command or response is rejected by the firewall. The data channel in the firewall will not be opened until the authentication is successfully completed.

Recommended Action This message is for informational purposes only, but it may indicate that an illegal attempt was made to modify the firewall security policy.

Error Message

```
%FW-4-HOST_TCP_ALERT_ON: Max tcp half-open connections ([dec]) exceeded for host  
[IP_address].
```

Explanation The **max-incomplete host** limit of half-open TCP connections has been exceeded. This message indicates that a high number of half-open connections is coming to the protected server, and it may indicate that a SYN flood attack is in progress and is targeted to the specified server host.

Recommended Action This message is for informational purposes only, but it may indicate that a SYN flood attack was attempted. If this alert is issued frequently and identified to be mostly false alarms, then the **max-incomplete host** threshold value is probably set too low, and there is a significant amount of legitimate traffic coming into that server. In this case, the **max-incomplete host** parameter should be set to a higher number to avoid false alarms.

Error Message

%FW-3-HTTP_JAVA_BLOCK: JAVA applet is blocked from ([IP_address]:[dec]) to ([IP_address]:[dec]).

Explanation A Java applet was seen in the HTTP channel, and the firewall configuration indicates that the applet from this Web site should be prohibited. The message indicates that the applet is being downloaded from one of the prohibited sites, and its entrance to the protected network is not allowed. The connection is reset, and the transmission of the detected applet is aborted immediately.

Recommended Action This message is for informational purposes only, but it may indicate a security problem.

Error Message

%FW-5-IMAP_INVALID_COMMAND: [chars]Invalid IMAP command from initiator ([IP_address]:[dec]): [chars]

Explanation The CBAC code detected an invalid IMAP command in the inspected IMAP connection. This message indicates that a suspicious violation was detected that may be an attack to the mail server system. The command is rejected and the connection is immediately reset by the firewall.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message

%FW-5-IMAP_NON_SECURE_LOGIN: [chars]LOGON IMAP command from initiator ([IP_address]:[dec]): [chars]

Explanation The CBAC code detected a cleartext logon attempt in the inspected IMAP connection while secure-login is configured. The command was rejected and the connection was immediately reset by the firewall.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message

%FW-6-INIT: Firewall inspection startup completed; beginning operation.

Explanation Firewall inspection is present in the startup configuration for at least one interface.

Recommended Action This message is for informational purposes only. It may be used to verify whether firewall inspection is active during system startup.

Error Message

%FW-3-INTERNAL_ERROR: IP Firewall internal failure -- [chars]

Explanation There were miscellaneous errors in the IP FW subsystem.

Recommended Action This message indicates the miscellaneous errors in the IP FW subsystem.

Error Message

```
%FW-3-NOTFOUND: Session context for ([IP_address]:[dec]) => ([IP_address]:[dec])
not found.
```

Explanation The CBAC code was searching its database for information for a particular inspection session, but this information was not found.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%FW-5-POP3_INVALID_COMMAND: [chars]Invalid POP3 command from initiator
([IP_address]:[dec]): [chars]
```

Explanation The CBAC code detected an invalid POP3 command in the inspected POP3 connection. A suspicious violation was detected that may be an attack to the mail server system. The command was rejected and the connection was immediately reset by the firewall.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message

```
%FW-5-POP3_NON_SECURE_LOGIN: [chars]LOGON POP3 command from initiator
([IP_address]:[dec]): [chars]
```

Explanation The CBAC code detected a cleartext logon attempt in the inspected POP3 connection while secure-login is configured. The command was rejected and the connection was immediately reset by the firewall.

Recommended Action This message is for informational purposes only, but may indicate a security problem.

Error Message

```
%FW-6-PRE_ALLOCATED_MEDIA_CHANNEL: Pre-Allocated [chars] channel from
[IP_address][[dec]:[dec]] to [IP_address][[dec]:[dec]]
```

Explanation The CBAC inspection has preallocated data structures and has created ACEs to allow the data or media traffic to flow through the firewall. This message is for informational purposes only, and may be used to verify whether data or media sessions are being created.

Recommended Action No action is required.

Error Message

%FW-3-RESPONDER_WND_SCALE_INI_NO_SCALE: Dropping packet - Invalid Window Scale option for session [IP_address]:[dec] to [IP_address]:[dec] (Initiator scale [int] Responder scale [int])

Explanation The firewall has detected that a packet from the Responder to the Initiator has the windows scaling option enabled but did not have the scaling option in the SYN packet from the Initiator to the Responder. This is an error according to RFC 1323

Recommended Action Enable the window scaling option on both the Initiator and the Responder or turn off window scaling on the Responder.

Error Message

%FW-6-SESS_AUDIT_TRAIL: [chars] session initiator ([IP_address]:[dec]) sent [int] bytes -- responder ([IP_address]:[dec]) sent [int] bytes

Explanation This message documents the per-session transaction log of network activities. The message is issued at the end of each inspected session, and it records the source and destination addresses and ports, as well as the number of bytes transmitted by the client and server.

Recommended Action This message is for informational purposes only and can be used to collect the basic accounting for the inspected sessions.

Error Message

%FW-6-SESS_AUDIT_TRAIL_START: Start [chars] session: initiator ([IP_address]:[dec]) -- responder ([IP_address]:[dec])

Explanation An inspection session has started. The message is issued at the start of each inspected session, and it records the source and destination addresses and ports. This message is for informational purposes only and can be used to collect the basic accounting for inspected sessions.

Recommended Action No action is required.

Error Message

%FW-4-SESSION_THRESHOLD_EXCEEDED: [chars]Number of sessions for the firewall rule '[chars]' applied on interface '[chars]' exceeds the configured threshold [dec]

Explanation This message indicates that the number of established CBAC sessions has exceeded the configured threshold.

Recommended Action This message is for informational purpose only, but may indicate a security problem. This might also mean that the session threshold is set to a low value, in which case the threshold value could be increased through a CLI command.

Error Message

%FW-4-SKINNY_INSPECTION_DISABLED: Skinny Inspection Disabled; Error = [chars]

Explanation Inspection of skinny protocol traffic has been disabled due to internal errors. The firewall will not inspect any skinny protocol traffic. This condition occurs when the firewall does not have enough memory to allocate initial skinny data structures.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. Restart the firewall, the router, or both to enable inspection of skinny protocol traffic.

Error Message

%FW-3-SMTP_INVALID_COMMAND: Invalid SMTP command ([chars])(total [dec] chars) from initiator ([IP_address]:[dec])

Explanation The CBAC code detected an invalid SMTP command in the inspected SMTP connection. This message indicates that a suspicious violation was detected that may be an attack on the mail server system. The command is rejected, and the connection is immediately reset by the firewall.

Recommended Action This message is for informational purposes only, but it may indicate a security problem.

Error Message

%FW-3-SMTP_UNSUPPORTED_PARAMETER: Unsupported SMTP parameter ([chars]) from initiator ([IP_address]:[dec])

Explanation The CBAC code has detected an invalid or unsupported parameter in an SMTP command. The parameter “@ or # to ETRN” means that the initiator is trying to send an invalid **etrn** command. This message is for informational purposes only, but may indicate a security problem.

Recommended Action If you suspect a security problem, perform actions to correct the problem.

Error Message

%FW-4-TCP_MAJORDOMO_EXEC_BUG: Majordomo Execute Attack - from [IP_address] to [IP_address]

Explanation A bug in the Majordomo program will allow remote users to execute arbitrary commands at the privilege level of the server.

Recommended Action For security reasons, users should not be allowed to execute programs through e-mail servers. This message is a very serious indication that your network may be under attack, and the source should be blocked immediately.

Error Message

%FW-4-TCP_SENDMAIL_BAD_FROM_SIG: Sendmail Invalid Sender - from [IP_address] to [IP_address]

Explanation This message appears whenever an e-mail message has a pipe symbol (|) in the “From:” field.

Recommended Action For security reasons, users should not be allowed to execute programs through e-mail servers. This message is a very serious indication that your network may be under attack, and the source should be blocked immediately.

Error Message

%FW-4-TCP_SENDMAIL_BAD_TO_SIG: Sendmail Invalid Recipient - from [IP_address] to [IP_address]

Explanation This message appears whenever an e-mail message has a pipe symbol (|) in the recipient field.

Recommended Action For security reasons, users should not be allowed to execute programs through e-mail servers. This message is a very serious indication that your network may be under attack, and the source should be blocked immediately.

Error Message

%FW-4-TCP_SENDMAIL_DECODE: Sendmail Decode Alias - from [IP_address] to [IP_address]

Explanation This message appears whenever an e-mail message has “:decode@” in the header. The decode alias is used to decode files and is implemented primarily as a convenience for system administration.

Recommended Action For security reasons, users should not be allowed to execute programs through e-mail servers. This message is a very serious indication that your network may be under attack, and the source should be blocked immediately.

Error Message

%FW-4-TCP_SENDMAIL_INVALID_COMMAND: Invalid SMTP command - [IP_address] to [IP_address]

Explanation This message appears whenever an invalid SMTP command is reported in the SMTP connection. This message indicates that a suspicious violation was detected that may be an attack on the mail server system.

Recommended Action This is unusual traffic and may warrant investigation.

Error Message

```
%FW-4-TCP_SENDMAIL_OLD_SIG: Archaic Sendmail Attacks - from [IP_address] to [IP_address]
```

Explanation Triggers when **wiz** or **debug** commands are sent to the SMTP port.

Recommended Action For security reasons, users should not be allowed to execute programs through e-mail servers. This message is a very serious indication that your network may be under attack, and the source should be blocked immediately.

Error Message

```
%FW-4-UNBLOCK_HOST: New TCP connections to host [IP_address] no longer blocked
```

Explanation New TCP connection attempts to the specified host are no longer being blocked. This message indicates that the blocking of new TCP connection attempts to the specified host has been lifted.

Recommended Action This message is for informational purposes only, but it may indicate a SYN flood attack was attempted on the host.

FX1000 Messages

The following are FX1000 Gigabit Ethernet controller messages.

Error Message

```
%FX1000-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay
```

Explanation A possible hardware error resulted in the discovery of too few Gigabit Ethernet interfaces.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%FX1000-3-ERRINT: [chars], error interrupt, csr_STATUS=[hex]
```

Explanation The Gigabit Ethernet controller has signaled a PCI error condition.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FX1000-1-INITFAIL_NOMEM: [chars], initialization failed, no buffer memory

Explanation The Gigabit Ethernet port initialization has failed because of insufficient memory.

Recommended Action Upgrade the GEIP with larger memory model. If the message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FX1000-5-LOSTCARR: [chars] cable/transceiver problem?

Explanation The Gigabit Ethernet port detects link failure, meaning that it is no longer receiving signals from the LAN. This can be caused by disconnected Gigabit Ethernet cabling, a GBIC failure, or a shutdown on the remote end.

Recommended Action Check your Gigabit Ethernet wiring and port adapter. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FX1000-2-NOISL: Interface [chars] does not support ISL

Explanation The ISL is not supported on the hardware of the specified interface.

Recommended Action No action is required.

Error Message

%FX1000-3-NOTFX1000: slot[[dec],[dec]] detects unknown PCI device (id=[hex])

Explanation The Gigabit Ethernet PA does not contain a Gigabit controller chip.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%FX1000-3-SEQUENCE_ERR: [chars], error interrupt, csr_STATUS=%[hex]

Explanation The Gigabit Ethernet controller has signaled a sequence error condition. The proper sequence of symbols is as follows: idle, start-of-frame (SOF), data, pad (optional), end-of-frame (EOF), fill (optional), idle.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%FX1000-3-TOOBIG: [chars], packet too big ([dec]), src [enet], dst [enet]

Explanation The interface detects a packet larger than what is defined by MTU.

Recommended Action Check the MTU setting of the other station, no other action is required.

GBIC_SECURITY Messages

The following are GBIC security check messages.

Error Message

%GBIC_SECURITY-4-EEPROM_CRC_ERR: EEPROM checksum error for GBIC in [chars]

Explanation The GBIC in the port specified in the error message contains invalid EEPROM data.

Recommended Action Remove the GBIC from the specified port.

Error Message

%GBIC_SECURITY-4-EEPROM_READ_ERR: Error in reading GBIC serial ID in [chars]

Explanation An error occurred while the GBIC type was being read from EEPROM.

Recommended Action Remove the GBIC from the specified port.

Error Message

%GBIC_SECURITY-4-EEPROM_SECURITY_ERR: GBIC in [chars] failed security check

Explanation The GBIC in the port specified in the error message contains invalid EEPROM data.

Recommended Action Remove the GBIC from the specified port.

Error Message

%GBIC_SECURITY-4-GBIC_INTERR: Internal error occurred in setup for GBIC interface [chars]

Explanation The system could not allocate resources, or had some other error, in the setup for the specified GBIC interface.

Recommended Action Reload the system. If the error persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

GBIC_SECURITY_CRYPT Messages

The following are GBIC SECURITY serial EEPROM verification messages.

Error Message

```
%GBIC_SECURITY_CRYPT-4-ID_MISMATCH: Identification check failed for GBIC in port [dec]
```

Explanation The GBIC in the specified port was identified as a Cisco GBIC, but the system was unable to verify its identity.

Recommended Action Verify that the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required. Otherwise, verify that the GBIC was obtained from Cisco or from a supported vendor.

Error Message

```
%GBIC_SECURITY_CRYPT-4-UNRECOGNIZED_VENDOR: GBIC in port [dec] manufactured by an unrecognized vendor
```

Explanation The GBIC in the specified port was identified as a Cisco GBIC, but the system was unable to match its manufacturer with one on the known list of Cisco GBIC vendors.

Recommended Action Verify that the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required.

Error Message

```
%GBIC_SECURITY_CRYPT-4-VN_DATA_CRC_ERROR: GBIC in port [dec] has bad crc
```

Explanation The GBIC was identified as a Cisco GBIC, but it does not have a valid CRC in the EEPROM data.

Recommended Action Verify that the Cisco IOS software running on the system supports the GBIC. If the GBIC is newer, a system software upgrade might be required. Even if the GBIC is unrecognized by the system, the GBIC may still operate properly but might have limited functionality.

GBIC_SECURITY_UNIQUE Messages

The following are GBIC security uniqueness verification messages.

Error Message

```
%GBIC_SECURITY_UNIQUE-3-DUPLICATE_GBIC: GBIC interface [dec]/[dec] is a duplicate of GBIC interface [dec]/[dec]
```

Explanation The GBIC was identified as a Cisco GBIC, but its vendor ID and serial number match that of another interface on the system.

Recommended Action Cisco GBICs are assigned unique serial numbers. Verify that the GBIC was obtained from Cisco or a supported vendor.

Error Message

```
%GBIC_SECURITY_UNIQUE-4-DUPLICATE_SN: GBIC interface [dec]/[dec] has the same serial number as another GBIC interface
```

Explanation The GBIC was identified as a Cisco GBIC, but its serial number matches that of another interface on the system.

Recommended Action Cisco GBICs are assigned unique serial numbers. Verify that the GBIC was obtained from Cisco or a supported vendor.

GE Messages

The following are Gigabit Ethernet subsystem messages.

Error Message

```
%GE-3-GEMAXADDR: [chars], expected [hex], actual [hex]
```

Explanation Too many MAC address are in the filter table.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GE-3-GEMISMATCH: [chars], expected [hex], actual [hex]
```

Explanation The PCI initialization for the GE has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-HW_FAULT: GE HW error, [chars], error_code=[hex]

Explanation A GE operation error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-IMAGEDOWNLOADFAIL: GE fpga image download failed, [chars]

Explanation The FPGA image for GE failed to be downloaded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-INITFAIL: GE initialization failed, [chars]

Explanation Initialization for the GE has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-INTERNAL: GE internal error, [chars]

Explanation An internal GE error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-MAJOR_FAULT: GE unrecoverable error, [chars], error_code=[hex]

Explanation A GE operation error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-3-MIBINITFAIL: GE MIB initialization failed, [chars]

Explanation MIB initialization for the GE has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GE-4-TOOBIG: GE - interface: [chars]: size [dec]: pak size

Explanation The packet size limit has been exceeded.

Recommended Action No action is required. The system will correct itself.

Error Message

%GE-6-UNKNOWN: Unknown message ([dec]) received ([chars]) from interface [chars]

Explanation An unknown message has been received from the back card.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GENERAL Messages

The following are Zenith route processor miscellaneous messages.

Error Message

%GENERAL-2-CRITEVENT: [chars]

Explanation A critical error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GENERAL-3-EREVENT: [chars]

Explanation This message is a general error to be used for sanity tests.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GENERAL-3-EREVENTHEX: [chars] [hex]

Explanation This message provides error information to be used for sanity testing.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GENERAL-3-EREVENTINT: [chars] [dec]

Explanation This message is a general error to be used for sanity tests.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GENERAL-3-EREVENTPXF: [chars] [chars], [chars], [chars]=[dec], [chars]=[dec], [dec], [chars]=[hex], [chars]=[hex], [chars]=[hex], [chars]=[int]

Explanation An internal software error has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GENERAL-3-EREVENTSTR: [chars] [chars]

Explanation This message is a general error condition that is primarily displayed for sanity tests.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GENERAL-5-IPHCEREVENT: [chars] [dec] [chars] [dec] [chars]

Explanation There was an RPM-XF specific IPHC error.

Recommended Action No action is required.

Error Message

%GENERAL-5-NOTEVENT: [chars]

Explanation This is a notification message.

Recommended Action No action is required.

Error Message

%GENERAL-3-WSEVENT: [chars]

Explanation This message provides information on a general error to be used for sanity testing.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

GET_DATA Messages

The following CMCC Channel Interface Processor (CIP) messages are related to the internal routine for allocating transfer elements.

Error Message

%GET_DATA-0-NOMEMORY: Can not allocate storage for xfer elements

Explanation An attempt was made to allocate a transfer element, and no storage was available. This is a fatal error.

Recommended Action The CIP has restarted. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GK Messages

The following are GK-H.323 messages.

Error Message

%GK-6-GK_CLI_RAS_IP_CHANGED: The IP address which has been changed was the gatekeeper's configured RAS address. Existing RAS clients will no longer be able to reach the gatekeeper.

Explanation The IP address that is being changed at the interface was statically assigned to the gatekeeper for its RAS signaling using the **zone local** command. This action will automatically replace the static RAS address of the gatekeeper with the new IP address. Because the old RAS address of the gatekeeper is no longer valid, existing clients that are registered to this gatekeeper using the old RAS address will no longer be able to communicate with this gatekeeper.

Recommended Action The user must notify existing RAS clients of the change and tell them to reregister their systems using the new RAS address of the gatekeeper, as shown in the **show gatekeeper zone status** command output.

Error Message

%GK-6-GK_CLI_RAS_IP_REMOVED: The IP address which has been removed was the gatekeeper's configured RAS address. The system will automatically assign a new IP address (if available) to be used as the gatekeeper's RAS address. Existing RAS clients will no longer be able to reach the gatekeeper.

Explanation The IP address that is being removed at the interface was statically assigned to the gatekeeper for its RAS signaling using the **zone local** command. This action will automatically remove the static RAS address of the gatekeeper. Because the gatekeeper no longer has a configured RAS address, the router will automatically assign an IP address (if any) to the gatekeeper. Existing clients that have registered to this gatekeeper through the old RAS address will no longer be able to communicate with this gatekeeper.

Recommended Action The user must notify existing RAS clients of the change and tell them to reregister their systems using the new RAS address of the gatekeeper, as shown in the **show gatekeeper zone status** command output.

Error Message

%GK-6-GK_CLOSE_SRV_CONNECTION: The connection to GKTMP server [chars]([IP_address]) appears to be hung and will be closed.

Explanation Messages are being backed up in the gatekeeper's write queue in the connection with the specified server name. The connection is assumed to be invalid, and the gatekeeper is closing the connection. This situation implies that messages will not be sent to that server for processing until either the gatekeeper or the server reinitiates the connection.

Recommended Action Check with the specified server for a possible connection error.

Error Message

%GK-6-GK_FLOAT_RAS_IP_CHANGED: The gatekeeper's RAS address has been automatically changed by the system. Existing RAS clients may no longer be able to reach the gatekeeper.

Explanation The IP address being changed at the interface causes the system to look for a better IP address to be used for the RAS address of the gatekeeper. Existing clients that have registered to this gatekeeper using the old RAS address may no longer be able to communicate with this gatekeeper.

Recommended Action The user must notify existing RAS clients to reregister their systems to the new RAS address of the gatekeeper, as shown in the **show gatekeeper zone status** command output.

Error Message

%GK-3-GKTMP_SERVER_MARKED_UNUSABLE: GKTMP Server: [chars]([chars]) connected to GK: [chars] is marked unusable

Explanation The gatekeeper has marked a GKTMP server as unusable when flow control is configured. The reason for this action could be that the average response time of the GMTMP server is very high, or the number of messages queued to be sent to the GKTMP server is very high. These conditions could be caused by an overloaded server or a problem with the TCP connection between the server and the gatekeeper.

Recommended Action Check the operational status of the GKTMP server and the network link between the server and the gatekeeper. If both are operational, enter the **show running-config** and the **show gatekeeper servers** commands and verify the status of the GKTMP server. Enter the **debug gatekeeper server** command on the Gatekeeper to enable debugging on the gatekeeper server. Gather this information, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-5-GKTMP_SERVER_MARKED_USABLE: GKTMP Server: [chars]([chars]) connected to GK: [chars] is marked usable

Explanation The gatekeeper has marked the GKTMP server as usable when flow control is configured.

Recommended Action No action is required.

Error Message

%GK-3-GKTMP_SERVER_OFFLINE: GKTMP Server: [chars]([chars]) is disconnected with Gatekeeper: [chars]

Explanation The connection between a GKTMP server and a gatekeeper has been closed. The reason for the closed connection could be one of the following:

- Closing of a connection by the gatekeeper because a socket read or write operation failed.
- Loss of a TCP connection.
- Receipt by the Gatekeeper of an unrecognized GKTMP message.
- Unconfiguring of the GKTMP server on the gatekeeper by user-entered CLI commands.
- Administrative shut down of the trigger on the Gatekeeper by user-entered CLI commands.
- Closing of the connection with the gatekeeper by the GKTMP server.

Recommended Action Check the operational status of the gatekeeper and the GKTMP server. If both are operational, check the TCP connection between the server and the gatekeeper. Check the output of the **show running-config** and **show gatekeeper servers** commands. Verify the status of the GKTMP server. Enter the **debug gatekeeper server** command on the gatekeeper to enable debugging on the gatekeeper server. Collect this information, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-5-GKTMP_SERVER_ONLINE: GKTMP Server: [chars]([chars]) is connected with Gatekeeper: [chars]

Explanation A connection between a GKTMP server and a gatekeeper has been established. The establishment of a connection could be initiated by either the gatekeeper or a GKTMP server.

Recommended Action No action is required.

Error Message

%GK-3-GKTMPServerMarkedUnusable: GKTMP Server: [chars]([chars]) connected to GK: [chars] is marked unusable

Explanation The gatekeeper has marked a GKTMP server as unusable when flow control is configured. Either the average response time of the GMTMP server is very high or the number of messages queued to be sent to the GKTMP server is very high. These conditions could be caused by an overloaded server or a problem with the TCP connection between the server and the gatekeeper.

Recommended Action Check the operational status of the GKTMP server and the network link between the server and the gatekeeper. If both are operational, enter the **show running-config** and **show gatekeeper servers** commands and check the status of the GKTMP server. Enter the **debug gatekeeper server** on the gatekeeper to enable debugging on the gatekeeper server. Collect this information, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-5-GKTMPServerMarkedUsable: GKTMP Server: [chars]([chars]) connected to GK: [chars] is marked usable

Explanation The gatekeeper has marked the GKTMP server as usable when flow control is configured.

Recommended Action No action is required.

Error Message

%GK-3-GKTMPServerOffline: GKTMP Server: [chars]([chars]) is disconnected with Gatekeeper: [chars]

Explanation The connection between a GKTMP server and a gatekeeper has closed. The following are reasons a connection can close:

- The gatekeeper has initiated closing of a connection because a socket read or write operation failed.
- A TCP connection might be broken.
- The gatekeeper has received an unrecognized GKTMP message.
- The GKTMP server has been unconfigured on the gatekeeper by user-entered CLI commands.
- The trigger has been administratively shut down on the gatekeeper by user-entered CLI commands.
- The GKTMP server has closed the connection with the gatekeeper.

Recommended Action Check the operational status of the gatekeeper and the GKTMP server. If both are operational, check the TCP connection between the server and the gatekeeper. Issue the **show running-config** and **show gatekeeper servers** commands and check the status of the GKTMP server. Enter the **debug gatekeeper server** command on the gatekeeper to enable debugging on the gatekeeper server. Collect this information, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-5-GKTMPServerOnline: GKTMP Server: [chars]([chars]) is connected with Gatekeeper: [chars]

Explanation A connection between a GKTMP server and a gatekeeper is established. The connection can be initiated by either the gatekeeper or a GKTMP server.

Recommended Action No action is required.

Error Message

%GK-3-GW_PROXY_ADD_COST_FAIL: GW/Proxy add cost failed. Could be out of memory.

Explanation The GW/PROXY add cost has failed. The system could be out of memory.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-GW_PROXY_ALIAS_NOT_FOUND: GW/Proxy not found for specified alias name [chars].

Explanation The GW/PROXY was not found for the specified alias name.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-GW_PROXY_ENDPT_NOT_FOUND: GW/PROXY may not be registered. Add cost failed.

Explanation An add cost has failed. The GW/PROXY may not be registered.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-GW_PROXY_IP_NOT_FOUND: GW/Proxy not found for specified IP address [IP_address].

Explanation The GW/PROXY was not found for the specified IP address.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-INVALID_GK_CMD: To shutdown Gatekeeper, use the "shutdown" command in the Gatekeeper mode.

Explanation An invalid command was used to shut down the Gatekeeper.

Recommended Action To shut down the Gatekeeper, use the **shutdown** command in the Gatekeeper mode. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-NO_DISC_PORT: Unable to open or bind to gatekeeper discovery port. Bringup failed.

Explanation The system is unable to open or bind to the Gatekeeper discovery port, and the bringup process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-NO_RAS_PORT: Unable to open or bind to RAS well-known port. Bringup failed.

Explanation The system is unable to open or bind to the RAS well-known port, and the bringup process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-PARTIAL_STATIC_ALIAS: Not all aliases were successfully created. Use the "show gatekeeper endpt" command to check on successful aliases.

Explanation Not all aliases were successfully created.

Recommended Action Use the **show gatekeeper endpoints** command to confirm the successful aliases.

Error Message

%GK-3-PROC_CB_NOMEM: No memory for process control block. Gatekeeper bringup failed.

Explanation No memory was available for the process control block. The Gatekeeper bringup process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-PROC_EV_NOMEM: No memory for free event queue. Gatekeeper bringup failed.

Explanation No memory is available for the free event queue. The Gatekeeper bringup process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-PROC_NOCREAT: Unable to create gatekeeper process. Gatekeeper bringup failed.

Explanation No memory is available to create the Gatekeeper process. The Gatekeeper bringup process has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-4-PROC_NOTALL: Unable to create more than [dec] gk thread processes.

Explanation The system could not create more than the specified number of Gatekeeper thread processes.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-PROC_NOTDOWN: Invalid state ([chars]): bringup is only permitted after shutdown.

Explanation This message reports an invalid state. The bringup process will be permitted only after a shutdown is performed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-PROC_NOTUP: Invalid state ([chars]): shutdown is only permitted after bringup.

Explanation This message reports an invalid state. The bringup process will only be permitted after a shutdown is performed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-5-RX_LRQ_PASSWORD_UPDATED: LRQ receive password for security password-group '[chars]' has been updated.

Explanation The gatekeeper was configured with an LRQ security password group that contained the **effective** keyword. This keyword allows the user to specify a time when the requested password is to take effect. The message displays to inform the user that the time period has expired and the updated password is now in effect.

Recommended Action This message is for informational purposes only. The user should confirm that all remote zones associated with this password group are now providing the password in its LRQ messages. If the user fails to confirm the results, an LRJ will contain a reason of invalid_permission.

Error Message

%GK-3-SHUTDOWN_WITH_CALLS: Cannot shutdown gatekeeper because there are calls in progress.

Explanation The Gatekeeper shutdown will not take place because there are calls in process.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-STATIC_ALIAS_FAILED: static-alias command failed. Could not create endpoint in endpoint dbase.

Explanation The **alias static** command has failed, and an endpoint could not be created in the endpoint database.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-STATIC_ALIAS_GW_FAILED: A static endpoint was added into the database but failed to create a gateway.

Explanation A static endpoint was added into the database, but it failed to create a gateway.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-SUBNET_FAILED: Failed to add/modify subnet information for specified subnet [IP_address]/[IP_address].

Explanation The subnet information for the specified subnet could not be created.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-SUBNET_NO_ATTRIBUTES: Please specify attribute [default | explicit] for this command.

Explanation No attribute (default or explicit) was specified for this command.

Recommended Action If an attribute was specified, and this error message was generated, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-SUBNET_NOT_FOUND: Subnet not found under specified IP address [IP_address]/[IP_address].

Explanation The subnet was not found under the specified IP address.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-ZONE_ACTIVE: There are endpoints currently registered in zone [chars]. Zone remove failed

Explanation Endpoints are currently registered in the specified zone; therefore, the zone could not be removed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GK-3-ZONE_NOT_FOUND: Zone not found for specified Gatekeeper name [chars].

Explanation The zone was not found for the specified Gatekeeper name.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GK_OSP Messages

The following are H.323 Gatekeeper OSP messages.

Error Message

%GK_OSP-3-GK_OSP_INIT_NOMEM: Not enough emory to initialize GK_OSP subsystem: [chars].

Explanation The system was unable to initialize the gatekeeper OSP subsystem because of low memory conditions.

Recommended Action Upgrade the router to a larger memory configuration.

Error Message

```
%GK_OSP-3-GK_OSP_PARSE_CHAIN_FAIL: Could not install gatekeeper osp CLI.
```

Explanation An internal error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GLBP Messages

The following are Gateway Load Balancing Protocol messages.

Error Message

```
%GLBP-4-BADAUTH: Bad authentication received from [IP_address], group [dec]
```

Explanation Two routers participating in a Gateway Load Balancing Protocol group disagree on the valid authentication string.

Recommended Action Use the **glbp authentication interface** command to repair the GLBP authentication discrepancy between the local system and the one whose IP address is reported.

Error Message

```
%GLBP-4-DIFFVIP1: [chars] Grp [dec] active routers virtual  
IP address [IP_address] is different to the locally configured  
address [IP_address]
```

Explanation The Gateway Load Balancing Protocol virtual IP address contained in the Hello message from the active router is different from the virtual IP address that is configured locally.

Recommended Action Check the configuration on all GLBP routers.

Error Message

```
%GLBP-4-DUPADDR: Duplicate address [IP_address] on [chars], sourced by [enet]
```

Explanation The IP address in a GLBP message received on the interface is the same as the IP address of the router. This condition might be due to a misconfiguration or a malfunctioning switch.

Recommended Action Check the configurations on all the GLBP routers and ensure that any switches you have are functioning properly.

Error Message

```
%GLBP-4-DUPVIP1: [chars] Grp [dec] address [IP_address] is \n\n already assigned to [chars] group [dec]
```

Explanation The GLBP virtual IP address contained in the Hello message cannot be learned because it is already assigned to a different GLBP group.

Recommended Action Check the configuration on all GLBP routers.

Error Message

```
%GLBP-4-DUPVIP2: [chars] Grp [dec] address [IP_address] is already assigned on this interface
```

Explanation The GLBP virtual IP address contained in the Hello message cannot be learned because it is already assigned to this interface.

Recommended Action Check the configuration on all GLBP routers.

Error Message

```
%GLBP-4-DUPVIP3: [chars] Grp [dec] address [IP_address] is already assigned to, or overlaps with, an address on another interface or application
```

Explanation The GLBP virtual IP address contained in the Hello message cannot be learned because it is already assigned to, or overlaps with, an address on another interface or application.

Recommended Action Check the configuration on all GLBP routers.

Error Message

```
%GLBP-6-FWDSTATECHANGE: [chars] Grp [int] Fwd [int] state [chars] -> [chars]
```

Explanation The GLBP forwarding engine has changed state.

Recommended Action No action is required.

Error Message

```
%GLBP-3-MISCONFIG: Cannot add MAC address [enet] to interface [chars] - not supported
```

Explanation A software or hardware error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%GLBP-6-STATECHANGE: [chars] Grp [int] state [chars] -> [chars]
```

Explanation The GLBP gateway has changed state.

Recommended Action No action is required.

GPRSFLTMG Messages

The following are Global Packet Radio Service Fault Management messages.

Error Message

```
%GPRSFLTMG-4-APNRELATEDERROR_PDPACTIVATIONFAIL: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]
```

Explanation PDP activation has failed. The following APN-related problems probably caused the failure:

- The APN requested in the PDP request is not configured in the GGSN router.
- Subscribe mode on APN, but the selection mode field is not verified. A duplicate static IP address is being used to access the APN.

Recommended Action Check the APN configuration. If the configuration seems to be correct, provide the output of **show running configuration** and **show gprs access-point all** commands, if possible. Copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GPRSFLTMG-4-AAAFAIL_PDPACTIVATIONFAIL: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]
```

Explanation A PDP activation failure has occurred. The reason code indicates the probable cause.

- a. No RADIUS server is present for authentication (no RADIUS server has been configured or the configured RADIUS server is not reachable).
- b. Authentication failed because of an invalid username or password.
- c. A PAP or a CHAP IE is missing in the packet in nontransparent mode.
- d. The username field is not present in the PDP activation request field.

Recommended Action Take the numbered action that corresponds to the probable reason:

- a. Ensure that the RADIUS server is configured properly and that the local server is able to ping the RADIUS server.
- b. Ensure that the RADIUS server is configured properly.

For reasons 3 or 4 or if the message recurs, copy the error message exactly as it appears on the console or in the system log. Issue the **show running configuration** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show running configuration** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-4-APNRELATEDERROR_PDPACTIVATIONFAIL: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]

Explanation PDP activation has failed. The following APN-related problems probably caused the failure:

- The APN requested in the PDP request is not configured in the GGSN router.
- APN is in subscribe mode, but the selection mode field is not verified in the PDP request.
- A duplicate static IP address is being used to access the same APN.

Recommended Action Ensure that the APN is configured correctly. If the message recurs, copy the error message exactly as it appears on the console or in the system log. Issue the **show running-config** and **show gprs access-point all** commands to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show running-config** and **show gprs access-point all** command outputs, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-4-CHARGING: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]

Explanation The primary or secondary charging gateway has been either configured or unconfigured.

Recommended Action This is an informational message only. No action is required.

Error Message

%GPRSFLTMG-0-GPRS_DHCP: [chars]

Explanation An error has occurred. The reason code indicates the probable cause.

- a. The DHCP client failed to get started. Memory allocation failures could be the cause of this condition.
- b. The GPRS DHCP process has failed to start.

Recommended Action Cisco recommends that you not use this GGSN for PDP session establishment with SGSN with a dynamic IP request. Check the available memory in the system. If this message occurred because of a failure of the DHCP Client to start, enter the **debug dhcp detail** command before the failure occurs. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-0-GPRS_SERVICE: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]

Explanation An error has occurred. The reason code indicates the probable cause.

- a. A path failure has occurred. No echo message has been received from the GSN peer and timeout.
- b. The system cannot send a GTP message using the specified socket.
- c. The GGSN service has started.
- d. The GGSN service has shut down.
- e. The primary charging gateway cannot be reached or is unconfigured.
- f. The primary charging gateway is up or is configured.
- g. The secondary charging gateway is up or is configured.
- h. The secondary charging gateway has become unreachable or is unconfigured.
- i. A permanent system failure has occurred.

Recommended Action Error messages with the reason code of c, f, or g are informational. If you receive an error message with any of the other reasons, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-4-GTPv1AAAFail_PDPACTIVATIONFAIL: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]

Explanation A PDP Activation has been failed because of one of the following reasons:

1. No RADIUS server is present, no RADIUS server is configured, or a configured RADIUS server is not reachable for authentication.
2. Authentication failed because of an invalid user name or password.
3. The PAP or CHAP IE is missing in the packet in nontransparent mode.
4. The user name field is not present in the PDP activation request that was sent.

Recommended Action For reason 1, check whether the RADIUS server is configured properly and if a ping operation can be performed successfully. For reason 2, check whether the RADIUS server is configured properly. For reasons 3 and 4, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GPRSFLTMG-4-GTPv1APNRELATEDERROR_PDPACTIVATIONFAIL: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]

Explanation PDP activation has failed because of one of the APN-related problems:

1. The APN that was requested in the PDP request is not configured in the GGSN router.
2. Subscribe mode has been enabled on APN, but the selection mode field has not been verified.
3. A duplicate static IP address to access the same APN already exists.
4. A session already exists for a different APN.

Recommended Action Check the APN configuration that corresponds to the error that was received. If the error persists, copy the message exactly as it appears on the console or in the system log. Enter the **show running-config** and **show gprs access-point all** commands. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GPRSFLTMG-4-GTPv1IPALLOCATIONFAIL_PDPACTIVATIONFAIL: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]

Explanation An IP address could not be dynamically allocated because of one of the following reasons:

1. Incorrect IP address problems:
 - a. The DHCP or RADIUS server IP address has been incorrectly configured in GGSN.
 - b. The DHCP or RADIUS server is reachable, but the configuration to allocate the IP address might be incorrect.
 - c. A properly configured DHCP or RADIUS server is unreachable.
2. Dynamic IP allocation has been disabled in the APN configuration.
3. PAP or CHAP information is missing from the RADIUS client in transparent mode. The user name and password is missing in the PDP activation request.

Recommended Action For reason 1a, check that the GGSN is configured with the valid DHCP/RADIUS server IP address. For reason 1b, check that the DHCP or RADIUS server is configured properly to allocate an IP address. For reason 1c, if the configurations are properly configured, check that the server is reachable from GGSN. For reason 2, configure the IP allocation pool as either a DHCP proxy client or a RADIUS client in the APN. For any other reason, or if the message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

<http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-4-GTPv1MOBILITY: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]
```

Explanation One of the following mobility-related problems has occurred:

1. The MS GPRS has become detached.
2. An MS GPRS is present.
3. MS, not GPRS, is responding for the network-initiated PDP and MS does not respond for packets initiated by an external network.
4. MS was refused for the network-initiated PDP.
5. The IMSI is unknown for the network-initiated PDP.

Recommended Action If the message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-0-GTPv1NORESOURCE: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]
```

Explanation Available resources are exhausted. GGSN service cannot continue because of one of the following reasons:

1. The number of pending signaling messages has reached its limit.
2. The GGSN has exhausted its available memory.
3. A permanent system failure has occurred.

Recommended Action For reason 1, check whether the number of PDPs that can be processed by GGSN can be increased. Check the APN configuration that corresponds to the error that was received. For any other reason, or if the problem persists, copy the message exactly as it appears on the console or in the system log. Enter the **show gprs gtp status** command. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support

representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-4-GTPv1QOSFAIL_PDPACTIVATIONFAIL: GSN: [IP_address], TEID: [hex], APN: [chars], Reason: [dec], [chars]
```

Explanation A QoS negotiation or update has failed. System resources were not available.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show gprs gtp status** command. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-4-HARDWAREFAIL: Reason: [chars]
```

Explanation An NVRAM write operation has failed.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-4-IPALLOCATIONFAIL_PDPACTIVATIONFAIL: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]
```

Explanation An IP address could not be dynamically allocated because of one of the following reasons:

1. The IP address of a DHCP or RADIUS server has been incorrectly configured in GGSN.
2. A DHCP or RADIUS server is reachable, but the configuration to allocate the IP address might be incorrect.
3. A DHCP or RADIUS server that is correctly configured is unreachable.
4. Dynamic IP allocation has been disabled in the APN configuration.

5. PAP or CHAP information is missing from the RADIUS client in transparent mode. The user name and password are missing in the PDP activation request.

Recommended Action For reason 1, check to see whether the GGSN is configured with the valid DHCP or RADIUS server IP address. For reason 2, check to see whether the DHCP or RADIUS server is properly configured to allocate an IP address. For reason 3, if the configurations have been checked and are correct, check to see whether the server is reachable from GGSN. For reason 4, configure the IP allocation pool as either a DHCP proxy client or a RADIUS client in the APN. If you still cannot fix the problem, or if any other message was received, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GPRSFLTMG-4-MOBILITY: GSN: [IP_address], TID: [hex][hex], APN: [chars],
Username: [chars] Reason: [dec], [chars]
```

Explanation A mobility-related error has occurred. The reason code indicates the probable cause.

- a. The MS GPRS has detached.
- b. The MS GPRS is present.
- c. The MS, and not the GPRS, is responding to the network-initiated PDP, and the MS does not respond to packets that were initiated by an external network.
- d. The MS has been refused for the network-initiated PDP.
- e. The IMSI is unknown for the network-initiated PDP.

Recommended Action If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GPRSFLTMG-4-MOBILITYERROR. : GSN: [IP_address], TID: [hex][hex], APN: [chars],
Reason: [dec], [chars]
```

Explanation A failure involving a mobility station has occurred. The reason code indicates the probable cause.

- a. The mobility station is detached.
- b. The mobility station is not responding.
- c. The mobility station refused to receive the signals.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-0-NOPROCESS: [chars]

Explanation A process could not be started.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show gprs gtp status** command. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GPRSFLTMG-0-NORESOURCE: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]

Explanation GGSN service cannot continue because available resources have been exhausted. The reason code indicates the probable cause.

- a. The PDP number has reached its limit.
- b. The number of pending signaling messages has reached its limit.
- c. Memory is insufficient in the GGSN.

Recommended Action If the reason is 1, increase the PDP number that the GGSN can accommodate, if possible. If this message recurs, copy the error message exactly as it appears on the console or in the system log. Issue the **show gprs gtp status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gprs gtp status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GPRSFLTMG-0-PACKETPARSINGERROR: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason: [dec], [chars]

Explanation A PDP context activation failed at the packet parsing state. The reason code indicates the probable cause.

- a. A mandatory IE is missing in the PDP.
- b. The mandatory IE has an invalid range of value.
- c. The mandatory IEs are not in sequence.
- d. There is an invalid message format.
- e. An optional IE in the packet has an invalid range of value.
- f. The GGSN node does not support the GTP version received.
- g. A noncharging message appears in the charging path.

- h. A charging message appears in the GTP path.
- i. There is an unknown GTP message.
- j. The GTP message that was received is too short to contain all expected information about the IE.
- k. An unexpected message appeared.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GPRSFLTMG-6-PDP_PURGED: GSN: [IP_address], TID: [hex][hex], APN: [chars],
Reason: [dec], [chars]
```

Explanation The PDP context has been purged because of a PDP context idle timeout.

Recommended Action No action is required.

Error Message

```
%GPRSFLTMG-4-QOSFAIL_PDPACTIVATIONFAIL: GSN: [IP_address], TID: [hex][hex], APN:
[chars], Reason: [dec], [chars]
```

Explanation QoS negotiation or update has failed because resources are not available.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gprs gtp status** command to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gprs gtp status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%GPRSFLTMG-4-RECOVERYIEDIFF: GSN: [IP_address], TID: [hex][hex], APN: [chars],
Reason: [dec], [chars]
```

Explanation The GGSN has received policy decision point (PDP) update requests with different recovery information elements in the same path.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GPRSFLTMG-0-RESOURCE: GSN: [IP_address], TID: [hex][hex], APN: [chars], Reason:
[dec], [chars]
```

Explanation Available resources were exhausted and GGSN service could not continue. The reason code indicates the probable cause.

- a. The maximum number of PDPs has been reached.

- b. The number of network-initiated PDPs has reached a percentage and the GGSN cannot process any more PDPs.

Recommended Action Verify whether you can increase the number of PDPs that the GGSN can support. If this message recurs, enter the **show gprs gtp status** command. Copy the error message exactly as it appears on the console or in the system log along with the output of the **show gprs gtp status** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

GPRSMIB Messages

The following are Global Packet Radio Service MIB messages.

Error Message

```
%GPRSMIB-4-FRAGMENT_ERROR: fragmentation error (s_uid = [hex]) received
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GPRSMIB-4-INVALIDMSG: Invalid GPRSMIB message (msg_type [hex]) received
```

Explanation An internal software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GRIP Messages

The following are XNS Routing Protocol messages.

Error Message

```
%GRIP-3-BADPATHS: Invalid number of paths ([dec]) for [APOLLO/XNS/UB]
```

Explanation An internal inconsistency was detected in the XNS routing table structure.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRIP-2-BADROUTE: Error [chars] route - null table

Explanation A hardware or a software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GRP Messages

The following are Gigabit Route Processor messages.

Error Message

%GRP-3-ADDRERROR: Bad access to fabric-buffers : invalid address\n

Explanation An illegal access has been made to the fabric buffers. This condition usually indicates a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-BADLENGTH: Internal fabric register mismatch. Expected length = [int].
Received length = [int].

Explanation A packet has been received from the fabric, but the packet length received and the packet length indicated in the buffer header do not match.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-BAD_PKT: CSAR: Received slot [int] Chan [int]

Explanation An invalid packet was received at CSAR.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BAD_RESET:

Explanation The software attempted to reset itself over the MBUS.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BAD_STATE: Slot:[int] State:[chars]

Explanation The software is in an incorrect state for receiving the current packet over the fabric. The message reports the slot in which the packet was received and describes the state of the reassembly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BADSTATE: Reassembly state is bad for slot [int]. State = [int]

Explanation The software is in an incorrect state for receiving the current packet over the fabric. The message reports the slot in which the packet was received and describes the state of the reassembly.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_ALLOC: Failed buffer allocation for [chars]

Explanation A data structure could not be allocated to contain the contents of the given BMA microcode file. There might be insufficient DRAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_BAD: Slot [dec]: bad slot state ([dec]) or card type ([hex] - [chars])

Explanation The software is not able to select or download the given BMA microcode on the given slot. Either the line card is not present, there is a card type other than a line card in the given slot, or the line card is not enabled.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_ENABL: No line cards enabled: selector [chars], feature [chars]

Explanation The selection or download of the BMA microcode failed for all slots, selector, and features. There are no enabled line cards.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_FAIL: Slot [dec], selector [chars], feature [chars]

Explanation The selection or download of the BMA microcode has failed for the given slot, selector, and feature. The line card could be disabled, or there could have been an error on the line card during the attempt to select or download the BMA microcode.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_FILE: Error reading [chars]

Explanation The given binary BMA microcode could not be read, probably because it was not found.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-BMAUCODE_SELECTOR: Command selector [chars] != file header selector [chars]

Explanation For the **bma microcode download** command, the selector specified on the command line does not match the selector in the binary BMA microcode file.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-CAMFULL: Too many entries in the Ethernet CAM \n

Explanation Too many MAC addresses were put into the CAM of the Ethernet. This problem usually indicates a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_ADD: Failed to add buffer size [int] with delta [int]

Explanation The specified buffer size could not be added to the SDRAM buffer carve specification because of one of the following internal parameter errors: an exceeded number of available elements, an excessive delta size, or null parameters.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_FAIL: [chars] BMA, slot [int]

Explanation One of the following problems has occurred: the SDRAM buffer carve on the given line card failed, the RP failed to send the carve information to the line card through IPCs, or the carve result from the line card failed to return to the RP. The line card probably is disabled.

Recommended Action Try rebooting the line card. If rebooting the line card does not resolve the problem, consider power-cycling the router. If the message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_FREEQS: Free queues ([int]) > allowed ([int])

Explanation The number of free queues allowed for the SDRAM buffer carving has been exceeded.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-CARVE_MTU: Only [int] MTUs considered (max = [dec])

Explanation The list of different MTUs that can be considered in the SDRAM buffer carving is limited by the given maximum number.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_PCT: Sum percentage SDRAM buffers ([int]) > 100

Explanation The specified sum of percentages for SDRAM buffer sizes has exceeded 100.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_SIZE: SDRAM buffer size [int] \n its delta [int]

Explanation The rounded-up SDRAM buffer size should be larger than a given delta size.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_SPEC: Empty SDRAM buffer carve specification

Explanation There is no SDRAM buffer carve specification to send to a line card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-CARVE_ZERO: [chars] BMA, slot [int], entry index [int]: zero SDRAM buffer size

Explanation The given SDRAM buffer size should not be zero.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-CELLNEG: Detected an internal signal error on the fabric interface.

Explanation An internal signal between the CSAR and the FIA was deasserted too early.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-COOKIE: Corrupt or missing MAC address cookie -- using random base [enet]

Explanation The part containing the MAC addresses allocated to this chassis could not be accessed or was found to be corrupt, either because of a hardware problem or because of a manufacturing problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-COREDUMP: Core dump incident on slot [dec], error: [chars]

Explanation The master GRP has detected a line card or a secondary Route Processor whose state is so close to failure that a diagnostic core dump is appropriate. If exception core dumps are configured for that slot, a dump will be taken. The error message provides further details of the error that has caused the dump request.

Recommended Action This error may be caused by a hardware or software failure. Run diagnostic tests on the line card by entering the **diag slot-number verbose EXEC** command, and replace the card if it fails the tests. Note that the line card will be disabled for the duration of the diagnostics. Use the **hw-module slot reload EXEC** command if the card remains disabled after the tests. If the card passes the tests, consider upgrading your system to the latest Cisco IOS software release in your release train to take advantage of recent fixes. If the problem still occurs after the upgrade, copy the error message text and the output of the diagnostic tests exactly as they appear on the console or in the system log, enter the **show tech-support** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-4-CORRUPT: Corrupted packet received. start_offset = [int]\n length = [int]  
card = [int].\n
```

Explanation A buffer with a corrupted buffer header has been received from the fabric.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-4-CRC32: CRC32 error detected from slot [int].
```

Explanation A CRC32 error has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-3-ERROR: NULL
```

Explanation This message provides information about a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-4-ETHERPAL: Ethernet PAL on the GRP is missing.
```

Explanation The system software has detected that the Ethernet PAL on the GRP either is missing or is improperly installed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-3-EXEC_ALLOC: No memory for command
```

Explanation No memory was available to allocate for the remote command string.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-EXEC_ENABL: No line cards enabled

Explanation There are no enabled line cards.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-EXEC_SLOT: Slot [dec] not enabled

Explanation There is no card in the given slot, or the card exists but is not enabled.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-FABCOPY: [chars] address = [hex].

Explanation The fabric driver software has passed an incorrectly aligned pointer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-FABRIC: [chars] ([int])

Explanation The master GRP is unable to communicate over the fabric to the specified line card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-FABRIC_MULTI: [chars] ([hex])

Explanation A problem has been detected between the master RP and a line card over the fabric.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-3-FABRIC_UNEXP: [chars] ([int])
```

Explanation An unexpected message has been received from the specified line card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-3-FABRIC_UNI: [chars] ([int])
```

Explanation A hardware or software problem has been detected over the fabric between the master RP and the card in the slot specified in the error message. This condition could be created by, most likely, a software problem or, less likely, a hardware problem.

The following is a list of possible reasons for this message; however, it is not all-inclusive:

- A software failure has occurred in which a process has disabled interrupts long enough for 5 consecutive fabric pings to be missed. This condition indicates a problem with the software on the destination card.
- The RP could not send a fabric ping to the specified line card. If a fabric ping cannot be sent for a number of consecutive times, the destination card will be reset.
- The RP could not send data other than a fabric ping to the specified line card. If the data that has failed to be sent is not a fabric ping, the destination card will not be reset, but this condition may affect other functionality of the RP; for example, CEF might be disabled.
- A hardware problem has occurred on the RP or GRP, in the fabric, or on the destination card. If the error was due to a hardware problem with the GRP, other IPC timeout messages would be logged before the fabric ping failure and entering the **show contr fia** command on the GRP would show errors, while entering the **show contr fia** command on the line card would not.

Recommended Action Consider upgrading the system to the latest Cisco IOS software version in your release train to eliminate all resolved software problems. If this message recurs, copy the error message exactly as it appears on the console or in the system log, enter the **show controller fia** command and, if the line card was reloaded, the **show context slot slot-number** command, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP-4-FIRSTLAST: First/Last cell error detected from slot [int].
```

Explanation A cell has been received with an invalid first or last bit set.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-FROMFABPAR: Parity error detected in from fabric buffer memory. Slot [int].\n

Explanation A parity error from the fabric buffers has been detected.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-IFCON: Too many Queued messages, No buffers available

Explanation Too many messages are coming from the Internet router line card. There are no more buffers on the RP to handle these messages.

Recommended Action Try shutting down debugging messages on the line card or reloading it. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-LC_CARD_TYPE_INVALID: Linecard has invalid card type [hex]

Explanation The line card type is invalid. The line card EEPROM is programmed with an invalid card type.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-LC_FLASH_PROG_FAIL: Slot [dec] failed program flash with [chars]

Explanation The line card could not be programmed and may be defective.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-LC_POST_ALLOC: Failed buffer allocation for [chars]

Explanation A data structure could not be allocated to contain contents of the given line card POST file. There might be insufficient DRAM.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-LC_POST_FAIL: Slot [dec] fail download

Explanation The download of the GLC POST has failed for the given slot. The line card could be disabled, or an error could have occurred on the line card during the attempt to download the GLC POST.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-LDFAIL: Unable to download ucode from [chars] in slot [hex] (bitmask), trying [chars] ucode

Explanation For some reason, the line card image specified by the configuration is not suitable for downloading, or another error has occurred. The line card image that is bundled within the GRP system image will be loaded.

Recommended Action Try reloading the microcode. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-MEMSIZE: Non oct-byte access to fabric buffers.

Explanation An illegal access has been made to fabric buffers. This usually indicates a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-MODULE: Missing [chars] for [chars]

Explanation A hardware or software error has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-MSGTOOBIG: Datagram size too large ([int])

Explanation An attempt to send a packet over the fabric has failed because the packet was too big. This problem usually indicates a software error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-NOFILE: Ucode file [chars] not found, system ucode loaded in slot [hex] (bitmask).

Explanation The file specified by the configuration was not found in Flash memory. The slot number represents a bit mask of the cards affected. The line card image that is bundled within the GRP system image will be loaded.

Recommended Action Use the **show flash** command to determine if the file is located in Flash memory. If the file is there, attempt to reload the microcode. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-NO_INTF: CSAR: No interface available Slot [int] Chan [int]

Explanation The CSAR has received packet with an invalid interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-NOMAC: Can't allocate MAC address for interface [int]/[int]

Explanation No MAC address was available for allocation to the specified interface.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-OLDVERSION: Running old version of GRP

Explanation The system software detected an old version of the GRP.

Recommended Action The GRP needs to be upgraded in order to run with this software.

Error Message

%GRP-3-PARITYERR: Parity error detected in the fabric buffers. Data ([hex])

Explanation A parity error has been detected by the fabric interface hardware on the RP. The hex number indicates the error interrupt vector. This message usually indicates a hardware problem on the RP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-POST_CODE_FILE: Error reading [chars], post.unicode is required in slot0 for upgrade

Explanation The software could not read the given binary LC POST code, possibly because it has not found the post.unicode in the PCMCIA card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-Q_CORRUPT: CSAR: HoldQ Count is corrupted

Explanation The CSAR Queue indicates a packet even though none is available.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-QFULLPAR: Parity error detected.

Explanation A parity error was detected between the CSAR and the FIA on the “queue full” signals. The parity error usually indicates a hardware error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-REASSEMBLY: Reassembly error detected. Slot = [int].\n State = [int], Status = [int].

Explanation There has been an error in reassembling a buffer over the fabric. The message indicates the slot in which the errored packet was received and describes the state of the reassembly. The status of the packet can be decoded as follows:

- 00 = middle buffer

- 01 = last buffer
- 10 = first buffer
- 11 = only buffer.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-RESET_CARD: Card [int] has reset too many times.

Explanation The line card specified in the error message has automatically reset itself too many times in attempts to overcome an error condition. It will attempt a reload again after ten minutes have elapsed. This probably indicates that the card is either incorrectly installed, incorrectly configured, or experiencing a hardware failure.

Recommended Action Check the configuration and cabling for errors. The line card can be reloaded manually using the **microcode reload** command. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-RESTART: NULL

Explanation The SDRAM buffer memory was reset and reallocated.

Recommended Action If this error occurred as a result of an operator-issued command, then no action is required. If the cause for the error message is unknown, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-RXFAB: From fabric buffers are out of order with software. Index = [int], Expected = [int], Received = [int].

Explanation The fabric driver software is not synchronized with the fabric hardware.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-SEQUENCE: Sequence error detected from slot [int]. Expected [int]\n

Explanation A cell with an incorrect sequence number has been received.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-TYPE: Unknown link type [int] int [int]/[int]

Explanation A packet was received on an interface that had an unknown link type. This message most likely indicates that there is a software problem.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-UCODEFAIL: [chars] [int]

Explanation The image that was downloaded to the line card has been rejected by the line card.

Recommended Action Try reloading the microcode. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-UCODETIMEOUT: [chars] ([int])

Explanation The line card did not acknowledge the download of the image.

Recommended Action Try reloading the line card image. If the error message recurs, copy the message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-UNDEF_HDR: Slot [int]:[hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]

Explanation A packet has been received from the fabric, but there was a problem in the header. The data that appear are the first bytes from the buffer header and the payload.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-4-UNEXPBUFFER: Unexpected buffer finished sending to fabric ([int]).

Explanation A send to fabric buffer completed sending, however, the software was not expecting this buffer to be completed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GRP-3-UNEXPINT: [chars] [hex]

Explanation An unexpected interrupt has occurred from the specified device on the GRP. The device that caused the interrupt is given in the error message output.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show tech-support** command to gather data that might help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

GRP_C10K_CH_DS3 Messages

The following are Cisco 10000 channelized-to-DS3 RP driver messages.

Error Message

%GRP_C10K_CH_DS3-1-ALLOCFAIL: C10K [dec]/[dec][chars] allocation failure

Explanation A Cisco 10000 channelized-to-DS3 controller or channel memory allocation failure has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

%GRP_C10K_CH_DS3-5-BERT: Interface [chars], BERT [chars]

Explanation The Cisco 10000 channelized-to-DS3 driver has received and processed a BERT completion event.

Recommended Action No action is required.

Error Message

```
%GRP_C10K_CH_DS3-3-CORRUPT: Corrupt configuration, unsupported [chars] ([int])  
encountered
```

Explanation The running configuration for the Cisco 10000 channelized-to-DS3 RP driver is corrupt.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show gsr** and **show ipc status** commands to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GRP_C10K_CH_DS3-5-FAREND: Interface [chars] [chars] far end request of type  
([chars])
```

Explanation The Cisco 10000 channelized-to-DS3 driver has received and processed a known far-end request (for example, a loopback request).

Recommended Action No action is required.

Error Message

```
%GRP_C10K_CH_DS3-1-MIA: C10K [dec]/[dec] LC removed during initialization
```

Explanation A Cisco 10000 channelized-to-DS3 line card was removed during initialization.

Recommended Action If C10K-channelized-to-DS3 functionality is desired, replace the line card.

Error Message

```
%GRP_C10K_CH_DS3-4-MSGVERSION: Incompatible message version with slot [dec]
```

Explanation There is an incompatibility between the message version being sent by the line card and the message version used by the GRP. This type of incompatibility could happen if the GRP and the line card are using different Cisco IOS software versions because of a GRP OIR event. PoS statistics will not be sent to the GRP as a result of this condition; however, all functionality will be retained.

Recommended Action Reload the microcode to solve the problem.

Error Message

```
%GRP_C10K_CH_DS3-3-OP: Interface ([chars]): [chars]
```

Explanation The Cisco 10000 channelized-to-DS3 driver has received an unexpected event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show gsr** and **show ipc status** commands to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GRP_C10K_CH_DS3-3-TIMEOUT: Interface ([chars]): [chars]
```

Explanation The Cisco 10000 channelized-to-DS3 driver has queried the line card for SONET information, but the line card did not respond.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show gsr**, **show ipc nodes**, **show ipc ports**, and **show ipc status** commands to gather data that may provide information to determine the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr**, **show ipc nodes**, **show ipc ports**, and **show ipc status** command output, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message

```
%GRP_C10K_CH_DS3-3-UNKNOWN_FAREND: Interface [chars] received an unknown far end request ([int])
```

Explanation The C10K-CH-DS3 RP driver has received an unknown far-end request.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <http://www.cisco.com/tac>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <http://tools.cisco.com/ServiceRequestTool/create>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

GRP_OC12_CH_DS3 Messages

The following are gigabit route processor (GRP) driver messages.

Error Message

```
%GRP_OC12_CH_DS3-1-ALLOCFAIL: OC12 [dec]/[dec][chars] allocation failure
```

Explanation An OC12-channelized-to-DS3 controller or a channel memory allocation failure has occurred.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRP_OC12_CH_DS3-5-BERT: Interface [chars], BERT [chars]
```

Explanation The OC12-CH-DS3 driver has received and processed a BERT completion event.

Recommended Action This message appears whenever the notification for a BERT completion event is received. No action is required.

Error Message

```
%GRP_OC12_CH_DS3-3-CORRUPT: Corrupt configuration, unsupported [chars] ([int])  
encountered
```

Explanation The OC12-CH-DS3 RP driver running configuration is corrupt.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr** and **show ipc status** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%GRP_OC12_CH_DS3-5-FAREND: Interface [chars] [chars] far end request of type  
([chars])
```

Explanation The OC12-CH-DS3 driver received and processed a known far-end request.

Recommended Action No action is required.

Error Message

```
%GRP_OC12_CH_DS3-1-MIA: OC12 [dec]/[dec] LC removed during initialization
```

Explanation An OC12-channelized-to-DS3 LC was removed during the initialization.

Recommended Action If OC12-channelized-to-DS3 functionality is desired, replace the LC.

Error Message

%GRP_OC12_CH_DS3-4-MSGVERSION: Incompatible message version with slot [dec]

Explanation The message version being sent by the line card does not match the message version being used by the GRP. This type of incompatibility can happen if the GRP and the line card are using different Cisco IOS software versions as a result of a GRP OIR event. The only problem caused by this condition is that POS statistics are not being reported to the GRP.

Recommended Action Reload the microcode.

Error Message

%GRP_OC12_CH_DS3-3-OP: Interface ([chars]): [chars]

Explanation The OC12-CH-DS3 RP driver has received an unexpected event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr** and **show ipc status** commands to gather data that may help identify nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GRP_OC12_CH_DS3-3-TIMEOUT: Interface ([chars]): [chars]

Explanation The OC12-CH-DS3 RP driver queried the LC for SONET information, and the LC did not reply.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr**, **show ipc nodes**, **show ipc ports**, and **show ipc status** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr**, **show ipc nodes**, **show ipc ports**, or **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GRP_OC12_CH_DS3-3-UNKNOWN_FAREND: Interface [chars] received an unknown far end request ([int])

Explanation The OC12-CH-DS3 RP driver has received an unknown far-end request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GRPGE Messages

The following are Gigabit Ethernet Route Processor (RP) driver messages.

Error Message

```
%GRPGE-3-CMDERR: Interface ([chars]): [chars] IPC command fails (cause: [hex])
```

Explanation The Gigabit Ethernet RP driver has experienced an IPC command error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRPGE-3-EVENT: Interface ([chars]): unknown IPC event ([int]) from linecard
```

Explanation The Gigabit Ethernet RP driver has received an unknown event from the line card.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRPGE-3-INIT: Gigabit Ethernet driver ([int]/[int]) initialization [chars].
```

Explanation The Gigabit Ethernet RP driver has experienced software initialization error.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRPGE-4-MSGVERSION: Incompatible message version with slot [dec]
```

Explanation The message version being sent by the line card does not match the message version used by the GR. This type of incompatibility can happen if the GRP and the line card are using different Cisco IOS versions, and a GRP OIR event. The only problem caused by this condition is that POS statistics are not being reported to the GRP.

Recommended Action Reload the microcode.

Error Message

```
%GRPGE-4-NULLCEFIDB: Interface ([chars])
```

Explanation This interface does not have CEF IDB by mistake.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRPGE-3-OP: Interface ([chars]): [chars]
```

Explanation The Gigabit Ethernet RP driver has received an unexpected event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr** and **show ipc status** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

```
%GRPGE-6-SH_CAM_FULL: Failed to add address [enet] to full [dec] entry shadow CAM
```

Explanation An attempt to add an entry to the CAM MAC address filter has failed.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GRPGE-4-UNSUP: Interface ([chars]): unsupported feature: [chars]
```

Explanation This feature is not supported by the Internet router Gigabit Ethernet RP.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GRPPOS Messages

The following are packet-over-SONET (POS) route processor messages.

Error Message

```
%GRPPOS-4-MSGVERSION: Incompatible message version with slot [dec]
```

Explanation The message version being sent by the line card does not match the message version being used by the GRP. This type of incompatibility could happen if the GRP and line card are using different Cisco IOS versions as a result of a GRP OIR event. The only problem caused by this condition is that POS statistics are not being reported to the GRP.

Recommended Action Reload the microcode.

Error Message

%GRPPOS-3-OP: Interface ([chars]): [chars]

Explanation The POS RP driver has received an unexpected event.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr** and **show ipc status** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr** and **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

Error Message

%GRPPOS-3-TIMEOUT: Interface ([chars]): [chars]

Explanation The POS RP driver queried the line card for SONET information, but the line card did not reply.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Issue the **show gsr**, **show ipc nodes**, **show ipc ports**, and **show ipc status** commands to gather data that may help identify the nature of the error. If you cannot determine the nature of the error from the error message text or from the **show gsr**, **show ipc nodes**, **show ipc ports**, and **show ipc status** command output, contact your Cisco technical support representative and provide the representative with the gathered information.

GSHDSL Messages

The following are G.Symmetric High bit rate DSL (G.SHDSL) messages.

Error Message

%GSHDSL-6-ACTIVATION: Interface [chars], the line is still not activated.

Explanation The line has not become activated. A cable might have been disconnected.

Recommended Action Verify that the cable is connected.

Error Message

%GSHDSL-3-APIFAIL: Interface [chars], globespan API function call failed.

Explanation An API function call has failed. The GlobeSpan PHY chip might be malfunctioning.

Recommended Action If the WIC does not come up successfully, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSHDSL-6-EOCBADPACK: Interface [chars], bad EOC packet is received.

Explanation The FCS that was calculated by the system does not match the FCS in the packet. The EOC packet will be ignored.

Recommended Action The packet is dropped and will be resent. This error occurs in normal operation. If most of the EOC packets are reported as bad and this message occurs frequently, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSHDSL-1-GETPROCPARAM: Unable to retrieve parameter for process

Explanation The system could not retrieve a parameter for the process just created.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSHDSL-3-NOMEM: Interface [chars], out of memory

Explanation The router is unable to run this image because of insufficient installed memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

%GSHDSL-3-RESETFAIL: Interface [chars], restart failed.

Explanation The WIC hardware might have failed.

Recommended Action Reseat the WIC. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GSI Messages

The following are G.Symmetric High bit rate DSL (G.SHDSL) messages.

Error Message

```
%GSI-1-INITFAIL: Interface [chars], init failed.
```

Explanation The DSL network module hardware might have failed.

Recommended Action Reseat the network module hardware. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GSI-3-NOMEM: Interface [chars], system is out of memory
```

Explanation The router is unable to run this image because of insufficient installed memory.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%GSI-3-NORESET: Interface [chars], failed when tried resetting from CLI.
```

Explanation The WIC hardware might have failed.

Recommended Action Reseat the WIC. If this message recurs, copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

```
%GSI-1-PROCFAIL: Interface [chars], failed to create process
```

Explanation The monitor-process creation has failed. There might not be enough memory to create the monitor process.

Recommended Action Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

Error Message

```
%GSI-6-RESET: Interface [chars], bringing up the line. It may take several seconds for the line to be active.
```

Explanation The WIC hardware is completing its activation process. This process might take as much as a minute to complete.

Recommended Action No action is required.

Error Message

%GSI-3-SAMEMODE: Interface [chars], the operating mode you are requesting is already in effect

Explanation The operating mode specified in the error message is already in effect on the specified interface.

Recommended Action Verify the current mode. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSI-1-SETPROCPARAM: Interface [chars], unable to pass parameter to process

Explanation The system could not pass a parameter for the process just created.

Recommended Action Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

GSR_ENV Messages

The following are Internet router environmental monitor messages.

Error Message

%GSR_ENV-1-CRITICAL: Slot [dec] [chars] [dec] [chars] [chars] [dec] [chars]

Explanation The slot environmental parameters for the specified slot are in the critical range. The card in the slot may be powered down for safety reasons.

Recommended Action The problem must be resolved immediately. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSR_ENV-1-CRITICAL_FAN: Slot [dec] [chars] [int] [chars]

Explanation One or more fans are broken or missing. This may cause the chassis to overheat.

Recommended Action Replace bad fan tray.

Error Message

%GSR_ENV-0-POWERDOWN: [chars] in slot [dec]

Explanation The slot has been powered down for safety reasons.

Recommended Action This problem must be resolved before the card is used again. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSR_ENV-0-SHUTDOWN: Slot [dec] [chars] [dec] [chars] [chars] [dec] [chars]

Explanation The slot may have been powered down for safety reasons. The card will be powered down after three warnings.

Recommended Action This problem must be resolved before the card is used again. Copy the error message exactly as it appears on the console or in the system log, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message

%GSR_ENV-0-SHUTDOWN_PS: Slot [dec] [chars] [int] [chars]

Explanation The power supply input voltage has failed.

Recommended Action Ensure that the power supply is plugged in and turned on.

Error Message

%GSR_ENV-2-WARNING: Slot [dec] [chars] [dec] [chars] [chars] [dec] [chars]

Explanation The environmental parameters for the specified slot are outside the normal range of operation.

Recommended Action These conditions must be resolved immediately. Correct the warning condition specified. For example, for temperature warnings, verify that adequate cooling is available, and that the empty slots have blank covers. For voltage warnings, check the appropriate power supply.