

System Messages

This section lists messages alphabetically by facility and mnemonic.

AAA Messages

This section contains authentication, authorization, and accounting messages.

AAA-2

Error Message %AAA-2-AAAMULTILINKERROR: [chars]([hex]): Acct db for Id [hex] absent

Explanation A AAA internal error has occurred.

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 that 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 %AAA-2-FORKFAIL: Cannot fork process [chars]

Explanation Attempted to fork a process and failed.

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 that 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.

AAA-3

Error Message %AAA-3-ACCT_IOMEM_LOW: AAA ACCT process suspended : low I/O memory

Explanation The authentication, authorization, and accounting (AAA) accounting process has been suspended due to insufficient memory.

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 %AAA-3-BADSERVERTYPEERROR: Cannot process [chars] server type [chars]

Explanation A method list function encountered a server type that was unknown, or could not be handled. This may be due to a server misconfiguration.

Recommended Action Research the cause of the misconfiguration and attempt to correct it, otherwise take the following action.

Error Message %AAA-3-ACCT_LOW_MEM_TRASH: AAA unable to handle accounting requests due to insufficient memory. So, we trash all queued accounting reguests, which may worry customer Please upgrade your memory or plan to get more free memory by optimizing your configuration.

Explanation An accounting request was dropped because there is not enough processor memory. All queued accounting requests will be discarded.

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 %AAA-3-ACCT_LOW_MEM_UID_FAIL: AAA unable to create UID for incoming calls due to insufficient processor memory

Explanation The AAA accounting process is unable to create a user ID (UID) due to insufficient memory.

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 %AAA-3-ATTRFORMATERR: Attribute with unknown format [dec]

Explanation An attribute was found with an invalid format.

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 that 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.

 $\textbf{Error Message} ~\$ AAA-3-AUTH_LOW_IOMEM: RADIUS process is unable to handle the requests due to insufficient low I/O memory \\$

Explanation The RADIUS process is unable to handle requests due to insufficient memory.

Error Message %AAA-3-AUTHORMLISTUNDEF: Authorization method list '[chars]' is not defined. Please define it.

Explanation A given method list was listed in a command without defining it first. The method list should be defined before use.

Recommended Action Define the method list before using it.

Error Message %AAA-3-BADCURSOR: invalid cursor index [dec] max [dec] service [chars]
protocol [chars]

Explanation A AAA client has provided an invalid attribute cursor to AAA.

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 that 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 %AAA-3-BADHDL: invalid hdl AAA ID [int], hdl [hex], [chars]

Explanation A AAA client has provided an invalid attribute list handle to AAA.

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 that 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 %AAA-3-BADLIST: invalid list AAA ID [int]

Explanation A AAA client has provided an invalid attribute list to AAA.

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 that 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 %AAA-3-BADMAGIC: Data structure failed magic number sanity check

Explanation A corrupted data structure has been found which was stored internally.

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 that 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 %AAA-3-BADMETHOD: Cannot process [chars] method [int]

Explanation A method list function encountered a method list that was unknown or could not be handled.

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 that 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 %AAA-3-BADMETHODERROR: Cannot process [chars] method [chars]

Explanation A method list function encountered a method type that was unknown or could not be handled.

Error Message %AAA-3-BADPROTOCOL: Unknown protocol [int]

Explanation The AAA subsystem encountered an unknown protocol type.

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 that 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 %AAA-3-BADSERVICE: Unknown service [int]

Explanation The AAA subsystem encountered an unknown service type.

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 that 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 %AAA-3-BUFFER_OVERFLOW: Radius I/O buffer has overflowed

Explanation An unusually large number of Radius attributes has caused AAA to overflow its Radius I/O buffer.

Error Message %AAA-3-DROPACCTFAIL: Accounting record dropped, send to server failed:
[chars]

Explanation An attempt to send an accounting record to a server has failed.

Recommended Action Check that the server (TACACS+ or RADIUS) is operational, that the network access server (NAS) is configured properly, and that the NAS can communicate with the server.

Error Message %AAA-3-INVALIDPARM: invalid parameter was used when accessing AAA function

Explanation A AAA client tried to use a AAA function with an invalid parameter.

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 that 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 %AAA-3-IPILLEGALMSG: Invalid use of ip_pid([int])

Explanation A process sent an illegal message to IP for which IP has not subscribed.

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 that 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 %AAA-3-ISDNINTF: [chars] [chars]: Can not apply configuration to ISDN
channel:
 "[chars]"

Explanation The current configuration cannot be applied to individual ISDN channels. You need virtual-profiles and virtual-access interfaces to apply a configuration to ISDN.

Recommended Action Refer to the "Configuring virtual profiles by AAA Configuration" section in the Cisco IOS Dial Technologies Configuration Guide.

Error Message %AAA-3-MLIST_INTERNAL_ERROR: method list '[chars]': [chars]

Explanation This is an internal software error.

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 that 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 %AAA-3-MLIST_TOO_MANY_METHODS: method list '[chars]'

Explanation A AAA client attempted to add too many methods to a method list. This is an internal software error.

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 that 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 %AAA-3-NOTABLE: AAA ID [int]

Explanation There has been a resource failure.

Error Message %AAA-3-NULLCURSOR: Null cursor

Explanation A AAA client has provided a nonexistant attribute cursor to AAA.

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 that 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 %AAA-3-NULLVRF: Null vrf entry

Explanation A NULL virtual routing and forwarding (VRF) entry was found while comparing the AAA VRF attributes.

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 %AAA-3-PARSEERR: Error([dec]) parser is unable to parse [chars]
per-user command

Explanation All attempts to parse this per_user unconfigure command have failed. The specified unconfigure command was not unconfigured.

Error Message %AAA-3-SERVER_INTERNAL_ERROR: Server '[IP_address]': [chars]

Explanation This is an internal software error in the AAA server group subsystem.

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 that 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 %AAA-3-SG_DEADTIME_FORKFAIL: Failed to fork process for [chars].

Explanation Most likely, the device has run out of memory, though other explanations are possible.

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 that 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 %AAA-3-SG_INTERNAL_ERROR: server group '[chars]': [chars]

Explanation This is an internal software error in the AAA server group subsystem.

Error Message %AAA-3-SG_TESTPROC_FORKFAIL: Failed to fork process for [chars].

Explanation Most likely, the device has run out of memory, though other explanations are possible.

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 that 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 %AAA-3-SORTFAIL: [chars] :Peruser Could not sort the [chars]
attributes

Explanation Sorting of the attributes received from the AAA server has failed.

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 that 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.

AAA-6

Error Message %AAA-6-ACCTSESSIDWRAP: Accounting-Session-ID [dec] exceeded max value
allowed

Explanation The Accounting-Session-ID has exceeded the maximum value allowed.

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

Error Message %AAA-6-USER_BLOCKED: Enable view requires to be authenticated by non-none methods, Please use the appropriate method with the login authentication

Explanation None method authentication is not allowed in CLI

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 that 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.

AAAA Messages

This section contains TACACS+ authentication, authorization, and accounting security messages.

AAAA-3

Error Message %AAAA-3-AAAFORKFAIL: Failed to start AAA process. AAA requests may not be processed.

Explanation The device has failed to create the AAA process.

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

Error Message %AAAA-3-ACCTFORKFAIL: Failed to start accounting process. Accounting records may not be sent.

Explanation The device has failed to create the accounting process.

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

Error Message %AAAA-3-BADSTR: Bad accounting data: [chars]

Explanation During AAA accounting operations, the internal database of accounting information for a user was found to be corrupt. In all cases, this indicates an internal software error, and that accounting information for a particular user session has been lost.

Error Message %AAAA-3-DROPACCTFULLQ: Accounting record dropped due to a full aaa accounting queue: [chars]-[chars] [chars]

Explanation An accounting record was dropped because too many accounting packets are enqueued.

Recommended Action Disable periodic accounting if it is on. The accounting queue may have grown to be large, which is usually due to a non-responsive AAA server. Enter the **show radius statistics** or the **show tacacs** command to see if the number of timeouts is increasing or if the response delay is unusually high.

Error Message %AAAA-3-DROPACCTLOWMEM: Accounting record dropped due to low memory:
[chars]-[chars] [chars]

Explanation An accounting record dropped due to low memory.

Recommended Action Disable periodic accounting if it is on. Try to reduce the load on the router.

Error Message %AAAA-3-DROPACCTQUEUEEXCEEDED: accounting record dropped, output
record queue full: [chars]-[chars] [chars]

Explanation An accounting record was dropped. The record could not be enqueued because the number of records in the output queue has exceeded the system limit.

Recommended Action If periodic accounting is enabled, disable it by entering the **no aaa accounting update newinfo periodic** command.

Error Message %AAAA-3-DROPACCTSNDFAIL: Accounting record dropped, send to server failed: [chars]-[chars] [chars]

Explanation An attempt to send an accounting record to a server failed.

Recommended Action Check that the server (TACACS+ or RADIUS) is operational. Next, check that the NAS is configured properly. Finally, check that the NAS can communicate with the server.

Error Message %AAAA-3-NOADMINSOC: [chars]

Explanation The socket setup for the administrative process has failed. The process is exiting.

Error Message %AAAA-3-NULPORT: Could not establish port information

Explanation This message indicates an internal software error. AAA could not determine a valid port string based on the information provided to it via a client.

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 that 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 %AAAA-3-NULUSR: accounting for null user

Explanation This message indicates an internal software error. During shutdown of a line or interface, the system tried to send accounting information via AAA, but could not find the user to which the accounting information belonged. The most likely reason for this error is trying to do accounting twice for the same event. This error message can occur without any loss of accounting information.

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 that 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 %AAAA-3-RELOGIN: sanity check in re-login [chars] to [chars]

Explanation A software or hardware error occurred.

Error Message %AAAA-3-SGDUPFREE: Duplicate free of server group [hex]

Explanation This is an internal software error.

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 that 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.

AAAA-4

Error Message %AAAA-4-BADSGTYPE: Server-group [chars] is not of type [chars].

Explanation The server group name does not match the specified type.

Recommended Action Verify that the group exists and has the correct type.

 ${\tt Error\,Message}$ %AAAA-4-NOCACHEPROC: The aaa cache process is not created. Please configure aaa cache profile first

Explanation Cache was listed in a method-list without defining it first. Cache profile should be defined before use.

Recommended Action Define the cache profile before using it.

Error Message %AAAA-4-SERVNOGRP: Warning: Server %i:[dec],[dec] is not part of server group [chars].

Explanation The server does not belong to the specified server group.

Recommended Action Check that the server belongs to the correct server group.

Error Message AAAA-4-SERVNORADIUS: The server-group "[chars]" is not a radius server group. Please define "[chars]" as a radius server group.

Explanation The protocol used by the server-group doesn't support the configured aaa action.

Recommended Action Use a radius server-group.

Error Message %AAAA-4-SERVNOTACPLUS: The server-group "[chars]" is not a tacacs+ server group. Please define "[chars]" as a tacacs+ server group.

Explanation The protocol used by the server-group does not support the configured AAA action.

Recommended Action Use a TACACS+ server-group.

Error Message %AAAA-4-UNSUPWAITSTART: % AAA: Unsupported option wait-start mapped to start-stop.

Explanation Wait-start accounting is not supported. It is being mapped to start-stop.

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

AAA_CACHE Messages

This section contains authentication, authorization, and accounting cache messages.

Error Message %AAA_CACHE-3-NULL_TREE_PERIODIC_PROC: Cache Tree pointer is of null
value

Explanation The cache tree pointer is of null value.

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 that 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.

AC Messages

This section contains Attachment Circuit messages.

Error Message %AC-3-AC_PROVISION: [chars]

Explanation An error was encountered during Attachment Circuit [un]provisioning.

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 that 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 %AC-3-AC_SUBBLOCK: [chars]

Explanation An error was encountered during Attachment Circuit sub-block creation or removal.

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 that 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 %AC-3-AC_VECTOR: [chars]

Explanation An error was encountered during Attachment Circuit configuration which caused problems in the setting or restoration of the interface vectors.

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 that 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.

ACCESS_IE Messages

This section contains access information element messages.

Error Message %ACCESS_IE-3-INVALID_HANDLE: Caller passed in invalid handle - traceback to follow.

Explanation An invalid handle was encountered in the access information element (IE) library.

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 that 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.

ACE Messages

This section contains access control encryption messages.

ACE-2

Error Message %ACE-2-CRYPTOENGERR: Crypto engine error: [chars] ([dec])

Explanation A crypto engine operation did not complete. This error condition can indicate that the crypto engine cannot bind or unbind an interface to a crypto engine. It can also indicate that the crypto engine cannot query an interface ID.

Recommended Action Remove the cryptomap set from the interface by entering the **no crypto map** command. Then reattach the cryptomap set to the interface by entering the **crypto map** command. Although removing and reattaching the crypto map might fix the cryptographic engine operation failure, report the failure to your Cisco technical support representative along with the sequence of commands that led to the failure.

ACE-3

Error Message %ACE-3-BOOTMSGERR: [chars]: boot error: [chars]

Explanation The ACE completed booting, but with an error status code. ACE will not operate and it will not register with the crypto subsystem.

Error Message %ACE-3-CEAL REGISTRATION: ACE [chars] failed to register.

Explanation The ACE failed to register with the Crypto Engine Acceleration Layer (CEAL).

Recommended Action Reset the module. 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 %ACE-3-NOENGINESLOT: Interface [chars] has no crypto engine slot

Explanation An IKE SA was requested for a given interface, but no crypto engine slot was assigned to that interface. [chars] is the name of the interface that is missing the **crypto engine slot** command.

Recommended Action Configure the interface in question with the crypto engine [sub]slot command.

Error Message %ACE-3-OUTOFID_RL: Too may [chars] IDs in the system. Cannot allocate a new one

Explanation All the IDs of the specified type are in use.

Recommended Action Reduce the traffic load, the number of IPSec tunnels, or the frequency of changing the value of a cryptographic key. If this message was seen under light loading conditions, 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.

ACE-6

Error Message %ACE-6-BOOTMSGINFO: [chars]: boot info: [chars]

Explanation The ACE completed booting, but with a non-zero informational status code. This does not indicate an error and ACE will run normally.

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

Error Message %ACE-6-INFO: [chars]: [chars]

Explanation This is an informational message from ACE

Recommended Action This is informational message only and occurs in normal operation. No action is required.

Error Message %ACE-6-SWITCHOVER: VPN-SM switchover: [dec]/[dec] has been [chars]
[dec]/[dec]

Explanation A module-to-module switchover has occurred. System performance is not affected.

Recommended Action No action is required.

Error Message %ACE-6-TUNNEL_ACE_CONGESTED: All crypto engines are congested,
assigning [chars] to [chars]

Explanation The congestion manager has assigned a new tunnel to an already congested crypto engine. All crypto engines have indicated congestion, so the least congested engine was selected for the tunnel. Packets may be lost on some tunnels.

Recommended Action Reduce the bandwidth requirements of existing tunnels or install additional crypto engines.

Error Message %ACE-6-TUNNEL_MOVE: [chars] has been moved from [chars] to [chars] to relieve congestion

Explanation The congestion manager has moved a tunnel from a congested crypto engine to an uncongested crypto engine.

Recommended Action No action is required.

Error Message %ACE-6-UNEXP_INBOUND_IPSEC: [chars]: received unexpected IPsec packet:
src IP: [IP_address]; dst IP: [IP_address]; (count=[dec])

Explanation An IPsec packet was unexpectedly forwarded to the RP.

Recommended Action If this message was seen in the context of the router booting, enabling the hardware crypto accelerator, then this message is normal and can be safely ignored. Otherwise, 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 that 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 %ACE-6-UNEXP_OUTBOUND_IPSEC: [chars]: received unexpected IPsec
packet: src IP: [IP_address]; dst IP: [IP_address]; firsthop/lasthop =
[chars]/[chars] (count=[dec])
```

Explanation An IPsec packet was unexpectedly forwarded to the RP.

Recommended Action If this message was seen in the context of the router booting, enabling the hardware crypto accelerator, or with an invalid peer IP address then this message is normal and can be safely ignored. Otherwise, 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 that 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.

ACL_ASIC Messages

This section contains Access Control List ASIC messages.

Error Message %ACL_ASIC-4-INTR_THROTTLE: Throttling "[chars]" interrupt exceeded
permitted [int]/[dec] interrupts/msec

Explanation Excessive interrupts were generated by the EARL ASIC. The system will enforce interrupt throttling to protect the SP.

ACLMGR Messages

This section contains Access Control List (ACL) manager messages.

ACLMGR-2

Error Message %ACLMGR-2-NOMAP: Cannot create ACL Manager data structures for VLAN
Map [chars]

Explanation The ACL manager could not allocate the data structures needed to describe a VLAN map in a form that can be loaded into hardware. This situation was probably caused by a lack of free memory.

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

Error Message %ACLMGR-2-NOVLB: Cannot create memory block for VLAN [dec]

Explanation The ACL manager was unable to save per-VLAN information needed for its correct operation. Some per-interface features, such as access groups or VLAN maps, will not be configured correctly.

Recommended Action Use a less complicated configuration that requires less memory.

Error Message %ACLMGR-2-NOVMR: Cannot create VMR data structures for access list
[chars]

Explanation The ACL manager could not allocate the data structures needed to describe an ACL in a form that can be loaded into hardware. There may not be enough available memory.

Recommended Action Use a less complicated configuration that requires less memory.

ACLMGR-3

Error Message %ACLMGR-3-ACLTCAMFULL: Acl Tcam Full! Sofware Forwarding packets on [chars] label [dec] on [chars] [chars]

Explanation There are too many ACL configurations for the platform-specific ACL TCAM table to support.

Recommended Action Reduce the number IP or MAC access lists to be configured to interfaces.

Error Message %ACLMGR-3-AUGMENTFAIL: Augmenting of access-map [chars] on [chars] label [dec] failed

Explanation The system ran out of CPU DRAM when attempting to merge internally required elements with the configured access map(s).

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

Error Message %ACLMGR-3-INSERTFAIL: Insert of access-map [chars] #[dec] into [chars]
label [dec] failed

Explanation The system ran out of CPU DRAM when trying to merge sections of an access map.

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

Error Message %ACLMGR-3-MAXRECURSION: Too many ([dec]) levels of recursion while merging ACLs (code [dec]).

Explanation The configuration is too complicated for the platform-specific ACL merge code to support. This may be caused by including too many separate access lists in a single VLAN map or policy map.

Recommended Action Reduce the number of IP or MAC access lists (considered separately) in any one VLAN or policy map to fewer than the number of levels reported by this log message.

Error Message %ACLMGR-3-MERGEFAIL: [chars] ACL merge error [dec] ([chars]) on
[chars] label [dec]

Explanation The ACL manager was unable to complete the merge of the configured features into a form suitable for loading into the hardware. Packets potentially affected by this feature will be sent to the CPU for processing instead. The most likely cause is specifying an ACL that is too large or too complex for the system to handle.

Recommended Action Try specifying a smaller and less complicated configuration.

Error Message %ACLMGR-3-NOLABEL: Cannot allocate [chars] label for vlan-id [dec]

Explanation The ACL manager was unable to allocate a label for the features on this interface. This means that the hardware cannot be programmed to implement the features, and packets for this interface will be filtered in software. There is a limit of 256 labels per direction.

Recommended Action Allocate more space to the relevant section of the TCAM and reboot, or else use a simpler configuration. Use the same ACLs on multiple interfaces, if possible.

Error Message %ACLMGR-3-RELOADED: Reloading [chars] label [dec] feature

Explanation The ACL manager was able to fit more of the configured features on this label into the hardware. One or more features had previously been unloaded because of lack of space.

Recommended Action No action is required.

Error Message %ACLMGR-3-UNKNOWNACTION: Unknown VMR access group action [hex]

Explanation An internal software error has occurred.

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 %ACLMGR-3-UNLOADING: Unloading [chars] label [dec] feature

Explanation The ACL manager was unable to fit the complete configuration into the hardware, so some features will have to be applied in software. This prevents some or all of the packets in a VLAN from being forwarded in hardware, and requires them to be forwarded by the CPU. Multicast packets may be dropped entirely instead of being forwarded.

Recommended Action Allocate more space to the relevant section of the TCAM and reboot, or else use a simpler configuration. Use the same ACLs on multiple interfaces, if possible.

ADJ Messages

This section contains adjacency (ADJ) subsystem messages.

ADJ-3

Error Message %ADJ-3-ADJGENALLOCATEFAIL: Failed to allocate memory [chars]

Explanation An internal software error occurred. This error was probably caused by insufficient available memory.

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 %ADJ-3-ADJGENDEALLOCATEFAIL: Failed to deallocate memory [chars]

Explanation An internal software error occurred.

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 %ADJ-3-ADJLISTREINSERTING: [chars] adj (addr [chars] int [chars] cid
[dec]) in adj list for [chars] while still in adj list for [chars]

Explanation An inconsistency was detected when attempting to maintain the list of CEF adjacencies pertaining to an interface. An adjacency was inserted into more than one list.

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 that 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.

Explanation An internal software error occurred.

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 %ADJ-3-ADJMGRREFRESHFAIL: Failed to dispatch a refresh adjacency summary event

Explanation An internal software error occurred.

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 %ADJ-3-ADJSTACK2: Adj stack2 error [chars]: [chars]

Explanation An internal software error occurred.

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 %ADJ-3-ALLOCATEFAIL: Failed to allocate an adjacency

Explanation An internal software error occurred. This error was probably caused by insufficient available memory.

Error Message %ADJ-3-ALLOCATEONDOWN: Allocating adj when adj subsystem down

Explanation An internal software error occurred.

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 %ADJ-3-BADADDRLEN: Zero address length detected distributing adj
[chars]

Explanation An internal software error occurred. An attempt was made to reference an adjacency with an unsupported address type.

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 %ADJ-3-BADADDRTYPE: Using an unsupported address type [dec] when trying to add/delete/modify/find an adjacency

Explanation An internal software error occurred. An attempt was made to reference an adjacency with an unsupported address type.

Error Message %ADJ-3-BADLINKTYPE: Using an unsupported linktype [chars] when trying to add/delete/modify/find an adjacency

Explanation An internal software error occurred. An attempt was made to reference an adjacency with an unsupported address type.

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 %ADJ-3-BADMACALIGN: adjacency mac string end [hex] not [chars] aligned

Explanation An internal software error occurred.

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 %ADJ-3-BADMAGIC: adjacency [chars] is followed by bad magic

Explanation An internal software error occurred.

Error Message %ADJ-3-BOARDENCAP: Generation of encapsulation string for [chars]
failed

Explanation An internal software error occurred.

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 %ADJ-3-BROKERINITFAIL: Failed to initialise adjacency RP broker facility

Explanation An internal software error occurred.

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 %ADJ-3-BUNDLES: Adj bundles: [chars]

Explanation An internal software error occurred.

Error Message %ADJ-3-DBGFILTERALLOCATEFAIL: Failed to allocate an adjacency debug
filter block

Explanation An internal software error occurred. This is probably because not enough memory was available.

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 %ADJ-3-ILALLOCATEFAIL: Failed to allocate an adjacency interest list subblock

Explanation An internal software error occurred. This is probably because not enough memory was available.

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.

Explanation An internal software error occurred. This is probably because not enough memory was available.

Error Message %ADJ-3-ILINITFAIL: Failed to initialise adjacency interest list facility

Explanation An internal software error occurred.

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 %ADJ-3-ILLEGALARGS: Illegal arguments - [chars]

Explanation An internal software error occurred.

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 %ADJ-3-IPC: Adj [chars], [chars] [chars] cid [int] - [chars]
distributing to [chars]

Explanation An internal software error has occurred.

Error Message %ADJ-3-LCXDRCLIENT: Adjacency distribution client: [chars]

Explanation An internal software error occurred.

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 %ADJ-3-NOFIBIDB: CEF Interface not found - [chars]

Explanation An internal software error occurred.

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 %ADJ-3-RESOLVE_REQ: Adj resolve request: [chars] [chars]

Explanation An internal software error occurred.

Error Message %ADJ-3-RPXDRCLIENT: Adjacency distribution client: [chars]

Explanation An internal software error occurred.

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 %ADJ-3-SBINITFAIL: Failed to initialise adjacency subblock facility

Explanation An internal software error occurred.

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 %ADJ-3-STATETRANSITION: Unexpected state transition from [chars] to [chars]

Explanation An internal software error occurred.

Error Message %ADJ-3-TYPENOTISSUAWARE: Bundle type [chars] must be ISSU aware to send to slot(s) [chars]

Explanation The bundle type is not ISSU aware, so it cannot be distributed to a slot with which ISSU negotiation has occurred. This indicates a design problem that requires code changes to fix.

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.

ADJ-5

Error Message %ADJ-5-ADJISSUINCOMPATIBLE: All or part of sdjacency message for [chars] not sent to incompatible CEF instance for [chars]

Explanation The adjacency is not distributed in whole to the remote CEF instance. This may impact traffic forwarding on the remote CEF instance.

Recommended Action No action is required.

Error Message %ADJ-5-PARENT: Midchain parent maintenance for [chars] - [chars]

Explanation A midchain adjacency failed to stack onto an output chain because a loop was detected. Traffic through the adjacency will be dropped until the adjacency is restacked. This condition is typically transient and is resolved by the control plane that drives the stacking. For example, if an IP tunnel destination resolves through the tunnel transiently this message will appear. The situation would be resolved either by learning the tunnel destination through an inteface other than the tunnel itself or by bringing the tunnel down.

Recommended Action No action is required.

AFLSEC Messages

This section contains Accelerated Flow Logging Security (AFLSEC) messages.

AFLSEC-6

```
Error Message %AFLSEC-6-OALDP: [chars] icmp [IP_address] -> [IP_address]
([dec]/[dec]), [dec] packet[chars]
```

Explanation Packet(s) matching the optimized ACL log criteria have been detected.

Recommended Action No action is required.

```
Error Message %AFLSEC-6-OALNP: [chars] ip protocol=[dec] [IP_address] ->
[IP_address], [dec] packet[chars]
```

Explanation Packet(s) matching the optimized ACL log criteria have been detected.

Recommended Action No action is required.

```
Error Message %AFLSEC-6-OALP: [chars] [chars] [IP_address]([dec]) ->
[IP_address]([dec]), [dec] packet[chars]
```

Explanation Packet(s) matching the optimized ACL log criteria have been detected.

Recommended Action No action is required.

```
Error Message %AFLSEC-6-OALRL: Oal logging rate-limited or missed [dec]
packet[chars]
```

Explanation Some packet matching logs were missed because the log messages were rate-limited or the cache table was full, or no log buffers were available.

Recommended Action No action is required.

```
Error Message %AFLSEC-6-OALRP: [chars] igmp [IP_address] -> [IP_address] ([dec]),
[dec] packet[chars]
```

Explanation Packet(s) matching the optimized ACL log criteria have been detected.

Recommended Action No action is required.

ALIGN Messages

This section contains ALIGN messages.

ALIGN-3

Error Message %ALIGN-3-CORRECT_SO: Alignment correction made at [chars] [chars]ing
[chars]

Explanation A software component within the router needs memory optimization.

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 that 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 %ALIGN-3-TRACE_SO: -Traceback= [chars]

Explanation A trace that shows where the previous ALIGN error occurred.

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 that 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 %ALIGN-3-TRACEX: [chars]

Explanation A trace that shows where the previous ALIGN error occurred.

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 that 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.

ALPS Messages

This section contains Airline Product Set (ALPS) messages.

ALPS-3

Error Message %ALPS-3-ASCU_IF_STUCK: Polling for ASCU [hex] on interface [chars] is stalled.

Explanation The polling mechanism for agent set control units (ASCUs) on an ALPS interface has become stuck.

Recommended Action No action is required.

ALPS-5

Error Message %ALPS-5-ASCU_DISABLED_ASCU_STUCK: ASCU [hex] on interface [chars] has been disabled since 4 consecutive messages were received from same SID.

Explanation An ALPS agent set control unit (ASCU) has been automatically disabled.

Recommended Action No action is required.

Error Message %ALPS-5-ASCU_DOWN: ASCU [hex] on interface [chars] is down.

Explanation An ALPS agent set control unit (ASCU) has transitioned from up to down.

Recommended Action No action is required.

Error Message %ALPS-5-ASCU_UP: ASCU [hex] on interface [chars] is up.

Explanation An ALPS agent set control unit (ASCU) has transitioned from down to up.

Recommended Action No action is required.

Error Message %ALPS-5-CIRCUIT_CLOSED: Circuit [chars] changed state to closed, rsn
= [chars].

Explanation An ALPS circuit has tranistioned from open to closed

Error Message %ALPS-5-CIRCUIT_OPEN: Circuit [chars] changed state to open.

Explanation An ALPS circuit has transitioned from closed to open.

Recommended Action No action is required.

Error Message %ALPS-5-PEER_CLOSED_DYNAMIC_INACTIVITY: Peer ([IP_address], [chars])
closed due to inactivity.

Explanation An ALPS peer connection is now closed due to inactivity.

Recommended Action No action is required.

Error Message %ALPS-5-PEER_CONN_ID_CHANGE: Peer ([IP_address], [chars]) ID modified
to ([IP_address], [chars]).

Explanation An ALPS peer connection identifier has changed.

Recommended Action No action is required.

Error Message %ALPS-5-PEER_OPEN: Peer ([IP_address], [chars]) changed state to open.

Explanation An ALPS peer connection is now open.

Recommended Action No action is required.

ALPS-6

Error Message %ALPS-6-CIRCUIT_ASCU_REJECT: Circuit [chars] received a Circuit Open Confirm with a list of rejected ascus

Explanation An ALPS circuit sent a Circuit Open Request message and received a Circuit Open Confirm with a list of rejected ascus.

Recommended Action No action is required.

Error Message %ALPS-6-CIRCUIT_BUSY_START: Circuit [chars] has entered a congested state.

Explanation An ALPS circuit is experiencing congestion.

Error Message %ALPS-6-CIRCUIT_OPEN_FAILED: Circuit [chars] received a Circuit Open
Failed message, rsn = [chars].

Explanation An ALPS circuit sent a Circuit Open Request message and received a Circuit Open Failed message as a reply.

Recommended Action No action is required.

Error Message %ALPS-6-CIRCUIT_UPDATE_FAILED: Circuit [chars] received a Circuit
Open Failed message, rsn = [chars].

Explanation An ALPS circuit sent a Circuit Update message and received a Circuit Open Failed message as a reply.

Recommended Action No action is required.

Error Message %ALPS-6-CIRCUIT_X25_VC_STUCK: Host unresponsive on X.25 VC for circuit [chars]

Explanation The X.25 or EMTOX host is not advancing the transmit window for extended periods of time. This may be indicative of a temporary problem with the host application. An X.25 Reset is sent to reset the transmit and receive windows to allow communication to proceed.

Recommended Action None

Error Message %ALPS-6-PEER_BUSY_END: Peer ([IP_address], [chars]) has exited a
congested state.

Explanation An ALPS peer connection is no longer experiencing congestion.

Recommended Action No action is required.

Explanation An ALPS peer connection is experiencing congestion.

Recommended Action No action is required.

Error Message %ALPS-6-PEER_OPEN_FAIL: Peer ([IP_address], [chars]) open failed, rsn
= [chars]

Explanation An ALPS peer connection attempted to open, but failed to open.

ALPS-7

Error Message %ALPS-7-CIRCUIT_BUSY_END: Circuit [chars] has exited a congested state.

Explanation An ALPS circuit is no longer experiencing congestion.

Recommended Action No action is required.

Error Message %ALPS-7-CIRCUIT_DROPS_CKT_DISABLED: Threshold exceeded for circuit disabled drops for circuit [chars]

Explanation The number of ALPS circuit drops due to circuit disabled exceeds the ALPS circuit threshold value.

Recommended Action No action is required.

Explanation The number of ALPS circuit drops due to invalid ASCU identifier exceeds the ALPS circuit threshold value.

Recommended Action No action is required.

Error Message %ALPS-7-CIRCUIT_DROPS_LIFETIME_EXPIRED: Threshold exceeded for lifetime timer expiration drops for circuit [chars]

Explanation The number of ALPS circuit drops due to lifetime timer expiration exceeds the ALPS circuit threshold value.

Recommended Action No action is required.

 $\label{lem:continuity} \textbf{Error Message} \quad \text{\$ALPS-7-CIRCUIT_DROPS_QUEUE_OVERFLOW: Threshold exceeded for queue overflow drops for circuit [chars]}$

Explanation The number of ALPS circuit drops due to queue overflow exceeds the ALPS circuit threshold value.

Recommended Action No action is required.

Explanation The number of ALPS circuit drops due to X.25 VC Reset exceeds the ALPS circuit threshold value.

Error Message %ALPS-7-PEER_DROPS_MAX_SIZE_EXCEEDED: Threshold exceeded for maximum size exceeded drops for peer ([IP_address], [chars]).

Explanation The number of ALPS peer drops due to maximum size exceeded, exceeds the ALPS peer threshold value.

Recommended Action No action is required.

Explanation The number of ALPS peer drops due to a peer unreachable condition exceeds the ALPS peer threshold value.

Recommended Action No action is required.

Error Message %ALPS-7-PEER_DROPS_QUEUE_OVERFLOW: Threshold exceeded for TCP Queue overflow peer drops for peer ([IP_address], [chars]).

Explanation The number of ALPS peer drops due to queue overflow exceeds the ALPS peer threshold value.

Recommended Action No action is required.

Error Message %ALPS-7-PEER_DROPS_VERSION_MISMATCH: Threshold exceeded for version mismatch peer drops for peer ([IP_address], [chars]).

Explanation The number of ALPS peer drops due to version mismatch exceeds the ALPS peer threshold value.

Recommended Action No action is required.

AP Messages

This section contains Authentication Proxy (AP) messages.

AP-1

Error Message %AP-1-POSTURE_POLICY_ERROR: POLICY=[chars] | POLICYNAME=[chars] |
IP=[IP_address] | ERROR=<[chars][chars]>

Explanation The specified policy was not applied for the host IP due to the reason specified as Error.

Recommended Action When the "POLICY" character string is "HOST ACL," verify that an input access list is defined and configured on the interface. A "URL REDIRECT ACL" policy needs a URL-redirect VSA to have an associated access control list URL-redirect-ACL VSA that can be

used to determine HTTP redirect critera. HTTP packets that match the ACL are subject to redirection. When a URL-redirect-ACL access control list is not specified or is not configured, the host will not be set up for HTTP redirection.

AP-4

Error Message %AP-4-AUTH_PROXY_NOMEM: Sufficient memory was not available to [chars]

Explanation There was not enough memory to perform the specified operation.

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

Error Message %AP-4-POSTURE_EXCEED_MAX_INIT: Exceeded maximum limit ([dec]) on entires in authentication proxy posture cache in initializing state

Explanation The number of entries that are in the Authentication Proxy posture cache and in an initializing state has exceeded the maximum limit.

Recommended Action This condition might indicate a Denial of Service attack. 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.

AP-5

Error Message %AP-5-AP_AAA_DOWN: Event=AAA [chars]. HOST=%i | POLICY
[chars]=[chars]. | AUDITSESSID=[chars]

Explanation The AAA servers defined by the method list are unreachable for the host and the policy being applied.

Recommended Action Determine the status and availability of the AAA servers.

AP-6

Error Message %AP-6-FALLBACK_REQ: IP=%i| MAC=%u| PROFILE_NAME=[chars]|
EVENT=[chars] | AUDITSESSID=[chars]

Explanation A fallback to authentication proxy has been initiated or terminated for the host.

Recommended Action No action is required.

Error Message %AP-6-POSTURE_DOWNLOAD_ACL: Send AAA request to download ([chars])
named access control list

Explanation The system has sent a request to AAA to retrieve the contents of the specified downloadable ACL.

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

Error Message %AP-6-POSTURE_POLICY: [chars] [chars] ([chars]) policy for host
([IP_address])

Explanation This message specifies the policy that was enforced for or removed from the specified host. The policy can be either an ACL or a URL to which any intercepted HTTP traffic is redirected.

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

Error Message %AP-6-POSTURE_START_VALIDATION: IP=[IP_address] | Interface=[chars]

Explanation The system has created an entry for the host in the Authentication Proxy posture cache and has initiated the posture validation process.

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

Error Message %AP-6-POSTURE_STATE_CHANGE: IP=[IP_address] | STATE=[chars]

Explanation The state of posture validation changed for the specified host in the Authentication Proxy posture validation cache.

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

APS Messages

This section contains Automatic Protection Switching (APS) messages.

APS-2

Error Message %APS-2-INITSYS: [chars]

Explanation A software error occurred during initialization of the APS subsystem.

Recommended Action Check for sufficient processor memory. 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 %APS-2-NOSOCKET: Failed To Open Socket

Explanation This message is posted when the APS subsystem fails to create a UDP socket for exchanging APS channel protocol messages over APS message channel configured for IP. This is usually caused by a low memory condition in the system

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

APS-6

Error Message %APS-6-BIDIRSWCH: Group [chars]: Remote Request - [chars]

Explanation This message is posted by the local network element after an APS switchover that is triggered by an APS request from the remote network element.

Recommended Action No action is required.

Error Message %APS-6-CHNLACTIVE: Group [chars] - [chars] channel is now ACTIVE

Explanation This message is posted when a previously standby channel becomes the active channel.

Error Message %APS-6-ENAUTFOVR: Enable Auto-Failover On [chars]

Explanation This message is posted when APS software enables hardware to perform APS actions for failures detected by the hardware.

Recommended Action No action is required.

ARAP Messages

This section contains Apple Remote Access Protocol messages.

Error Message %ARAP-0-VSERROR: TTY [dec]: VS queued error

Explanation An internal software error occured.

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 that 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.

Explanation Terminal Access Controller Access Control System (TACACS) authentication failed because extended TACACS is not configured.

Recommended Action Configure extended TACACS.

ARCHIVE_CONFIG Messages

This section contains ARCHIVE_CONFIG messages.

ARCHIVE_CONFIG-4

Error Message %ARCHIVE_CONFIG-4-ARCHIVE_DELETE_FAILED: Delete of a previously saved archive of the router configuration could not be completed.

Explanation The router could not delete a file that had previously been written. The file that was being deleted contains an archive of the router configuration. This condition could occur if the file was manually deleted.

Recommended Action No action is required.

Error Message %ARCHIVE_CONFIG-4-ARCHIVE_SKIPPED: Archive of router configuration was skipped due to a previous initiation.

Explanation An attempt to create an archive was started while one archive operation had already been started. Only one archive can be created at a time. Two or more simultaneous archive operations are not allowed. This condition could occur if two users attempt to create an archive simultaneously.

Recommended Action Retry the archive creation when the current archive operation has finished being written.

ARCHIVE_CONFIG-6

Error Message %ARCHIVE_CONFIG-6-ARCHIVE_CREATE_FAILED_STANDBY: Could not create an archive of the router configuration on the standby RP.

Explanation The router could not create an archive file on the standby route processor (RP). The file that was being created contains an archive of the router configuration. This condition can occur if the active RP cannot communicate with the standby RP.

Recommended Action No action is required.

Error Message %ARCHIVE_CONFIG-6-ARCHIVE_DELETE_FAILED_STANDBY: Delete of a previously saved archive of the router configuration could not be completed on the standby RP.

Explanation The router could not delete a file that was previously written on the standby route processor (RP). The file that was being deleted contains an archive of the router configuration. This condition might occur if the file was manually deleted or if the active RP cannot communicate with the standby RP.

ARCHIVE_DIFF Messages

This section contains ARCHIVE_DIFF messages.

ARCHIVE DIFF-3

Error Message %ARCHIVE_DIFF-3-DIFF_CMD_INIT_FAILED: Failed to register the special case [chars] command:"[chars]" during initialization. Config Diff and Rollback cannot be used as a result of this error.

Explanation An internal software error occurred during initialization of the Archive Diff program. As a result of this error, checking configuration differences (config diff) and rollback operations cannot be performed.

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 %ARCHIVE_DIFF-3-DIFF_INIT_FAILED: Could not initialize the Config Diff and Rollback subsystem

Explanation An internal software error occurred during initialization. Config diff and rollback cannot be used as a result of this error.

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.

ARCHIVE_DIFF-5

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_BACKUP: Backing up current running
config to [chars]

Explanation The current running configuration is saved so that when the timer expires, if no confirmation has been received from the user to confirm configuration changes, the system will roll back to the saved configuration.

Recommended Action This message occurs during normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_CANCEL: User: [chars]: Rollback Confirmed Change is cancelled due to [chars] failure

Explanation Rollback confirmed change is normally configured along with other configuration operations, such as **config term** or **config replace**. If those operations failed, rollback confirmed change should not be activated.

Recommended Action Remove the error condition and retry.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_CONFIRM: User: [chars]: Confirm the configuration change

Explanation The configuration change is confirmed. The timer for rolling to the previously saved configuration is cancelled.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_RESET_ABSTIMER: User: [chars]: Reset Rollback Confirmed Change timer(absolute) to %lu minute

Explanation The rollback confirmed change timer (absolute) was reset to a new value.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_RESET_IDLETIMER: User: [chars] Reset
Rollback Confirmed Change timer(idle) to %lu minute

Explanation The rollback confirmed change timer (idle) was reset to a new value.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_REVERTNOW: User: [chars]: Rollback immediately.

Explanation A rollback will happen immediately and the timer will be cancelled.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_ROLLBACK_RETRY: Failed to acquire configuration lock. Rollback did not start. Schedule to retry in 5 minutes

Explanation Because the system was unable to acquire a configuration lock, configuration rollback did not start. A retry will be scheduled.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_ROLLBACK_START: Start rolling to:
[chars]

Explanation The timer for rollback confirmed change has expired. System will roll back to the previously saved configuration.

Recommended Action This message occurs in normal operation of the rollback confirmed change. No action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_START_ABSTIMER: User: [chars]:
Scheduled to rollback to config [chars] in %lu minutes

Explanation The system will wait until the timer expires for the user to confirm the configuration changes. If the confirmation is not received before the timer expires, the router will roll back to the previous configuration.

Recommended Action To keep your configuration changes, enter the **configure confirm** command. Otherwise, no action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_START_IDLETIMER: User: [chars]:
Scheduled to rollback to config [chars] if session has been idle for %lu minutes

Explanation The system will wait until the timer expires for the user to confirm the configuration changes. If the confirmation is not received before the timer expires, the router will roll back to the previous configuration.

Recommended Action To keep your configuration changes, enter the **configure confirm** command. Otherwise, no action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_WARNING_ABSTIMER: System will rollback to config [chars] in one minute. Enter

Explanation Rollback to the previous configuration will start in one minute unless the user confirms the configuration changes.

Recommended Action To keep your configuration changes, enter the **configure confirm** command. Otherwise, no action is required.

Error Message %ARCHIVE_DIFF-5-ROLLBK_CNFMD_CHG_WARNING_IDLETIMER: User [chars] on tty [dec] has been idle for %lu minutes. System will rollback to config [chars] in oneminute if it continues to be idle. Enter

Explanation Rollback to the previous configuration will start in one minute unless the user confirms the configuration changes.

Recommended Action To keep your configuration changes, enter the **configure confirm** command. Otherwise, no action is required.

ARCHIVE_ISSU Messages

This section contains messge related to the In Service Software Upgrade facility.

ARCHIVE ISSU-2

Error Message %ARCHIVE_ISSU-2-GET_BUFFER: Archive ISSU client failed to get buffer
for message. Error: [dec] ([chars])

Explanation The Archive ISSU client failed to get buffer space for building a negotiation message. A negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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. Issue the show logging and show checkpoint client 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-2-INIT: Archive ISSU client initialization failed to
[chars]. Error: [dec] ([chars])

Explanation The Archive ISSU client could not be initialized. This initialization failure must be addressed before in-service software upgrade or downgrade can be performed successfully. If you do not address this failure, there will be downtime during software upgrade or downgrade.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-2-SEND_NEGO_FAILED: Archive ISSU client failed to send
negotiation message. Error: [dec] ([chars])

Explanation The Archive ISSU client failed to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

Recommended Action Issue the show logging and show checkpoint client command to gather data that may help identify the nature of the error. 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. 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-2-SESSION_NEGO_FAIL_START: Failed to start Archive ISSU
session negotiation. Error: [dec] ([chars])

Explanation The Archive ISSU client failed to start session negotition. If a problem occurs with the ISSU session start, the standby device cannot be brought up properly.

Recommended Action Issue the show issu session command to gather data that may help identify the nature of the error. 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. Also perform a search of the Bug Toolkit <a href="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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-2-SESSION_REGISTRY: Archive ISSU client failed to register session information. Error: [dec] ([chars])

Explanation The Archive ISSU client failed to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up properly.

Recommended Action Issue the **show issu capability entries** and **show issu session** and **show issu negotiated capability** command to gather data that may help identify the nature of the error. 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. 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/launch.do, or contact your Cisco technical support.

ARCHIVE_ISSU-3

Error Message %ARCHIVE_ISSU-3-INVALID_SESSION: Archive ISSU client does not have a valid registered session.

Explanation The Archive ISSU client does not have a valid registered session.

Recommended Action Issue the **show issu capability entries** and **show issu session** and **show issu negotiated capability** command to gather data that may help identify the nature of the error. 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-3-MSG_NOT_OK: Archive ISSU client 'Message Type [dec]'
is not compatible

Explanation The Archive ISSU client received an incompatible message from the peer device. The message cannot be processed.

Recommended Action Issue the **show issu message group** and **show issu session** and **show issu negotiated version** command to gather data that may help identify the nature of the error. 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-3-MSG_SIZE: Archive ISSU client failed to get the MTU
for Message Type [dec].Error: [dec] ([chars])

Explanation The Archive ISSU client failed to calculate the MTU for the specified message. The Archive ISSU client is not able to send the message to the standby device.

Recommended Action Issue the **show issu message group** and **show issu session** and **show issu negotiated version** command to gather data that may help identify the nature of the error. 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-3-SESSION_UNREGISTRY: Archive ISSU client failed to unregister session information. Error: [dec] ([chars])

Explanation The Archive ISSU client failed to unregister session information.

Recommended Action Issue the **show issu capability entries** and **show issu session** and **show issu negotiated capability** command to gather data that may help identify the nature of the error. CCopy 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. 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/launch.do, or contact your Cisco technical support.

Error Message %ARCHIVE_ISSU-3-TRANSFORM_FAIL: Archive ISSU client [chars] transform
failed for 'Message Type [dec]'. Error: [dec] ([chars])

Explanation The Archive ISSU client could not transform the specified message type. If the transmit transformation failed, the checkpoint message was not sent to the standby device. If the receive transformation failed, the checkpoint message was not applied on the standby device. In both cases, the Archive state between the active device and the standby device is not identical.

Recommended Action Issue the show issu session and show issu negotiated version command to gather data that may help identify the nature of the error. 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. 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/launch.do, or contact your Cisco technical support.

ATM Messages

This section contains ATM messages.

ATM-1

Error Message %ATM-1-ISSU_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.

ATM-3

Error Message %ATM-3-ISSU_SENDFAILED: ATM ISSU: send message failed, rc = [dec]

Explanation The sending of a message has failed.

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.

ATM-4

Error Message %ATM-4-ISSU_INCOMPATIBLE: atm-issu-compat: returned FALSE

Explanation The compatibility checking has failed.

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 %ATM-4-ISSU_XFORM: [chars]: failed, rc=[chars]

Explanation The transform has failed.

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.

ATMPA Messages

Error Message %ATMPA-1-INVALIDCONFIG: VIP2-40 and below only supports one OC-3 ATM PA. The other PA bay needs to be emptied in order for the ATM PA to function.

Explanation The bandwidth requirements of the installed port adapters exceed the processor's rated capability.

Recommended Action Either remove one of the port adapters or upgrade the VIP.

Error Message %ATOM_TRANS-3-INIT_FAIL: Failed to start ATOM Manager

Explanation Failed to start and initialize AToM Manager.

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. Issue 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/launch.do, or contact your Cisco technical support.

ATMSPA Messages

This section contains ATM Shared Port Adapter (ATMSPA) messages.

ATMSPA-2

Error Message %ATMSPA-2-INITFAIL: [chars] - Init Failed return code: [int]

Explanation The shared port adapter (SPA) failed to complete hardware initialization. One of the devices in the SPA failed to initialize successfully. Information about the failed device is specified in the message text on the console or in the system log.

Recommended Action Power down and reseat the indicated SPA card. If the condition 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.

ATMSPA-3

Error Message %ATMSPA-3-DATA_ERROR: [chars] Error [hex] [chars]

Explanation A data path protocol violation or sequence error has been detected. The message text on the console or in the system log provides more information on the specific cause of the error.

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 %ATMSPA-3-FATAL_ERROR: occurred on [chars]. Resetting SPA

Explanation The shared port adapter (SPA) has been reset because of a critical error in one of its devices. The error could either be a single occurrence of an event or multiple occurrences within a period of time. The message text on the console or in the system log provides more information on the specific cause of the error.

Recommended Action If the SPA is reset more than once, 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 %ATMSPA-3-FPD_VER_DEPENDENCY_NOTE: Cannot perform the requested FPD update operation because [chars] in subslot [int]/[int] has incompatible HW version [int].[int] with FPD image version [dec].[dec] for FPD ID [dec]. Only image version greater than [int].[int] can be used in the update operation of [chars] with HW version greater than [int].[int].

Explanation The version of the field-programmable device (FPD) image from the FPD image bundle or package is not compatible with the hardware (HW) version of the target card.

Recommended Action If the SPA is reset more than once, 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 %ATMSPA-3-GEN_ERROR: [chars] Error [hex] [chars]

Explanation The error that is specified in the message has been detected.

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 %ATMSPA-3-HW_ERROR: [chars] Error [hex] [chars]

Explanation A hardware error has been detected. The message text on the console or in the system log provides more specific informationabout the error.

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 %ATMSPA-3-QOS_ALLOC_FAILED: [chars] [chars]: [dec]

Explanation Traffic-shaping parameters could not be configured because the number of unique shaping parameters that are configured on the PVCs or PVPs in this specified ATM SPA is over the maximum limit. The maximum number of unique shaping parameters that can be configured on the PVCs or PVPs is 4096.

Recommended Action Ensure that the total number of unique shaping parameters that are configured on both PVCs and PVPs does not exceed the maximum limit of 4096.

Error Message %ATMSPA-3-SW_ERROR: [chars] Error [hex] [chars]

Explanation A software error has been detected. The message text on the console or in the system log provides more specific information about the error.

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 %ATMSPA-3-VCQ_ERROR: [chars]: VC queue configuration failed due to un-initialized queue table(global identifier [dec])

Explanation The software configuration of a virtual circuit (VC) queue failed because of an uninitialized queue table.

Recommended Action Attempt to perform a soft OIR operation by entering the command that is described in the shared port adapter software configuration guide. If the condition 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.

ATMSPA-4

Error Message ATMSPA-4-VCSETUP: [chars]: VC setup command received on the LC for an existing VC (VCD [dec])

Explanation A command to set up a virtual circuit (VC) has been received for a VC that has already been set up and configured by a previous **setup** VC command from the RP. A duplicate **setup** command may indicate that the RP did not receive a response from the line card for the previous **setup** command.

Recommended Action No action is required.

Error Message %ATMSPA-4-VCTEARDOWN: [chars]: VC tear down command received on the LC
for a non-existing VC (VCD [dec])

Explanation The virtual circuit (VC) does not exist on the line card. The VC probably has been torn down by a previous **teardown** command from the route processor (RP). A duplicate **teardown** command may indicate that the RP did not receive a response from the line card for the previous **teardown** command.

Recommended Action No action is required.

Error Message %ATMSPA-4-VPSETUP: [chars]: VP setup command received on the LC for an
existing VP (VPI [dec])

Explanation A command to set up a virtual path (VP) has been received for a VP that has already been set up. The VP has already been configured by a previous **setup** VP command from the route processor (RP). A duplicate **setup** command may indicate that the RP did not receive a response from the line card for the previous **setup** command.

Error Message %ATMSPA-4-VPTEARDOWN: [chars]: VP tear down command received on the LC for a non-existing VP (VPI [dec])

Explanation The virtual path (VP) does not exist on the line card. The VP probably has been torn down by a previous **teardown** command from the route processor (RP). A duplicate **teardown** command may indicate that the RP did not receive a response from the line card for the previous **teardown** command.

Recommended Action No action is required.

ATOM_NP_CLIENT Messages

This section contains Any Transport Over MPLS (AToM) NP client messages.

ATOM_NP_CLIENT-3

Error Message %ATOM_NP_CLIENT-3-INFO: [chars]

Explanation The AToM NP client failed to initialize properly, which will result in improper operation of the Any Transport Over MPLS feature.

Recommended Action Attempt to reload the IOS image on the affected card or platform. 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 that 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 %ATOM_NP_CLIENT-3-NOMEM: [chars]

Explanation The AToM NP client failed to initialize properly, which will result in improper operation of the Any Transport Over MPLS feature.

Recommended Action This error may indicate that more memory must be installed on the affected card or platform to service all the features and related entities enabled by the configuration. Attempt to reload the IOS image on the affected card or platform. 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 that 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.

ATOM_NP_CLIENT-4

Error Message %ATOM_NP_CLIENT-4-WARN: [chars] [dec] [chars]

Explanation An AToM entry could not be added because the entry passed is invalid.

Recommended Action Attempt to reload the IOS image on the affected card or platform. 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 that 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.

ATOM_SEG Messages

This section contains Any Transport Over MPLS (AToM) Segment Handler messages.

ATOM SEG-3

Error Message %ATOM_SEG-3-CHUNKFREE: Error freeing [chars] [hex]

Explanation An error has occurred in the AToM segment handler.

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 %ATOM_SEG-3-ILLEGALUPD: Illegal label [dec] update [chars]

Explanation An error has occurred in the AToM Segment Handler.

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 %ATOM_SEG-3-NOTSUPP: Unsupported update [chars]

Explanation An error has occurred in the AToM segment handler.

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.

ATOM_TRANS Messages

This section contains Any Transport Over MPLS (AToM) Layer 2 messages.

ATOM_TRANS-3

Error Message %ATOM_TRANS-3-INIT_FAIL: Failed to start ATOM Manager

Explanation Failed to start and initialize AToM Manager.

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 that 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 %ATOM_TRANS-3-LABEL_ALLOC_FAIL: Failed to allocate local label for peer:%i, vcid:%u

Explanation The system was unable to allocate a local label for the specified AToM virtual circuit.

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.

ATOM_TRANS-4

Error Message %ATOM_TRANS-4-CONFIG: [chars]

Explanation The AToM pseudowire is using an unacceptable configuration.

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.

AUDIT Messages

This section contains audit messages.

AUDIT-1

Error Message %AUDIT-1-FILE_ROLLOVER: Audit File Roll-over: [dec]

Explanation The audit circular file has rolled over.

Recommended Action Increase the size of the audit file.

AUTHMGR Messages

This section contains Auth Manager messages.

AUTHMGR-5

Error Message %AUTHMGR-5-FAIL: Authorization failed for client ([chars]) on Interface [chars]

Explanation The client was unable to obtain authorization on the interface.

Recommended Action No action is required.

Error Message %AUTHMGR-5-MACMOVE: MAC address ([enet]) moved from Interface [chars]
to Interface [chars]

Explanation Client has moved to a new interface without logging off of the previous one.

Recommended Action No action is required.

Error Message %AUTHMGR-5-MACREPLACE: MAC address ([enet]) on Interface [chars] is
replaced by MAC ([enet])

Explanation A new client has triggered a violation causing an existing client to be replaced

Error Message %AUTHMGR-5-SECURITY_VIOLATION: Security violation on the interface [chars], new MAC address (%e) is seen

Explanation A host on the specified interface is attempting to gain access to the network or is trying to authenticate in a host mode that does not support the number of hosts attached. This incident is treated as a security violation and the port has been error-disabled.

Recommended Action Ensure that the port is configured to support the number of hosts attached. Enter the **shutdown** command followed by **no shutdown** command to restart the port.

Error Message %AUTHMGR-5-SECURITY_VIOLATION_VLAN: Security violation on the interface [chars], new MAC address ([enet]) is seen on vlan [dec].

Explanation A host on the specified interface is attempting to gain access into the network or is trying to authenticate in a host mode that does not support the number of hosts attached. This is treated as a security violation and the port has been error-disabled. This log provides vlaninformation along with the mac.

Recommended Action Ensure that the port is configured to support the number of hosts attached. Enter the **shutdown** command followed by **no shutdown** command to restart the port.

Error Message %AUTHMGR-5-START: Starting '[chars]' for client ([chars]) on Interface
[chars]

Explanation The authentication manager is starting an authentication method for the client.

Recommended Action No action is required.

Error Message %AUTHMGR-5-SUCCESS: Authorization succeeded for client ([chars]) on Interface [chars]

Explanation Authorization was successful for the client.

Recommended Action No action is required.

Error Message %AUTHMGR-5-UNAUTHORIZED: Interface [chars] unauthorized

Explanation The specified port has become unauthorized.

Recommended Action No action is required.

Error Message %AUTHMGR-5-VLANASSIGN: VLAN [dec] assigned to Interface [chars]

Explanation A VLAN was assigned to the interface.

AUTHMGR-7

Error Message %AUTHMGR-7-FAILOVER: Failing over from '[chars]' for client ([chars])
on Interface [chars]

Explanation The authorization manager will fail over from the current authentication method to another method.

Recommended Action No action is required.

Error Message %AUTHMGR-7-NOMOREMETHODS: Exhausted all authentication methods for client ([chars]) on Interface [chars]

Explanation All available authentication methods have been tried for the client, but authentication has failed.

Recommended Action No action is required.

Error Message %AUTHMGR-7-RESULT: Authentication result '[chars]' from '[chars]' for client ([chars]) on Interface [chars]

Explanation The authentication result and method are displayed for the client.

Recommended Action No action is required.

AUTH_MGR_ISSU Messages

This section contains Auth Manager in-service software upgrade (ISSU) messages.

AUTH MGR ISSU-2

Error Message %AUTH_MGR_ISSU-2-GET_BUFFER: Auth Mgr ISSU client failed to get buffer
for message. Error: [dec] ([chars])

Explanation The authentication manager ISSU client was unable to get buffer space for building a negotiation message. A negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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**, **show tech-support**, and **show checkpoint client** commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-2-INIT: Auth Mgr ISSU client initialization failed to
[chars]. Error: [dec] ([chars])

Explanation The authentication manager ISSU client could not be initialized. This initialization failure must be addressed before an in-service software upgrade or downgrade can be performed successfully. Otherwise, a software upgrade or downgrade will result in downtime.

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, show tech-support, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-2-SEND_NEGO_FAILED: Auth Mgr ISSU client failed to send
negotiation message. Error: [dec] ([chars])

Explanation The authentication manager ISSU client was unable to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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, show tech-support, show logging, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-2-SESSION_NEGO: Auth Mgr ISSU client encountered
unexpected client nego_done. Error: [dec] ([chars])

Explanation An ISSU-compliant client transitions through a series of internal states. The authentication manager ISSU client encountered a client negotiation done state that was unexpected. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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, show tech-support, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-2-SESSION_REGISTRY: Auth Mgr ISSU client failed to register session information. Error: [dec] ([chars])

Explanation The authentication manager ISSU client was unable to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up properly.

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, show tech-support, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Recommended Action show tech-support commands and your pertinent troubleshooting logs.

AUTH_MGR_ISSU-3

Error Message %AUTH_MGR_ISSU-3-CAP_INVALID_SIZE: Auth Mgr ISSU client capability
list is empty.

Explanation The authentication manager ISSU client capability exchange list is empty, which is an invalid condition.

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, show tech-support, and show issu capability entries commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-CAP_NOT_COMPATIBLE: Auth Mgr ISSU client capability exchange result incompatible.

Explanation Based on the results of the capability exchange, the authentication manager ISSU client is not compatible with the peer.

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, show tech-support, and show issu capability entries commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-INVALID_SESSION: Auth Mgr ISSU client does not have a valid registered session.

Explanation The authentication manager ISSU client does not have a valid registered session.

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, show tech-support, show logging, show issu capability entries, show issu session, and **show issu negotiated capability** commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-MAUTH_VLAN_ASSIGN_NOT_COMPATIBLE: Multi Auth VLAN Assignment is active in one of the ports and the peer does not support Multi Auth VLAN Assignment.

Explanation At least one of the ports have Multi Auth host mode and VLAN assignment simultaneously enabled and ISSU cannot proceed since Standby does not support Multi Auth VLAN assignment. Shut down the ports in which Multi Auth VLAN assignment is enabled and retry ISSU.

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, show tech-support, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-MSG_NOT_COMPATIBLE_WITH_PEER: 'Feature Id [dec], Tag
[dec]' is not supported by Auth Mgr ISSU client at peer

Explanation The authentication manager ISSU client at the peer supervisor does not support this message type. The authentication manager client will be marked as incompatible with the peer.

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, show tech-support, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-MSG_NOT_OK: Auth Mgr ISSU client 'Feature Id [dec],
Tag [dec]' is not compatible

Explanation The authentication manager ISSU client received an incompatible message from the peer device. The message cannot be processed.

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, show tech-support, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-MSG_SIZE: Auth Mgr ISSU client failed to get the MTU
for Feature Id [dec], Tag [dec]. Error: [dec] ([chars])

Explanation The authentication manager ISSU client was unable to calculate the MTU for the specified message. The authentication manager ISSU client is not able to send the message to the standby device.

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, show tech-support, show logging, show issu message group, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %AUTH_MGR_ISSU-3-SESSION_UNREGISTRY: Auth Mgr ISSU client failed to unregister session information. Error: [dec] ([chars])

Explanation The authentication manager ISSU client was unable to unregister session information.

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, show tech-support, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

```
Error Message %AUTH_MGR_ISSU-3-TRANSFORM_FAIL: Auth Mgr ISSU client [chars]
transform failed for 'Feature Id [dec], Tag [dec]'. Error: [dec] ([chars])
```

Explanation The authentication manager ISSU client could not transform the specified message type. If the transmit transformation failed, the checkpoint message was not sent to the standby device. If the receive transformation failed, the checkpoint message was not applied on the standby device. In either case, the authentication manager state between the active device and the standby device is not identical.

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, show tech-support, show logging, show issu session, and show issu negotiated version commands and your pertinent troubleshooting logs.

AUTORP Messages

This section contains Protocol Independent Multicast (PIM) version 2 Auto-Rendezvous Point (AUTORP) messages.

AUTORP-2

Error Message %AUTORP-2-RADIXINIT: Error initializing the Auto-RP radix tree

Explanation An internal software error occurred.

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.

AUTORP-4

Error Message %AUTORP-4-OVERLAP: AutoRP [chars] packet, group %i with mask %i removed because of multicast boundary for %i with mask %i

Explanation The multicast boundary has a longer network mask than the Auto-Rendezvous Point encoded group.

Recommended Action Use postive permit clauses in the AutoRP access control list.

Error Message %AUTORP-4-PAK_ERR: AutoRP [chars] packet is received on interface
[chars] with Source address=[IP_address], Destination address=[IP_address],
TTL=[int], IP length=[int] Datagram size/UDP length=[int]

Explanation The AutoRP packet was received with wrong packet length. The packet has been dropped as it may be a malformed packet.

Error Message No action is required.%AUTORP-4-PRM_DEL: Error expiring semi-static RP-mapping entry (%i/[dec], RP:%i)

Explanation An internal software error occurred.

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.

 $\textbf{Error Message} \ \, \$ \text{AUTORP-4-RADIXINSERT: Error inserting a new entry into the RP-mapping radix tree} \\$

Explanation An internal software error occurred.

AUTORP-5

Error Message %AUTORP-5-CRP_REMOVED: C-RP %i on interface [chars] has been removed

Explanation PIM is disabled on the interface or the interface card has been removed.

Recommended Action No action is required.

Error Message %AUTORP-5-MAPPING: RP for %i/[dec] is now %i

Explanation A new Auto-Rendezvous Point has been elected for the subject group prefix.

Recommended Action No action is required.

AUTORP-6

Error Message %AUTORP-6-RP_MAPPING_IDB_DEL: AutoRP RP-MAPPING IDB [chars] is deleted

Explanation The configured rp-mapping IDB has been deleted.

Recommended Action No action is required.

AUTOSHUT Messages

This section contains automatic shutdown (utoshut) messages.

AUTOSHUT-4

Error Message %AUTOSHUT-4-MOD_AUTOSHUT: Module [dec] shutdown automatically, reset [dec] times within [dec] minutes due to [chars].

Explanation This message includes information about the automatic shutdown of a module.

AUTOSHUT-5

Error Message %AUTOSHUT-5-MOD_AUTOSHUT_SLOW: Module [dec] reset frequency exceeded threshold but over [dec] minutes. Hence NOT powering down module.

Explanation The module's reset frequency has exceeded the threshold, but over a period more than the preset period.

Recommended Action No action is required.

BACKPLANE_BUS_ASIC Messages

This section contains backplane bus ASIC messages.

BACKPLANE_BUS_ASIC-3

Error Message %BACKPLANE_BUS_ASIC-3-FAILURE_INTR_CFG: Failure to setup the Backplane Bus ASIC device interrupts.

Explanation The line card internal ASIC could not be initialized. As a result, the device has been disabled and the datapath will not be operational.

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.

BACKPLANE_BUS_ASIC-4

Error Message %BACKPLANE_BUS_ASIC-4-DEV_RESET: Backplane Bus Asic reset, interrupt
[chars]

Explanation The backplane bus ASIC in the MSC/FlexWAN-ENH has received a fatal error. The ASIC will be reset and the MSC/FlexWAN-ENH will attempt to continue normal operation.

Recommended Action No action is required if traffic recovers. Otherwise, enter the **show platform** hardware hyperion all command to gather data that may help identify the cause of the error. 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 %BACKPLANE_BUS_ASIC-4-EARL_BUS_SYNC_ERR: Failed to sync Earl bus, Backplane Bus Asic version [dec]

Explanation The backplane bus ASIC in the line card failed to synchronize with the EARL bus.

Recommended Action No action is required if traffic recovers. Otherwise, enter the show platform hardware hyperion all command to gather data that may help identify the cause of the error. 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 %BACKPLANE_BUS_ASIC-4-UNEXPECTED_VERSION: Unexpected Backplane Bus ASIC version.

Explanation The line card is unable to recognize the version of the Hyperion ASIC.

Recommended Action No action is required if traffic passes through the line card. Otherwise, check the Bug Toolkit on Cisco's web site to determine a version in which the bug is fixed and upgrade accordingly. If traffic does not pass after the upgrade, enter the show platform hardware hyperion all command to gather data that may help identify the cause of the error. 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.

BACKPLANE BUS ASIC-5

Error Message %BACKPLANE_BUS_ASIC-5-BUS_MODE_CHANGE: The System Switching Bus Mode changed to [chars] mode

Explanation The supervisor engine has instructed this line card to change the mode on the switching bus.

Recommended Action No action is required.

Error Message %BACKPLANE_BUS_ASIC-5-BUS_SEQ_ERR: Constellation bus Sequence Error. Resetting Backplane Bus Asic.

Explanation The switch processor has detected a sequence error on the backplane bus. A reset sequence from the EARL has been called to recover from this error. System traffic should recover and continue normally.

Recommended Action No action is required if traffic recovers. Otherwise, enter the show platform hardware hyperion all command to gather data that may help identify the cause of the error. 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 %BACKPLANE_BUS_ASIC-5-DEV_INIT_FAILURE: The Backplane Bus Asic initialization failed

Explanation The backplane bus ASIC could not be initialized. As a result, this device is not operational and has been disabled.

Error Message %BACKPLANE_BUS_ASIC-5-DEV_INTR_INFO: [chars]

Explanation This message provides more information about the interrupts from the backplane bus ASIC to the line card CPU.

Recommended Action No action is required if traffic recovers. Otherwise, enter the show platform hardware hyperion all command to gather data that may help identify the cause of the error. 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 %BACKPLANE_BUS_ASIC-5-DEV_RESET_INFO: [chars]

Explanation This message provides more information about the interrupts leading to the reset of the backplane bus ASIC.

Recommended Action No action is required if traffic recovers. Otherwise, enter the show platform hardware hyperion all command to gather data that may help identify the cause of the error. 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 %BACKPLANE_BUS_ASIC-5-NULL_DEV_OBJECT: The Backplane Bus Asic device object pointer is set to NULL

Explanation The memory location of the backplane bus ASIC device object is invalid. The backplane bus ASIC operation is disabled and the device interrupt is now masked.

BCM Messages

This section contains Broadcom (BCM) switch messages.

BCM-4

Error Message %BCM-4-ECC_L2CACHE: Corrected ECC from L2 cache

Explanation A soft-parity error from the Layer 2 cache has been detected and corrected. Normal system operation should continue.

Recommended Action If there is a regular or sustained occurrence of this message, 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 %BCM-4-ECC_MEMORY: Corrected ECC from memory

Explanation A soft-parity error from the memory has been detected and corrected. Normal system operation should continue.

Recommended Action If there is a regular or sustained occurrence of this message, 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.

BFD Messages

This section contains Bidirectional Forwarding Detection (BFD) messages.

BFD-3

Error Message %BFD-3-BUFPOOL: Creation of BFD Private Buffer Pool failed

Explanation A private buffer pool could not be created in memory.

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 %BFD-3-CHUNK: Chunk malloc failure - [chars] - [hex]

Explanation The system was unable to allocate memory.

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 %BFD-3-CHUNK_DESTROY: Unable to destroy [chars]

Explanation The system was unable to deallocate memory.

Error Message %BFD-3-DBSCAN: Session data removed durring scan [dec]

Explanation An adjacency database corruption occurred.

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 %BFD-3-IF_IN_USE: Interface [chars]([dec]) already in use

Explanation The specified interface number is already in use.

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 %BFD-3-IF_NO_CLEAN: Could not free bfd idb array - still in use

Explanation The bidirectional forwarding detection (BFD) interface descriptor blocks (IDBs) are still in use and cannot be freed.

Error Message %BFD-3-ILL_IF: Illegal interface [dec][chars]

Explanation The interface number is out of range for the platform.

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 %BFD-3-INVQELEM: Invalid queue element - [chars]

Explanation An invalid queue element was detected.

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 %BFD-3-INVVER: Invalid version type

Explanation An invalid version type was detected.

Error Message %BFD-3-NBR: bfd_neighbor - client not found

Explanation A client does not exist in the client list.

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 %BFD-3-NOCLIENT: Client not found

Explanation No client exists in the BFD client list.

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 %BFD-3-NOIOUPROC: Failed to create BFD IOU Process

Explanation The IOU process failed to start.

Error Message %BFD-3-NOKADIS: Failed to start Kadis. Status [dec]

Explanation The Kadis timer process failed to start.

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 %BFD-3-NOPPPROC: Failed to create BFD PP Process

Explanation The pseudo-preemptive (PP) process failed to start.

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 %BFD-3-NO_TYPE: Neighbor address type not specified as ADDR_IP([dec]),
[dec]

Explanation A BFD client called a BFD neighbor with an uninitialized address type.

Error Message %BFD-3-NULLDISC: Invalid Discriminator [hex], state [dec]

Explanation An invalid discriminator value was detected.

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 %BFD-3-PACKET: bfd_pak_coalesce - [chars] failed

Explanation The packet buffer could not be obtained or coalesced.

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 %BFD-3-SWIDB: Failed to create BFD swidb subblock for interface [chars]

Explanation An interface descriptor block (IDB) sub-block could not be created.

Error Message %BFD-3-VERSION: Version change [chars]

Explanation A version change error occurred.

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 %BFD-3-WAVL_DELETE_FAIL: Failed deleting node %x from wavl tree thread
[dec]

Explanation The BFD process was unable to delete a node from a wrapped AVL (WAVL) tree.

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 %BFD-3-WAVL_INIT_FAIL: Failed initializing wavl tree.

Explanation The BFD process was unable to initialize a wrapped AVL (WAVL) tree.

Error Message %BFD-3-WAVL_INSERT_FAIL: Failed inserting node %x to wavl tree thread
[dec]

Explanation The BFD process was unable to insert a node into a wrapped AVL (WAVL) tree.

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 %BFD-3-WAVL_TREE: Failed to malloc space for wavl tree.

Explanation The BFD process was unable to allocate memory space for a wrapped AVL (WAVL) tree.

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.

BFD-6

Error Message %BFD-6-MAX_DESCR: BFD discrminators exhausted. No more sessions can be created.

Explanation The maximum number of BFD discriminators has been assigned.

Error Message %BFD-6-MAX SESSION: Maximum session creation limit [dec] reached.

Explanation The maximum number of BFD sessions has been created.

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 %BFD-6-TX_ON_STANDBY: BFD transmit detected on standby

Explanation The standby device attempted to transmit a packet.

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.

BFDFSM Messages

This section contains Bidirectional Forwarding Detection (BFD) Finite State Machine (FSM) messages.

BFDFSM-3

Error Message %BFDFSM-3-INVEVENT: Invalid event_id [hex]

Explanation An invalid event occurred in the state machine.

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 %BFDFSM-3-INVSTATE: Invalid current state [hex]

Explanation An invalid state occurred in the state machine.

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 %BFDFSM-3-INVTRANS: obj: [[hex]] event_id: [[hex]] er_p: [[hex]] arg:
[[hex]] session state [chars] -> [chars]

Explanation An invalid transition occurred in the state machine.

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 %BFDFSM-3-NOEVENT: Unable to apply event [hex]

Explanation A transition failure occurred in the state machine.

Error Message %BFDFSM-3-NULLMACH: Invalid machine pointer [hex]

Explanation The state machine contains an invalid pointer.

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.

BFD_HA Messages

This section contains Bidirectional Forwarding Detection (BFD) high availability (HA) messages.

BFD_HA-2

Error Message %BFD_HA-2-CF: [chars][dec]

Explanation An error occurred with the CompactFlash device.

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 %BFD_HA-2-RESOURCE: [chars]

Explanation An error occurred in a system resource.

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 %BFD_HA-2-RF: [chars][dec]

Explanation An error occurred in the RF system.

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.

BFD HA-3

Error Message %BFD_HA-3-DELSESS: [chars][dec]

Explanation An error occurred while deleting a session.

BFD_ISSU Messages

This section contains Bidirectional Forwarding Detection (BFD) in-service software upgrade (ISSU) messages.

BFD_ISSU-2

Error Message %BFD_ISSU-2-GET_BUFFER: BFD ISSU client failed to get buffer for message. Error: [dec] ([chars])

Explanation The BFD ISSU client was unable to get buffer space for building a negotiation message. A negotiation message cannot be sent to the standby device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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, show tech-support, show logging, show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %BFD_ISSU-2-INIT: BFD ISSU client initialization failed to [chars].
Error: [dec] ([chars])

Explanation The BFD ISSU client could not be initialized. This initialization failure must be addressed before an in-service software upgrade or downgrade can be performed successfully. Otherwise, a software upgrade or downgrade will result in downtime.

Error Message %BFD_ISSU-2-SEND_NEGO_FAILED: BFD ISSU client failed to send
negotiation message. Error: [dec] ([chars])

Explanation The BFD ISSU client was unable to send a session negotiation message to the peer device. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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, show tech-support, show logging, show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %BFD_ISSU-2-SESSION_NEGO: BFD ISSU client encountered unexpected
client nego_done. Error: [dec] ([chars])

Explanation An ISSU-compliant client transitions through a series of internal states. The BFD ISSU client encountered a client negotiation done state that was unexpected. If a problem occurs with the ISSU session negotiation, the standby device cannot be brought up properly.

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, show tech-support, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %BFD_ISSU-2-SESSION_REGISTRY: BFD ISSU client failed to register
session information. Error: [dec] ([chars])

Explanation The BFD ISSU client was unable to register session information. If a problem occurs with the ISSU session registration, the standby device cannot be brought up properly.

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, show tech-support, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

BFD ISSU-3

Error Message %BFD_ISSU-3-INVALID_SESSION: BFD ISSU client does not have a valid registered session.

Explanation The BFD ISSU client does not have a valid registered session.

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, show tech-support, show logging, show issu capability entries, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %BFD_ISSU-3-MSG_SIZE: BFD ISSU client failed to get the MTU for Message
Type [dec]. Error: [dec] ([chars])

Explanation The BFD ISSU client was unable to calculate the MTU for the specified message. The BFD ISSU client is not able to send the message to the standby device.

Error Message %BFD_ISSU-3-SESSION_UNREGISTRY: BFD ISSU client failed to unregister
session information. Error: [dec] ([chars])

Explanation The BFD ISSU client was unable to unregister session information.

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, show tech-support, show logging, show issu session, and show issu negotiated capability commands and your pertinent troubleshooting logs.

Error Message %BFD_ISSU-3-TRANSFORM_FAIL: bfd ISSU client [chars] transform failed
for message [dec]'. Error: [dec] ([chars])

Explanation The BFD ISSU client could not transform the specified message type. If the transmit transformation failed, the checkpoint message was not sent to the standby device. If the receive transformation failed, the checkpoint message was not applied on the standby device. In either case, the BFD state between the active device and the standby device is not identical.

BFD_SCALE Messages

This section contains Bidirectional Forwarding Detection (BFD) credit-based workload messages.

BFD_SCALE-6

Error Message %BFD_SCALE-6-INSUFFICIENT_RESOURCES: Configuration not changed,
exceeds maximum resource limit.

Explanation The configuration could not be changed due to a resource limitation.

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 %BFD_SCALE-6-RESOURCES_EXHAUSTED: BFD adjacency can not be created due to resource limitation.

Explanation A BFD adjacency cannot be created due to a resource limitation.

BFD_TEST Messages

This section contains Bidirectional Forwarding Detection (BFD) test messages.

BFD_TEST-3

Error Message %BFD_TEST-3-BAD_ADDR_TYPE: Invalid address type [dec]

Explanation The BFD test process detected an invalid address type.

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 %BFD_TEST-3-BAD_TYPE: Invalid session type [dec]

Explanation The BFD test process detected an invalid session type.

Explanation 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 %BFD_TEST-3-WAVL_INIT_FAIL: Failed initializing wavl tree.

Explanation The BFD test process was unable to initialize a wrapped AVL (WAVL) tree.

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 %BFD_TEST-3-WAVL_INSERT_FAIL_IPV4: Failed inserting neighbor address
%30i to wavl tree thread [dec]

Explanation The BFD test process was unable to insert an IPv4 node in a wrapped AVL (WAVL) tree.

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 %BFD_TEST-3-WAVL_INSERT_FAIL_IPV6: Failed inserting neighbor address
%30P to wav1 tree thread [dec]

Explanation The BFD test process was unable to insert an IPv6 node in a wrapped AVL (WAVL) tree.

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 %BFD_TEST-3-WAVL_TREE: Failed to malloc space for wavl tree.

Explanation The BFD test process was unable to allocate memory for a wrapped AVL (WAVL) tree.

Error Message %BFD_TEST-3-WAVL_WALK_FAIL: wavl_walk failed while walking wavl tree
thread [dec] interface [dec]

Explanation A thread failed while walking the wrapped AVL (WAVL) tree.

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.

BFD_TEST-7

```
Error Message %BFD_TEST-7-FSM_STATE: Session
[[IP_address],[IP_address],[chars],[int]], event [chars], state [chars] ->
[chars]
```

Explanation State information is shown in the message.

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 that 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 %BFD_TEST-7-RECV_START: First packet has come in.

Explanation The first packet has been received.

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

BGP Messages

This section contains Border Gateway Protocol (BGP) messages.

BGP-2

Error Message %BGP-2-INSUFMEM: Insufficient memory for [chars] entry

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.

BGP-3

Error Message %BGP-3-ADDROUTE: Unable to add route for [chars] to radix trie

Explanation An addition to the radix trie could not be completed because of an error.

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 %BGP-3-BADMASK: Attempt to install route for %i without valid mask in [chars]

Explanation An internal software error occurred.

Error Message %BGP-3-BADROUTEMAP: Bad parameters in the route-map [chars] applied for [chars]

Explanation The route map contains incorrect entries.

Recommended Action Correct the route map.

Error Message %BGP-3-BGP_INCONSISTENT: [chars] Inconsistent [chars]

Explanation An error was detected in a data structure. This is an internal software error.

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 %BGP-3-DELPATH: Attempted to delete path from an empty net for [chars]

Explanation A BGP path could not be deleted.

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 %BGP-3-DELROUTE: Unable to remove route for [chars] from radix trie

Explanation The system was unable to delete a route from the radix trie.

Error Message %BGP-3-INSUFCHUNKS: Insufficient chunk pools for [chars], requested size [dec]

Explanation The static chunk pools size is too small.

Recommended Action Collect the chunk and BGP summary. 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 %BGP-3-INVALID_MPLS: Invalid MPLS label ([dec]) received in update for
prefix [chars] from [chars]

Explanation An invalid MPLS label was found in a received BGP message. This indicates that there is some problem on the remote router.

Recommended Action Check the configuration of the remote router.

Error Message %BGP-3-MARTIAN_IP: [chars] Martian prefix [chars] in [chars]

Explanation A Martian prefix was found in the BGP message. This indicates that there is some problem on the remote router.

Recommended Action Check the configuration of the remote router.

Error Message %BGP-3-MAXPFXEXCEED: No. of prefix received from [chars][chars][chars]
(afi [dec]): [dec] exceed limit [dec]

Explanation The number of prefixes received from a neighbor exceeds the configured limit. The message displays the session number or VRF identifier, if applicable.

Recommended Action Check the number of prefixes received from the neighbor and determine whether the limit should be increased.

 $\textbf{Error Message} \ \text{\$BGP-3-NOBITFIELD: Could not allocate bitfield. Cannot open session to [chars]}$

Explanation The allocation of a neighbor index for this neighbor has failed 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 %BGP-3-NOTIFICATION: [chars] neighbor [chars] [dec]/[dec] ([chars])
[dec] bytes [chars]

Explanation An error condition has been detected in the BGP session. A notification message is being sent or received and the session will be reset. This message appears only if the **log-neighbor-changes** command is configured for the BGP process.

Recommended Action This message represents an error in the session and its origin should be investigated. If the error is reported periodically, 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 %BGP-3-ORF_PFXLIST: Received misformatted prefixlist ORF from [chars]

Explanation The received prefix list outbound route filter (ORF) is misformatted.

Recommended Action Check the prefix list ORF implementation on the neighboring router.

Error Message %BGP-3-PER_VRF_AGGR: pervrfaggr label: [chars]

Explanation The TFIB asks for a label for a prefix in the VRF routing table. The per-VRF-aggregate label will be assigned to the connected type or BGP aggregate prefix when BGP runs a best-path calculation. This message might appear when a prefix changes to a connected type or BGP aggregate type.

Recommended Action No action is required. 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 %BGP-3-RADIXINIT: Radix trie initialization failed

Explanation Initialization of the radix tree 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.

BGP-4

Error Message %BGP-4-AFIMPORT: [chars] prefixes imported to [chars] vrf reached the limit [dec]

Explanation The number of prefixes imported from an address family to a VRF has reached the configured limit

Recommended Action Check the number of imported prefixes from the address family and determine whether the limit should be increased or if the **ip vrf import route-map** command is configured correctly.

Error Message %BGP-4-ATTRNULL: A NULL attribute has been assigned to a path

Explanation The path was incorrectly assigned a value of NULL instead of a valid attribute.

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 %BGP-4-BFD_NOT_ONEHOP: BFD is supported for single hop neighbors.
[chars] is not single hop neighbor

Explanation Bidirectional forwarding detection (BFD) is not enabled because the configured neighbor is not a single hop. BFD is supported only for single hop neighbors.

Recommended Action Unconfigure BFD from BGP.

Error Message %BGP-4-MAXDYNNBR: BGP:DN: Cannot create new neighbor [chars], for range [chars]: maximum number of [dec] dynamic neighbors limit reached

Explanation The number of dynamically created subnet range neighbors has reached a warning limit.

Recommended Action Check the number of listen range limit configured for dynamic subnet neighbors and determine whether the limit should be increased.

Error Message %BGP-4-MAXPFX: No. of prefix received from [chars][chars] (afi
[dec]) reaches [dec], max [dec]

Explanation The number of prefixes received from a neighbor has reached a warning limit. The message displays the session number or VRF identifier, if applicable.

Recommended Action Check the number of prefixes received from the neighbor and determine whether the limit should be increased.

Error Message %BGP-4-MAX_EXTCOMM_EXCEED: Exceeded limit of [dec] extended communities per advertised prefix

Explanation An attempt was made to advertise a prefix with an extended community attribute containing more extended communities than the allowed limit.

Recommended Action Reduce the configured number of route targets or other extended communities that will be added to prefix advertisements.

Error Message ~ \$ BGP-4-NBRTRACK: ~ Route Tracking failed on memory. ~ Neighbor tracking for route-fall-over will stop

Explanation The route tracking system failed to allocate memory. Neighbor route fallover will stop tracking neighbor routes in order to free some memory.

Recommended Action If the system is stable, then reconfigure neighbor route fallover. If this message reappears, neighbor route fallover has been unconfigured.

Error Message %BGP-3-NEGCOUNTER: Prefix-accepted counter negative for peer [chars],
prefix [chars]

Explanation The counter value for accepted prefixes is less than zero, which is an illegal value. This indicates an internal software error.

Recommended Action Reset the session.

 ${\bf Error\ Message}\ \mbox{\$BGP-4-NORTRID:}\ \mbox{BGP}\ \mbox{could}\ \mbox{not}\ \mbox{pick}\ \mbox{a}\ \mbox{router-id}.$ Please configure manually.

Explanation The BGP router ID has not been manually configured and BGP is unable to allocate a router ID from the IPv4 address of one of its interfaces.

Recommended Action Make sure that at least one interface is up and has a valid IPv4 address, or configure the router ID manually.

Error Message %BGP-4-RIDSYNC: BGP routes are redistributed to OSPF. For synchronization to work, you must manually configure the BGP router-id to be the same as the OSPF router-id.

Explanation For synchronization to work, the BGP router ID must be the same as the OSPF router ID at all times that the router is up.

Recommended Action If synchronization is turned on between one instance of OSPF and BGP, make sure to manually configure a BGP router ID that is identical to the router ID of the particular OSPF instance.

Error Message %BGP-4-VPNV4NH_MASK: Nexthop %i may not be reachable from neigbor
[chars] - not /32 mask

Explanation We are sending to an IBGP neighbor a VPNv4 route whose next hop address is our loopback, which does not have a 32 bit mask. In addition, we are using OSPF on this loopback, and the OSPF network type of this interface is loopback. OSPF advertises this address as a host route (with mask /32) regardless of what mask is configured. This conflicts with the Tag Distribution Protocol (TDP), which uses configured masks, so our TDP neighbors may not receive a tag for this route. As a result, connectivity could be lost between sites that belong to the same VPN.

Recommended Action Configure the loopback used as the next hop with a 32 bit IP host mask (/32), or configure the **ip ospf network point-to-point** command on this loopback.

Error Message %BGP-4-VPN_NH_IF: Nexthop [chars] may not be reachable from neigbor
[chars] - not a loopback

Explanation We are sending to an IBGP neighbor a VPN route whose the next hop is one of our directly-connected physical interfaces. The label for the next hop address may be removed in the MPLS cloud one hop soon. Since the P routers do not have VPN information, they do not know where to forward packets with the BGP label. As a result, connectivity could be lost between VPN sites.

Recommended Action Use loopback interfaces as the next hops for VPN IBGP neighbors.

BGP-5

Error Message %BGP-5-ADJCHANGE: neighbor [chars][chars][chars] [chars]

Explanation A BGP neighbor has either come up or gone down, as indicated. This message appears only if the **log-neighbor-changes** command is configured for the BGP process.

Recommended Action This informational message normally appears as routers and BGP neighbors go up or down. However, unexpected neighbor loss might indicate high error rates or high packet loss in the network and should be investigated.

Error Message %BGP-5-DAMPENING_DECAY_TIME: Decay time from maximum penalty to
suppress penalty is [dec] secs. Maximum penalty: [dec], suppress penalty: [dec]

Explanation The configured dampening parameters may not be feasible. The time window between maximum penalty and suppress penalty may be low.

Recommended Action If the decay time from maximum penalty to suppress penalty is too low, increase the half-life time or the maximum penalty values.

Error Message %BGP-5-DAMPENING_HIGH_MAX_PENALTY: Maximum penalty ([dec]) is more than allowed maximum ([dec]). Dampening is OFF

Explanation The configured dampening parameters may not be feasible. The maximum penalty is more than the allowed maximum. As a result, dampening will be off.

Recommended Action Depending on the value of the maximum penalty, adjust the maximum suppress time. Because the maximum penalty is more than the allowed maximum, reduce maximum suppress time. The maximum penalty should be greater than the suppress penalty but less than the maximum allowable penalty.

Error Message %BGP-5-DAMPENING_LOW_MAX_PENALTY: Maximum penalty ([dec]) is less than
suppress penalty ([dec]), Dampening is OFF

Explanation The configured dampening parameters may not be feasible. The maximum penalty is less than the configured suppress penalty. As a result, dampening will be off.

Recommended Action Depending on the value of the maximum penalty, adjust the maximum suppress time. Because the maximum penalty is less than the suppress penalty, increase the maximum suppress time. The maximum penalty should be greater than the suppress penalty but less than the maximum allowable penalty.

Error Message %BGP-5-VERSION_WRAP: bgp version wrapped of [chars]

Explanation The BGP table version has reached its maximum value and has wrapped around. The message describes this event.

Recommended Action This message is informational. However, frequent occurrences of such an event might indicate high error rates or high packet loss in the network and should be investigated.

BGP-6

Error Message %BGP-6-ASPATH: [chars] AS path [chars] received from [chars]: [chars]

Explanation The remote BGP peer sent an update with an invalid autonomous system (AS) path.

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 that 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.

Explanation This is an informational message describing an internal software operation. If the static chunk pool size can not service the request, it will be serviced with a memory allocation (malloc) process.

Recommended Action No action is required.

Error Message %BGP-6-NEXTHOP: Invalid next hop (%i) received from [chars]: [chars]

Explanation The remote BGP peer sent a route with an illegal next hop. The route was ignored.

Recommended Action No action is required.

BGP_MPLS Messages

This section contains BGP MPLS common messages.

BGP MPLS-3

Error Message %BGP_MPLS-3-GEN_ERROR: [chars]

Explanation This message describes a general runtime error related to BGP MPLS.

Error Message %BGP_MPLS-3-IPRMCONNECT: [chars]

Explanation BGP VPNv4 failed to register to the IP rewrite manager (IPRM) component.

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 that 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 %BGP_MPLS-3-LABELALLOC: [chars]

Explanation An MPLS label could not be allocated for a prefix.

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 that 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 %BGP_MPLS-3-LSDCONNECT: [chars]

Explanation BGP VPNv4 failed to register to the MPLS forwarding component.

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 that 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 %BGP_MPLS-3-NBR_ROUTE: [chars]

Explanation An error occurred in manipulating the BGP neighbor route needed for MPLS operations.

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 that 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 %BGP_MPLS-3-PERVRF: pervrfaggr label: [chars]

Explanation An error occurred related to the per-VRF label feature.

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 that 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 %BGP_MPLS-3-PER_VRF_AGGR: pervrfaggr label: [chars]

Explanation An error occurred related to the per-VRF aggregate label feature.

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 that 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 %BGP_MPLS-3-SIZEMISMATCH: Label table size ([dec]) mismatch, checkpt
key creation failed

Explanation A BGP MPLS label table size mismatch was detected.

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 that 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 %BGP_MPLS-3-VPN_REWRITE: [chars]

Explanation An error occurred in installing, updating, or removing a VPN rewrite entry in the MPLS forwarding tabl.e

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 that 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.

BGP_MPLS-4

Error Message %BGP_MPLS-4-LABELALLOC: Label allocation failure

Explanation A resource limitation was encountered while allocating a local label on the router.

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 that 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.

BGP_MPLS-7

Error Message %BGP_MPLS-7-IASLABELALLOC: Failed to create rewrite for prefix
[chars], reason: [chars]

Explanation A BGP MPLS VPN rewrite creation failed.

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 that 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 %BGP_MPLS-7-IPv4LABELALLOC: Failed to allocate label for IPv4 prefix %i/[dec]

Explanation A BGP MPLS IPv4 label allocation failed.

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 that 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.

BSR Messages

This section contains Bootstrap Router (BSR) messages.

BSR-5

Error Message %BSR-5-CBSR_REMOVED: Candidate-BSR on interface [chars] has been removed

Explanation The interface card has been removed.

Recommended Action No action is required.

Error Message %BSR-5-CRP_REMOVED: Candidate-RP on interface [chars] has been removed

Explanation The interface card has been removed.

Recommended Action No action is required.

BUNDLES Messages

This section contains Bundles messages.

BUNDLES-3

Error Message %BUNDLES-3-ALLOCATION: Bundle allocation error: [chars]

Explanation An internal software error occurred. This error is probably caused by a low-memory condition.

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.

 $\textbf{Error Message} \; \texttt{\$BUNDLES-3-PLATFORMSPACE:} \; \; \textbf{Platform attempted to access unreserved space} \\$

Explanation An internal software error occurred.

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.

Explanation The bundle type is not In Service Software Upgrade (ISSU) aware so cannot be distributed to a slot with which ISSU negotiation has occurred. This indicates a design problem that requires code changes to fix.

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.

C2950_MONITOR Messages

This section contains Catalyst 2950 series switch monitor messages.

C2950_MONITOR-3

Error Message %C2950_MONITOR-3-C2950MONITOR_UNKNOWN_PARAM: Unknown trap type:[dec] received in emt_call function.

Explanation An unknown trap type occurred.

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.

C4K_IOSSYS Messages

This section contains Catalyst 4000 series switch Cisco IOS system messages.

C4K IOSSYS-7

Error Message $C4K_{IOSSYS-7-INVALIDVALUE}$: [chars] Type [dec] not handled, returning a default of 0

Explanation This message is for debugging purposes. When you see this message, report it to your technical support representative.

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.

C4K_REDUNDANCY Messages

This section contains Catalyst 4000 series switch redundancy messages.

C4K REDUNCANCY-2

Explanation For the redundancy utility to operate properly, the system must be configured with symmetrical hardware and software. A mismatch in versions of Cisco IOS software between the active and standby systems has been detected. Redundancy operations cannot be guaranteed.

Recommended Action Configure the system so that the active and standby supervisor engines are using the same versions of Cisco IOS software.

Error Message %C4K_REDUNDANCY-2-NON_SYMMETRICAL_REDUNDANT_SYSTEM: [chars]

Explanation For the redundancy utility to operate properly, the system must be configured with symmetrical hardware and software. A mismatch in hardware has been detected between the active and standby systems. Redundancy operations cannot be guaranteed.

Recommended Action Configure the hardware so that the active and standby supervisor engines are identical.

Explanation An active supervisor engine failed during a POST operation. The standby supervisor engine will reset the current active supervisor engine, and the standby supervisor engine will attempt to become the active supervisor engine.

Recommended Action Perform offline diagnostic operations on the failed supervisor engine to isolate the failure.

C6KENV Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router environmental (C6KENV) messages.

C6KENV-2

Error Message %C6KENV-2-BADFLOWCTRL: Module [dec] not at an appropriate hardware revision level to support DFC. Power denied

Explanation The fabric-capable module in the specified slot is not at an appropriate hardware revision level and cannot support a DFC. If a DFC is present, the module will not be activated and remains powered down.

Recommended Action Remove the DFC to enable the module to operate at its current hardware revision level. To enable DFC operation, ensure that the module is at an appropriate hardware revision level.

Error Message %C6KENV-2-BADFLOWCTRL_WARN: WARNING: Module [dec] not at an appropriate hardware revision level to support DFC3

Explanation The fabric-capable module in the specified slot is not at an appropriate hardware revision level to support a DFC3 or higher.

Recommended Action When you upgrade the DFC daughter card, also upgrade the module to an appropriate hardware revision level.

Error Message %C6KENV-2-BADPINN1: Module [dec] not at an appropriate hardware revision level to coexist with PFC3 system. Power denied

Explanation The module specified in the error message has a revision of 2.x or below. Modules with this revision will experience problems when they are used with a supervisor engine with a PFC3 installed and should not be used.

Recommended Action Upgrade the module to an appropriate hardware revision level.

Error Message %C6KENV-2-BADTRANSCEIVER: Module [dec] will be power disabled because an inappropriate transceiver is inserted at [chars].

Explanation An incompatible transceiver is inserted at the interface specified in the error message. This transceiver should not be used in this system.

Recommended Action Remove the specified transceiver and restore power to the module. If this transceiver was purchased from Cisco, contact your Cisco technical support representative to get the transceiver replaced.

Error Message %C6KENV-2-C2PLUSWITHNODB: The constellation 2 plus module in slot [dec] has no forwarding daughter board. Power denied

Explanation The module in the slot specified has no forwarding daughter card and is expected to have either a distributed, accelerated, or centralized forwarding card. This module will not be activated and will remain powered down.

Recommended Action Enter the **show module** command to view error message details.

Error Message %C6KENV-2-DFCMISMATCH: Module [dec] DFC incompatible with Supervisor DFC. Power denied

Explanation The DFC in the specified module is different from the DFC in the supervisor engine. The module will not be activated and remains powered down.

Recommended Action Enter the **show module** command to view the difference between the DFC in the module and the DFC in the supervisor engine.

Error Message %C6KENV-2-DFCMISMATCHMINOR: Module [dec] DFC installed is incompatible with system operating mode. Power denied. To enable Module [dec] DFC, the system must be reset.

WARNING: Any system reset will change the system operating mode which can result in degradation of system performance. To eliminate this from occurring, remove Module [dec] DFC or replace with a system compatible DFC.

Explanation The DFC in the specified slot does not have the same software operating mode as the rest of the system. The DFC will remain powered down and cannot be activated.

Recommended Action Enter the **show module** and **show platform earl-mode** commands to view the difference between the DFC in the specified slot and the operating mode of the rest of the system.

Error Message %C6KENV-2-FANUPGREQ: Module [dec] not supported without fan upgrade

Explanation The supervisor engine and the DFC in the specified slot require a fan tray upgrade. A system shutdown is scheduled.

Recommended Action Upgrade the system fan tray.

Error Message %C6KENV-2-SHUTDOWN_NOT_SCHEDULED: Major sensor alarm for [chars] is ignored, [chars] will not be shutdown.

Explanation The system detected that the specified module should be shut down because it exceeded major sensor thresholds. However, the command that shuts down the module in the event of a major sensor alarm has been overridden, so the specified module will not be shut down. The command used to override the shutdown is **no environment-monitor shutdown**.

Recommended Action Remove the configuration that bypasses the module shutdown due to sensor thresholds being exceeded. Shut down the module after removing the configuration.

Error Message %C6KENV-2-SHUTDOWN_SCHEDULED: shutdown for [chars] scheduled in [dec]
seconds

Explanation A major alarm condition will be corrected by shutting down the affected component. [chars] is the component, and [dec] is the time in seconds before shutdown.

Recommended Action Replace the component as soon as possible.

C6KENV-4

Error Message %C6KENV-4-ALARMCLR: [chars] alarm cleared

Explanation The specified alarm condition has been cleared. The shutdown has been cancelled.

Recommended Action No action is required.

Error Message %C6KENV-4-FANCOUNTFAILED: Required number of fan trays is not present

Explanation The system is missing the number of required fan trays to operate properly. Although this is a minor alarm, system components could overheat and be shut down.

Recommended Action Insert the required fan tray as soon as possible.

Error Message %C6KENV-4-FANCOUNTOK: Required number of fan trays is present

Explanation The number of required fan trays has been restored.

Recommended Action No action is required.

Error Message %C6KENV-4-FANHIOUTPUT: Version [dec] high-output fan-tray is in effect

Explanation The system has detected that the fan tray is a high-output (version 2) fan tray. The system has updated the cooling capacity for the fan tray.

Recommended Action No action is required.

Error Message %C6KENV-4-FANLOOUTPUT: Version [dec] low-output fan-tray is in effect

Explanation The system has detected that the fan tray is a low-output (version 1) fan tray. The system has updated the cooling capacity for the fan tray.

Recommended Action No action is required.

Explanation An upgrade of the power supply is required to sufficiently operate this fan tray. Although this is a minor alarm, overcurrent protection on the power supply could start without further warning.

Recommended Action Upgrade the power supply.

Error Message %C6KENV-4-FANTRAYFAILED: fan tray failed

Explanation One or more fans in the system fan tray have failed. Although this is a minor alarm, system components could overheat and be shut down.

Recommended Action Reseat the fan tray. If the error recurs, replace the system fan tray at the earliest opportunity.

Error Message %C6KENV-4-FANVERCHK: Power-supply [dec] inserted is only compatible with Version [dec] fan-tray. Please make sure fan is low-output fan-tray

Explanation The system has detected that the fan tray is a low-output (version 1) fan tray. If the fan tray is a low-output tray, no action is required. If the fan tray is actually a high-output (version 2) fan tray, the specified power supply is not able to support the high-output fan tray.

Recommended Action If the fan tray is a high-output (version 2) fan tray, enter the **hw-module fan-tray version 2** command to update the system with the upgrade information. Replace the 1000 W or 1300 W power supply, as these two power supplies are not compatible in this chassis with the version 2 fan tray.

Error Message %C6KENV-4-INSUFFCOOL: Module [dec] cannot be adequately cooled

Explanation The fan tray cannot adequately cool the specified module. Although this is a minor alarm, system components could overheat and be shut down.

Recommended Action Upgrade the system fan tray.

Error Message %C6KENV-4-MINORTEMPOKALARM: [chars] all temperature sensor have failed. If the module temperature sensor does not recover by itself, please power cycle the module when it is feasible

Explanation All module temperature sensors have failed.

Recommended Action If the module temperature sensors do not recover, power cycle the module when possible.

 $\textbf{Error Message} \ \ \text{\%C6KENV-4-MINORTEMPOKALARMRECOVER:} \ [chars]. \ \ \textbf{It has returned to normal operating status.}$

Explanation All module temperature sensors have returned to normal operating status.

Recommended Action No action is required.

Error Message %C6KENV-4-MINORTEMPSUPOKALARM: All temperature sensors of Supervisor in slot [dec] have failed. If the temperature sensor does not recover by itself, please power cycle the chassis when it is feasible

Explanation All temperature sensors have failed in the supervisor engine.

Recommended Action If the temperature sensors do not recover, power cycle the chassis when possible.

Error Message %C6KENV-4-MINORTEMPSUPOKALARMRECOVER: Supervisor in slot [dec] has returned to normal operating status.

Explanation The supervisor engine temperature sensors have returned to normal operating status.

Recommended Action No action is required.

Error Message %C6KENV-4-MINORVTTOKALARM: All the backplane vtt temperature sensor have failed. If the backplane vtt temperature sensor does not recover by itself, please power cycle the chasis when it is feasible

Explanation All backplane VTT temperature sensors have failed.

Recommended Action If the backplane VTT temperature sensors do not recover, power cycle the chassis when possible.

 $\label{lem:cover:backplane} \begin{tabular}{ll} \textbf{Error Message} & C6KENV-4-MINORVTTOKALARMRECOVER: Backplane VTT has returned to normal operating status. \end{tabular}$

Explanation The backplane VTT has returned to normal operating status.

Recommended Action No action is required.

C6KENV-SP

Error Message %C6KENV-SP-4-FANTRAYFAILED: Fan tray failed.

Explanation One or more fans in the system fan tray have failed. Although this is a minor alarm, system components can overheat and be shut down.

Recommended Action Replace the system fan tray as soon as possible.

Error Message %C6KENV-SP-4-MINORTEMPALARM: [chars] has exceeded normal operating temperature range.

Explanation Message indicates that the normal operating temperature range has been exceeded. This message can indicate a trend for the module or component, and also a trend for other components in the system.

Recommended Action Inspect the indicated module or component closely to determine why it operates out of normal operating temperature range and determine if it eventually exceeds the allowed operating temperature range. Verify the air flow to the device is not blocked and that the fan is operational. Enter the **show environment temperature** command to see temperature readings and the **show environment alarm threshold** command to see the alarm thresholds.

C6KERRDETECT Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router bus error detection (C6KERRDETECT) messages.

C6KERRDETECT-2

 $\textbf{Error Message} \ \, \text{\%C6KERRDETECT-2-SWBUSSTALL:} \ \, \text{The switching bus is experiencing stall} \\ \, \text{for [dec] seconds}$

Explanation During an Online Insertion or Removal (OIR), some switching modules will assert a stall signal on the backplane to pause data transmission for the duration of the OIR. When the OIR is performed smoothly and quickly, traffic is usually interrupted for less than one second. If the OIR is performed slowly or is paused, the longer traffic interruption will result in this error message being reported.

Recommended Action Perform the OIR smoothly and quickly. Do not pause with the module partially inserted.

C6K_IVRF Messages

This section contains Catalyst 6500 series switch internal VRF (IVRF) messages.

C6K_IVRF-3

Error Message %C6K_IVRF-3-C6K_IVRF_ERROR: [chars]

Explanation A VRF infrastructure failure occurred involving the platform's internal VRFs (IVRFs).

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.

C6K_MPLS_COMMON Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router LAN and WAN Multiprotocol Label Switching (C6K MPLS COMMON) messages.

C6K_MPLS_COMMON-3

Error Message %C6K_MPLS_COMMON-3-L2_CONFIG_NOT_RECOMMENDED: xconnect is configured on interface vlans and WAN interfaces are facing the MPLS Core. Do not configure LAN interfaces facing the MPLS Core.

Explanation An attempt was made to configure a LAN interface to face the MPLS core. The current network configuration has cross-connection services configured on interface VLANs and has WAN interfaces facing the MPLS core.

Recommended Action Do not configure MPLS on LAN interfaces facing the MPLS core if the network has cross-connect services configured on an interface VLAN and WAN interfaces that face the MPLS core.

Error Message %C6K_MPLS_COMMON-3-L3_CONFIG_NOT_RECOMMENDED: LAN interfaces are facing the MPLS Core. Do not configure xconnect on interface vlans.

Explanation An attempt was made to configure a cross-connection service on an interface VLAN. The current network configuration has MPLS configured on a LAN interface that is facing the MPLS core.

Recommended Action Do not configure cross-connection services on an interface VLAN if the network has MPLS configured on a LAN interface.

Error Message %C6K_MPLS_COMMON-3-OSM_BB1_CONFIG_UNSUPPORTED: The maximum label range configured for this system exceeds the [int] limit supported by the module in slot [int]. For proper MPLS functionality on any of the interfaces on this module the maximum label range should be set to [int].

Explanation The OSM cannot support the MPLS label range configured for this system.

Recommended Action Change the maximum MPLS label range by using the **mpls label range** command.

Error Message %C6K_MPLS_COMMON-3-VPLS_CONFIG_EXCEEDED: The number of EoMPLS/VPLS VCs exceeded the maximum supported on [IP_address]/[int].

Explanation The number of destination routers or the global number of virtual circuits exceeded the maximum limit supported by the device.

Recommended Action Refer to network configuration guidelines for the maximum limits.

C6K_MPLS_LC Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router Multiprotocol Label Switching (MPLS) switch processor or module (C6K_MPLS_LC) messages.

C6K_MPLS_LC-3

Error Message %C6K_MPLS_LC-3-INFINITE_OCE: In label: [dec] Invalid OCE previous oce type: [dec] prev ptr:**Unrecognized format'%p'**, next oce type: [dec] next oce ptr:**Unrecognized format'%p'**

Explanation The Output Chain Element(OCE) specified in the system message is invalid because it has exceeded the maximum depth. One known cause is invalid static route configuration. Traffic for this path will be dropped.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C6K_MPLS_LC-3-INVALID_TABLEID: Invalid tableid([dec]) for label([dec])

Explanation The system has received an invalid table identifier number. The table identifier should be in the range from 0 to 4095. This is an internal software error.

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 %C6K_MPLS_LC-3-INVALID_TE_IF_NUMBER: An invalid Traffic Engineering interface number [[int]] was passed to the statistics update routine

Explanation The traffic engineering interface number sent to the statistics update routine is invalid.

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 %C6K_MPLS_LC-3-INVALID_VRFID: Invalid vrf_id(%u) for label([dec])

Explanation An invalid VRF identifier (ID) was received. The VRF ID should be in the range of 0 to 4095. This is an internal software error.

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 %C6K_MPLS_LC-3-LABEL_STACK_SIZE: Label [[dec]] is not added to label stack. Current label stack is [[dec] [dec] [dec] [dec]]

Explanation The label specified in the system message was not added to the label stack because the stack already contains the maximum number of allowed labels. The system cannot forward data correctly. This condition is an internal software error.

Recommended Action Enter the show mpls forwarding-table labels command, and gather label information about the label that was not added to the stack and about the labels that are in the stack already. 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 %C6K_MPLS_LC-3-MALLOCFAIL: failed to create [chars]

Explanation The system failed to allocate memory for an MPLS entry for the incoming label. Some MPLS packets might be forwarded by the software.

Recommended Action Reduce other system activity to ease memory demands. If necessary, increase system memory. When more memory is available, wait for a few minutes and enter the clear ip route command. If sufficient memory has not been made available, this message will display again. If this problem 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.

Error Message %C6K_MPLS_LC-3-OCE_ERROR: Invalid OCE [[chars]] [hex]

Explanation The Output Chain Element (OCE) specified in the system message is invalid because it cannot be processed. This issue can cause problems in data forwarding. This condition is an internal software error.

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 %C6K_MPLS_LC-3-REWRITEFAIL: null adj for incoming label [dec]

Explanation The specified incoming label has a NULL adjacency entry. The hardware adjacency entry might not be programmed because the incoming label has the NULL adjacency entry. This condition is an internal software error.

Recommended Action Enter the show mpls forwarding-table labels command. 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 %C6K_MPLS_LC-3-SIX_PE_REW_LBL_ENTRY_MISMATCH: The label entry([hex]) in the 6PE rewrite table for incoming label [dec] does not match the passed in label entry([hex])

Explanation The label entry in the IPv6 on Provider Edge router (6PE) rewrite table does not match the label entry for an incoming label. This is an internal software error.

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 %C6K_MPLS_LC-3-TCAMFAIL: TCAM validation check failed for label [dec]

Explanation The validation check on an inserted TCAM entry failed for the specified label.

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.

C6K_MPLS_LC-5

Error Message %C6K_MPLS_LC-5-TCAM_EXCEPTION: TCAM exception occured for MPLS, traffic will be software switched

Explanation The switch failed to insert an MPLS entry into the hardware FIB TCAM because the total number of software forwarding entries exceeds the hardware FIB TCAM limit. As a result, some MPLS packets might be forwarded by the software.

Recommended Action Reduce the number of routes in the system to free up TCAM space. When enough free TCAM space is available, the software starts the TCAM recovery mechanism automatically, which will reinstall into TCAM those MPLS label entries that failed before. If the number of labels has been tuned down with the mls cef maximum-routes configuration command, increase the number of labels, save the configuration, and reload the router, bacause this configuration will only be effective on reloading the router. The maximum number of routes currently configured can be observed with the show mls cef maximum-routes command, and the current number of routes in the system can be observed with the show mls cef summary command.

Error Message %C6K_MPLS_LC-5-TCAMEXPRECOVER: TCAM exception recovered for MPLS, traffic will be hardware switched

Explanation At some earlier point in time some of the MPLS forwarding table could not fit into the hardware TCAM. The complete MPLS forwarding table is now in hardware, and forwarding for the incoming MPLS packets will be done in hardware.

Recommended Action No action is required.

C6K_MPLS_RP Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router LAN Multiprotocol Label Switching (C6K_MPLS_RP) messages.

C6K_MPLS_RP-2

Error Message %C6K_MPLS_RP-2-INIT: [chars]

Explanation The initialization of the Constellation MPLS forwarding infrastructure failed. This condition causes problems in the MPLS packet forwarding. The router will be forced to reboot to recover from the problem.

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 %C6K_MPLS_RP-2-NO_IP_ACL_RSVD_VLAN: IP ACL features will not be
applied to MPLS->IP packets due to a lack of internal VLAN resources

Explanation This error might occur if the total number of VLANs in use exceeds 4096. The VLAN resources are shared by VLANs used for SVI, VLANS used for subinterfaces, hidden VLANs used for routed ports, and internal VLANs used for some VRFs. An internal VLAN is needed when an IP ACL feature is applied to a VRF interface. If the total number of VLANs in use exceeds 4096, no more internal VLANs can be allocated, so IP ACL features will not be applied to MPLS-to-IP packets.

Recommended Action Reduce the total number of VLANs in use by removing SVI interfaces, subinterfaces, or VRF interfaces.

Error Message %C6K_MPLS_RP-2-NO_IP_QOS_RSVD_VLAN: IP QoS features will not be applied to MPLS->IP packets due to a lack of internal VLAN resources

Explanation This message indicates a condition that might occur if the total number of VLANs in use exceeds 4096. The VLAN resources are shared by VLANs used for SVI, VLANS used for subinterfaces, hidden VLANs used for routed ports, and internal VLANs used for some VRFs. An internal VLAN is needed when an IP QoS feature is applied to a VRF interface. If the total number of VLANs in use exceeds 4096, no more internal VLANs can be allocated, so IP QoS features will not be applied to MPLS-to-IP packets.

Recommended Action Reduce the total number of VLANs in use by removing SVI interfaces, subinterfaces, or VRF interfaces.

C6K MPLS RP-3

Error Message %C6K_MPLS_RP-3-GET_RSVD_VLAN_TABLEID_MISMATCH: Tableid [int] in reserved VLAN idb [chars] mismatched application tableid [int]

Explanation An application provided a table ID for a reserved VLAN, but the table ID does not match the value in the reserved VLAN interface descriptor block (IDB).

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 %C6K_MPLS_RP-3-GET_RSVD_VLAN_VRFID_MISMATCH: Tableid %u in reserved VLAN idb [chars] mismatched application tableid %u

Explanation An application gave a table identifier (ID) to get a reserved VLAN interface descriptor block (IDB) but the table ID within the IDB does not match the specified value.

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 %C6K_MPLS_RP-3-INFINITE_OCE: In label: [dec] Invalid OCE previous oce type: [dec] prev ptr:**Unrecognized format'%p'**, next oce type: [dec] next oce ptr:**Unrecognized format'%p'**

Explanation The Output Chain Element(OCE) specified in the system message is invalid because it has exceeded the maximum depth. One known cause is invalid static route configuration. Traffic for this path will be dropped.

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 %C6K_MPLS_RP-3-INVALID_TABLEID: Invalid tableid([dec]) for label([dec])

Explanation An invalid table ID was received. The table ID should be in the range of 0 to 4095. This is an internal software error.

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 %C6K_MPLS_RP-3-INVALID_VRFID: Invalid vrfid(%u) for label([dec])

Explanation An invalid VRF identifier (ID) was received. The VRF ID should be in the range of 0 to 4095. This is an internal software error.

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 %C6K_MPLS_RP-3-L2_CONFIG_NOT_RECOMMENDED: xconnect is configured on interface vlans and WAN interfaces are facing the MPLS Core. Do not configure LAN interfaces facing the MPLS Core.

Explanation An attempt was made to configure a LAN interface to face the MPLS core. The current network configuration has cross-connection services configured on interface VLANs and has WAN interfaces facing the MPLS core.

Recommended Action Do not configure MPLS on LAN interfaces facing the MPLS core if the network has cross-connection services configured on an interface VLAN and WAN interfaces that face the MPLS core.

Error Message %C6K_MPLS_RP-3-L3_CONFIG_NOT_RECOMMENDED: LAN interfaces are facing the MPLS Core. Do not configure xconnect on interface vlans.

Explanation An attempt was made to configure a cross-connection service on an interface VLAN. The current network configuration has MPLS configured on a LAN interface that is facing the MPLS core.

Recommended Action Do not configure cross-connection services on an interface VLAN if the network has MPLS configured on a LAN interface.

Error Message %C6K_MPLS_RP-3-NO_RSVD_VLAN_ERROR: Failed to allocate reserved VLAN
for vrf [int]

Explanation The system failed to allocate an MPLS-reserved VLAN.

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 %C6K_MPLS_RP-3-PKT_DROP_NO_RSVD_VLAN_IDB: Packet dropped, no idb for
reserved VLAN [int]

Explanation A packet received on a reserved VLAN was dropped because it did not contain an interface descriptor block (IDB) for the VLAN.

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 %C6K_MPLS_RP-3-RECIRC_DROP: Re-circulated packet dropped due to error.
Possible causes: MTU or TTL fail
Total drops = [int] pkts, Last packet size [int] Bytes
Top 3 Labels and partial packet dump -

```
{[int](exp:[dec] eos:[dec] ttl:[dec]), [int](exp:[dec] eos:[dec] ttl:[dec]),
[int](exp:[dec] eos:[dec] ttl:[dec])}
[hex] [hex] [hex] [hex] [hex] [hex] [hex]
```

Explanation A recirculated packet was dropped due to an error. This condition might occur if the size of a recirculated packet exceeds the egress interface MTU.

Recommended Action Increase the MTU size on the egress interface to accomodate the incoming packets. If the problem 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.

Error Message 6K_MPLS_RP-3-RSVD_VLAN_CLEAR_ACL_ERROR: Failed to clear ACL default
for reserved VLAN [int] for vrf [int]

Explanation The system failed to clear the ACL default for an MPLS-reserved VLAN.

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 %C6K_MPLS_RP-3-RSVD_VLAN_RELEASE_ERROR: Failed to release reserved VLAN [int] from vrf [int]

Explanation The system failed to release an MPLS-reserved VLAN from a VRF either because the VRF was not found or because a failure occurred when dissociating the VLAN from the VRF.

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 %C6K_MPLS_RP-3-RSVD_VLAN_SET_ACL_ERROR: Failed to set ACL default for reserved VLAN [int] for vrf [int]

Explanation The system failed to set an ACL default for an MPLS-reserved VLAN.

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 %C6K_MPLS_RP-3-RSVD_VLAN_SET_IDB_ERROR: Failed to set idb of reserved VLAN [int] for vrf [int]

Explanation The system failed to set the IDB for an MPLS-reserved VLAN.

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.

C6K_MPLS_RP-6

Error Message %C6K_MPLS_RP-6-PKT_DROP_RSVD_VLAN_TABLEID: Packet dropped, reserved VLAN idb [chars] has incorrect tableid [int]

Explanation A packet received on a reserved VLAN was dropped due to an incorrect table ID in the IDB. This situation might occur during VRF removal. The aggregate label will stay in the H state for a few minutes, while the table ID in the reserved VLAN IDB has already cleared.

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 %C6K_MPLS_RP-6-PKT_DROP_RSVD_VLAN_VRFID: Packet dropped, reserved
VLAN idb [chars] has incorrect tableid %u

Explanation A packet received on a reserved VLAN was dropped due to an incorrect table identifier (ID) in the interface descriptor block (IDB). This condition might occur when, during VRF removal, an aggregate label will stay in the H state for a few minutes, while the table ID in the reserved VLAN IDB has already cleared.

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.

C6K_PLATFORM Messages

This section contains general Catalyst 6500 series switch and Cisco 7600 series router platform (C6K_PLATFORM) messages.

C6K_PLATFORM-0

Error Message %C6K_PLATFORM-0-UNKNOWN_CHASSIS: The chassis type is not known.([hex])

Explanation The Cisco IOS software installed on the system does not recognize the chassis type specified in the error message.

Recommended Action Ensure that your Cisco IOS software release train supports the chassis type. Upgrade your system to the latest Cisco IOS software release in your release train.

C6K_PLATFORM-2

Error Message %C6K_PLATFORM-2-PEER_RESET: [chars] is being reset by the [chars]

Explanation The local CPU is being reset by the peer CPU when the peer CPU reloads because of exceptions.

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.

C6K_PLATFORM-3

Error Message %C6K_PLATFORM-3-INFO1: [chars]=[hex] [chars]=[hex]

Explanation This message provides information regarding the internal state of the SiByte processor.

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.

C6K_PLATFORM-4

Error Message $C6K_{PLATFORM-4-CONFREG_BREAK_ENABLED}$: The default factory setting for config register is 0x2102.It is advisable to retain 1 in 0x2102 as it prevents returning to ROMMON when break is issued.

Explanation The SP configuration register has been changed from the default factory setting of 0x2102 to another hexadecimal value.

Recommended Action No action is required.

Error Message $C6K_{PLATFORM-4-ENVMON}$: System shutdown due to temperature alarms is [chars].

Explanation The system has a configuration to shut down a module if its operating temperature exceeds a temperature threshold. This configuration has been bypassed, and a module will still operate in an over-temperature condition. Operating at an over-temperature condition can damage the hardware.

Recommended Action Do not override the sensor alarms that act on an over-temperature condition. Enter the **environment-monitor shutdown temperature** command to bring the system back to standard temperature detection.

Error Message %C6K_PLATFORM-4-RTC_OSCILLATOR: The oscillator in the Real Time Clock is [chars]. Calendar [chars] be maintained during the powered down state of the switch.

Explanation A command has been entered that will cause the system calendar not to be maintained during a power down of the switch. The system date and time will require manual setting when the system is powered up during the next boot time. This command is useful to conserve the battery power of the CMOS, which is used to keep the real-time clock active while the switch is powered down. This condition is useful only if the switch is powered down for a long period of time.

Recommended Action If the switch need not be powered down for a long period of time, remove the configuration by entering the **no hw-module rtc-oscillator shutdown** command.

C6K_PLATFORM-5

Error Message %C6K_PLATFORM-5-LESS_SPACE : May not have enough space to save the
crash info. on flash of [chars] on module: [dec]

Explanation The flash memory device does not have enough memory to save the crash information. The crash information might not be saved on the flash memory device.

Recommended Action Remove unnecessary files from the flash memory device, and enter the **squeeze** command for the flash memory device.

Error Message %C6K_PLATFORM-5-MISMATCH : '[chars]' device programming algorithm
mismatch detected on [chars] (module: [dec]), formatting is recommended.

Explanation The flash memory device programming algorithm that was written to the device when the flash memory was formatted is different from what the current running software has detected. The first [chars] is the device, the second [chars] is where the mismatch was detected, and [dec] is the module number. This conditions occurs when a flash memory is installed into a system with a different Cisco IOS release or when a Cisco IOS upgrade is performed on the switch.

Recommended Action Reformat the flash memory device. Otherwise, no action is required.

C6K_PLATFORM-6

Error Message %C6K_PLATFORM-6-PACKET_BUFFER: This setting will cause a packet buffer error to [chars]

Explanation This warning message appears when the configuration contains the **error-detection packet-buffer action** command. Upon detecting a packet buffer failure on an ASIC, the supervisor engine takes the action specified by the **error-detection packet-buffer action** command (and shown in [chars]). The choices include error-disabling the ports on a particular ASIC, error-disabling the module, or automatically power-cycling the module. To view the default and configured actions on all modules, enter the **show error-detection packet-buffer** command.

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

C6K_POWER Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router power (C6K_POWER) messages. For more power messages, see the C6KPWR Messages section of this chapter.

C6KPWR

Error Message %C6KPWR-SP-2-PSFAIL: power supply [dec] output failed.

Explanation Power supply [dec] has failed.

Recommended Action Replace the power supply.

Error Message %C6KPWR-SP-4-PSOK: power supply [dec] turned on.

Explanation Power supply [dec] is turned on.

Recommended Action No action is required.

Error Message %C6KPWR-SP-4-PSREDUNDANTBOTHSUPPLY: in power-redundancy mode, system is operating on both power supplies.

Explanation When the system is in power redundancy mode, it operates on both power supplies.

Recommended Action No action is required.

C6K POWER-3

Error Message %C6K_POWER-3-NOTIFY_FAIL: Failed to notify RP of change in operator
status for [chars] number [dec] from '[chars]' to '[chars]'

Explanation The SP is unable to acquire the resources needed to notify the RP of the event specified in the error message.

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.

C6K POWER-4

Error Message %C6K_POWER-4-PD_NOLINKUP: The device connected to [dec]/[dec] is powered up but its link is not up in [dec] seconds. Therefore, power is withdrawn from the port.

Explanation The system withdrew the power that was allocated to the specified port because the port link was not operational in the specified number of seconds.

Recommended Action Try to connect the device to a different port or connect a different device to the port specified in the message.

C6K_POWER-6

Error Message %C6K_POWER-6-NOLPP: Because of lack of system power, devices that require the system to power them on may not come up within one second.

Explanation The local power pools have been deallocated. The module firmware cannot power up the device until it has received authorization for power allocation from the software running on the supervisor engine.

Recommended Action No action is required.

C6K_PROCMIB Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router Process MIB SP CPU (C6K_PROCMIB) messages.

C6K PROCMIB-3

Error Message %C6K_PROCMIB-3-IPC_PORTOPEN_FAIL: Failed to open port while connecting
to process statistics: error code = [chars]

Explanation An error occurred during an attempt to open a port for an IPC message.

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 %C6K_PROCMIB-3-IPC_TRANSMIT_FAIL: Failed to send process statistics
update : error code = [chars]

Explanation An error occurred during an attempt to send an IPC message.

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 %C6K_PROCMIB-3-MALLOC_FAILURE_IPC: Failed to allocate IPC message to contact process

Explanation A memory allocation failure occurred during the processing of an IPC message.

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.

C6KPWR Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router power (C6KPWR) messages.

C6KPWR-2

 $\textbf{Error Message} \ \, \text{\%C6KPWR-}2\text{-}INSUFFICIENTPOWER:} \ \, \text{Powering down all line} \ \, \text{as there is not enough power to operate all critical cards}$

Explanation The switch was operating with two power supplies in combined mode. One of power supplies has failed. Available power is insufficient to support all critical service modules. Critical service modules include modules that support VPNs or IP security. If these critical modules fail, security issues could arise; therefore, all modules have been powered down.

Recommended Action Replace the failed power supply.

Error Message %C6KPWR-2-MAJORPOWERALARM: In the absence of power supply 1, system power usage exceeds allowed range of [chars]W. Power total will be reduced in [dec] seconds

Explanation This message indicates a major power alarm condition. The power supply in slot 2 has exceeded its allowed range. The range is specified in the error message.

Recommended Action Enter the **show power** command to determine the actual power usage. Insert a power supply in power supply slot 1, or power down some modules to reduce system power usage. If downtime can be scheduled, move the power supply from slot 2 to slot 1. If this condition persists, the environmental monitor will shut down some modules to prevent a complete power failure.

 $\textbf{Error Message} \ \, \& C6 \texttt{KPWR-2-MAJORPOWERALARMRECOVER:} \ \, \textbf{System power usage has returned to} \\ \, \text{allowed operating range}$

Explanation This message indicates that system power usage has returned to the permitted operating range. The scheduled shutdown is cancelled, and the system will continue operating.

Recommended Action No action is required.

Error Message %C6KPWR-2-MINORPOWERALARM: In the absence of power supply 1, system power usage exceeds the recommended range of [chars]W

Explanation This message indicates a minor power alarm condition. The power supply in slot 2 has exceeded its allowed range. The range is specified in the error message. Selected modules will be shut down to prevent a complete power failure.

Recommended Action Enter the **show power** command to determine the actual power usage. Insert a power supply in power supply slot 1, or power down some modules to reduce system power usage. If downtime can be scheduled, move the power supply from slot 2 to slot 1.

C6KPWR-3

Error Message %C6KPWR-3-PSUNKNOWN: Unknown power supply in slot [dec] (idprom read failed).

Explanation The IDPROM of the power supply in the specified slot cannot be read.

Recommended Action Remove and reinsert the power supply. Fasten the screw and attempt to operate the power supply again. 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.

C6KPWR-4

Error Message %C6KPWR-4-INPUTCHANGE: Power supply [dec] input has changed. Power capacity adjusted to [chars]W

Explanation The power supply in the specified slot has detected a change in its input supply. The power capacity for the power supply has been adjusted accordingly.

Recommended Action Enter the **show power** command to see the current power status. Otherwise, no action is required.

Error Message %C6KPWR-4-MAJORPOWERALARMRECOVER: System power usage has returned to allowed operating range

Explanation This message indicates that system power usage has returned to the allowed operating range, so the scheduled shutdown was cancelled. The system will continue operating.

Recommended Action No action is required.

Error Message C6KPWR-4-MINORPOWERALARM: In the absence of power supply 1, system power usage exceeds the recommended range of [chars]W

Explanation This message indicates a minor power alarm condition. The power supply in slot 2 has exceeded its allowed range. The range is specified in the error message. Selected modules will be shut down to prevent a complete power failure.

Recommended Action Enter the **show power** command to determine the actual power usage. Insert a power supply in power supply slot 1, or power down some modules to reduce system power usage. If downtime can be scheduled, move the power supply from slot 2 to slot 1.

 $\textbf{Error Message} \ \, \& \texttt{C6KPWR-4-MINORPOWERALARMRECOVER:} \ \, \textbf{System power usage has returned to normal operating range}$

Explanation This message indicates that system power usage has returned to the normal operating range.

Recommended Action No action is required.

Error Message %C6KPWR-4-PS1FAILALERT: Do not remove power supply 1 without inserting another supply. In the absence of power supply 1, system power capacity will be reduced to [chars]W after a [dec] second grace period.

Explanation The system is experiencing heavy traffic. In this condition, the single power supply should be used in slot 1 rather than in slot 2.

Recommended Action Insert a power supply in slot 1, or move the power supply from slot 2 to slot 1.

Error Message %C6KPWR-4-PS2ONLY: Single power supply system should utilize power supply slot 1

Explanation The system is experiencing heavy traffic. In this condition, the single power supply should be used in slot 1 rather than in slot 2.

Recommended Action Move the power supply from slot 2 to slot 1.

Error Message %C6KPWR-4-PSINPUTDROP: Power supply [dec] input has dropped

Explanation The power supply in the specified slot has detected a drop in its input supply. The power capacity for the power supply has been adjusted accordingly.

Recommended Action Enter the **show power** command to see the current power status. Otherwise, no action is required.

Error Message %C6KPWR-4-PSMISMATCH: power supplies rated outputs do not match.

Explanation The two power supplies in the system have different output ratings.

Recommended Action For more efficient load sharing, use power supplies with the same output rating.

Error Message %C6KPWR-4-PSNOREDUNDANCY: Power supplies are not in full redundancy, power usage exceeds lower capacity supply

Explanation The two power supplies in the system have different output ratings. Current power usage exceeds the capacity of the lower-rated power supply. If the higher-rated power supply fails, the lower-rated power supply will not be able to support all modules that are currently powered up.

Recommended Action To ensure that the system power supplies are optimally redundant, use power supplies with identical output ratings or reduce system power consumption.

C6K_VSD_R0IR Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router messages.

C6K_VSD_R0IR-2

Error Message %c6k_VSD_ROIR-2-ROIR_INVALID_MODULE_TYPE: Remote switch module type is
invalid : slot [dec]

Explanation An internal software error 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 %c6k_VSD_ROIR-2-ROIR_INVALID_SYNC_EVENT: ROIR: [chars] receiver
process has received an invalid sync event OrIt can't sync the event to its standby
counter part

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-2-ROIR_NULL_MODULE_DATA_STRUCTURE: [chars]
bay(per-module) data structure ptr is NULL

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-2-ROIR_NULL_MODULE_DATA_STRUCTURE_TYPE: ROIR: [chars]
bay(per-module) data structure ptr is not NULLmodule data structure TYPE is NULL

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-2-UNKNOWN_OR_NULL_EVENT_RECEIVED: [chars]: Received
[chars] event

Explanation The system was unable to create a watched boolean for the ROIR event receiver process, which is used to recieve ROIR messages. This message could indicate a catastrophic software error.

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 %c6k_VSD_ROIR-2-VECTOR_IS_NULL: [chars] [chars]: Vector is
NULLResource or config callbacks couldn't be called when module hadProblems coming
online

Explanation An internal software error occurred.

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.

C6K_VSD_R0IR-3

Error Message %c6k_VSD_ROIR-3-ROIR_HUGE_BAY_SIZE: ROIR: [chars], failed to send bulk
sync for bay type [dec] due to its huge unit size [dec]

Explanation Remote OIR failed to bulk sync for one bay typebecause of its huge unit size.

Recommended Action This is a system error. Please contact Cisco tech-support.

Error Message %CDP-3-CHUNK: Chunk_malloc Failure

Explanation chunk malloc failure

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 %c6k_VSD_ROIR-3-ROIR_ISSU_SESS_INCOMPLETE: ROIR ISSU SESSION INVALID:
issu nego session not completed

Explanation The remote OIR did not complete the ISSU session negotiation. The system is trying to transform a message sent or received. This is a system error.

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 %c6k_VSD_ROIR-3-ROIR_LATE_EVENT_RESPONSE: ROIR: sender dropped late
response for slot [dec] type [dec] seq [dec] result [dec]

Explanation The remote OIR sender received a late processing response. The request timed out while waiting for a response. This is a system error.

Error Message %c6k_VSD_ROIR-3-ROIR_TIMER_WB_FAIL: ROIR Timer Process: Unable to create watched boolean

Explanation The system was unable to create a watched boolean for a timer process of ROIR. This message could indicate an internal software error.

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.

C6K VSD R0IR-6

Error Message %c6k_VSD_ROIR-6-BAD_IDPROM: ROIR:idprom error [chars] for index
[chars], switch_id [dec]physical_slot [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-BAY_IS_NULL: [chars], bay is NULL bay_type:[dec],
index:[dec]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-BULK_SYNC_MSG_SEND_FAILED: [chars] Failure sending
Bulk sync msg

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-ERR_GET_SWID:
[chars] Error ([dec]) in getting swid and phy_idx for vidx [dec]
```

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-EVENT_SEND_FAILED: Remote Oir::Sender: Events for for
Module Type [dec] Slot [dec] could not be sent to core because [chars]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-FAILED_TO_GET_PAK: ROIR:Notify Failed to get pak for
[chars] notification

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-FAILED_TO_SEND_NOTIFICATION: ROIR:Notify Failed to send [chars] notification

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-GETBUFFER_FAILED: ROIR: [chars] getbuffer failed. Mod
type = [dec], slot# = [dec]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-INVALID_SM_INSTANCE: Unable to get remote module State
Machine instance forswitch [dec] slot [dec] module_type [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-MALLOC_FAILURE: Switch Id: [dec] : malloc for [chars]
failed

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-NACKED_EVENT: [chars] Remote Oir::CORE NACK'ed event
status [dec]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-POST_PROCESSING_NOTIFY_FAILED: ROIR:sender [chars]
Post processing notifications to local applns failed

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-PROCESSING_FAILED: ROIR::Sender:: For Bay type [dec]
slot [dec] - Core unsuccessful in processing event type [dec] status [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-RECEIVED_NULL_ARG: [chars] received NULL argument

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-REGISTRY_ADDITION_FAILED: Registry addition failed
for [chars]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-REMOTE_MODULE_SANITY_CHK_FAILED: sanity check failed
for remote module virtual slot number [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-REMOTE_SWITCH_NOT_ONLINE:
[chars] remote switch not online [dec]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-RF_CLIENT_NOTIFY_TIMER: [chars](): Could not extend
notification timer

Explanation An internal software error occurred.

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.

 $\textbf{Error Message} \ \, \$c6k_VSD_ROIR-6-RF_ROIR_MESG_SEND_FAILED: \ \, [chars] \ \, (): \ \, Error \ \, sending \\ remote oir rf \ \, message$

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-RF_SEND_PEER_MSG_FAILED: [chars] - rf_send_peer_msg
failed

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-ROIR_BAD_VSLOT_NUM: [chars] virtual slot [dec] number
is invalid for virtual switch module

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-ROIR_EVENT_SEND_NULL_IDPROM: ROIR Event Send failed :
fru type [dec] bay type [dec] unit [dec] name [chars] description [chars] - reason:
[chars]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-ROIR_RECV_EVENT_ERROR: ROIR:incoming event error
received [chars] event

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-ROIR_UNABLE_TO_GET_REMOTE_MODULE_DATA_STRUCT: Unable
to get remote switch module data structure forswitch [dec] slot [dec] module type
[dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-SLOT_IS_ZERO: [chars] slot is ZERO

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-TIMER_EVENT_RECV: ROIR::Receiver::Timer Process got TIMER event

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-TIMER_EXPIRED: ROIR::Receiver::For Switch:[dec] Type
[dec] Phy Slot [dec] - [chars] timer expired

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-UNABLE_TO_COMMUNICATE_THREAD: Remote Oir::Sender::
Cannot communicate thread sub block to type [dec] slot [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-2-UNABLE_TO_CREATE_PROCESS: Could not create [chars]
Process

Explanation The system was unable to create a watched boolean for the timer process of ROIR. This could indicate an internal software error.

Error Message %c6k_VSD_ROIR-6-UNABLE_TO_CREATE_ROIR_PROCESS: ROIR:Core Process
creation failedswitch [dec] slot [dec] module_type [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-UNABLE_TO_CREATE_SWOVER_PROCESS: ROIR:HA error Could
not create Remote Swover process!!pid: [dec] for slot [dec]

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-UNABLE_TO_CREATE_THREAD_INSTANCE: Remote
Oir::Sender::Unable to create a [chars] for process type [dec] slot [dec]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-UNABLE_TO_CREATE_WB: ROIR: [chars] Unable to create
[chars] watched boolean

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-UNABLE_TO_GET_THREAD_SUBLOCK: Unable to get thread sub-block. Unable to continue. Remote switch sender thread aborting.

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-UNABLE_TO_INIT: ROIR: Core: Unable to init [chars]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-UNABLE_TO_RETRIEVE_MODULE_DATA_STRUCTURE: Unable to get module data structure for remote module

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-WORKER_THREAD_IDENT_FAILED: ROIR::Recvr [chars] Could not get identify worker thread id

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-WORKER_THREAD_INVALID_THREAD: ROIR::Recvr - Bay
sw[dec] type[dec] slot[dec] - [chars]

Explanation An internal software error occurred.

Error Message %c6k_VSD_ROIR-6-WORKER_THREAD_PACK_DROPPED: ROIR::Rcvr Worker Thread
[dec] dropped packet because data section NULL!

Explanation An internal software error occurred.

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 %c6k_VSD_ROIR-6-WORKER_THREAD_SET_OR_CREATE_WORKER_THREAD: ROIR::Rcvr
Worker Unable to [chars] thread [chars]

Explanation An internal software error occurred.

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.

C6K_WAN_C2W Messages

This section contains Catalyst 6500 series switch and Cisco 7600 series router WAN C2Wire (C6K_WAN_C2W) messages.

C6K WAN C2W-4

Error Message $C6K_WAN_C2W-4-READERROR$: C2Wire read failed reg [hex] on device [chars]

Explanation The SMbus driver failed to read from the specified C2W device.

Recommended Action No action is required if this warning message appears occasionally. If the message appears often in a short period of time, 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 %C6K_WAN_C2W-4-WRITEERROR: C2Wire write failed reg [hex] on device
[chars]

Explanation The SMbus driver failed to write to the specified C2W device.

Recommended Action No action is required if this warning message appears occasionally. If the message appears often in a short period of time, 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.

C7600_ES Messages

This section contains Ethernet Services linecard messages.

C7600 ES-2

Error Message %C7600_ES-2-CRITICAL_ERR: C7600-ES Line Card Failure: [chars]

Explanation A critical error has occured on the C7600-ES Line Card. The message that was previously received on the console or in the system log and cash dump should provide more information of the problem.

Error Message %C7600_ES-2-IOFPGA_IO_BUS_ERROR: C7600-ES Line Card IOFPGA IO [chars]
Bus Error: Error = [hex] Error Address = [hex], Error Data = [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. SELENE/LINKFPGA/PEFPGA FPGA failed to respond to a read or write access. This message indicates a hardware failure or a malfunction. The linecard will reload to attempt to fix the problem.

Error Message %C7600_ES-2-NMI_RESET: C7600-ES Line Card NMI reset by SUP

Explanation The Supervisor detected C7600-ES line card as unresponsive and attempted to recover line card by issuing an Non Maskable Interrupt.

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 that 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 %C7600_ES-2-NP_FAILURE: C7600-ES Line Card NP [dec] Failure: [chars]

Explanation An unexpected fatal condition has occured on the C7600-ES Line Card. The message that was previously received on the console or in the system log and cash dump should provide more information of the problem. This message indicates a NP failure or malfunction. The LC will reset to attempt to fix the problem.

Recommended Action If the problem persists, then collect crash dump and File a DDTS. 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 that 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 %C7600_ES-2-NP_WORKAROUND: C7600-ES Line Card NP[[dec]] Workaround
[chars] after [[dec]] retries

Explanation The NP workaround routine on the C7600-ES Line Card Passed/Fail.If the workaround failed, it will result in packets not being forwarded.

Recommended Action Attempt to reload the line card. If the problem persists, then 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 that 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 %C7600_ES-2-PEX_INIT_FAILED: C7600-ES Line Card PCI Express
Initialization failed at [chars][[dec]]

Explanation The C7600-ES Line Card received an error during initialization when attempting to initialize the PCI Express interface with the forwarding hardware. A hardware problem has prevented the target line card from fully initializing. This will result in packets not being forwarded.

Recommended Action Attempt to reload the line card. If the problem persists, then 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES-2-UNRECOVERABLE_FAILURE: C7600-ES Line Card Unrecoverable
Failure for Device: [chars]

Explanation An unexpected fatal condition has occured on the C7600-ES Line Card. The message that was previously received on the console or in the system log should provide more information on the specific nature of the problem. This message indicates a hardware failure or malfunction. The system will reload to attempt to fix the problem.

Recommended Action If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

C7600_ES-3

Error Message %C7600_ES_LINK-3-FPGA_NOT_READY: [chars] reports Link FPGA is not ready (ConfigPLD status [hex])!

Explanation The Link FPGA configuration is not done properly. This could be caused by an incompleted Link FPGA update in a previous FPD upgrade process.

Recommended Action Restart the FPD upgrade. If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES-3-KPFPGA_FIFO_INT: C7600-ES Line Card Packet Engine Supertycho KPFPGA Interrupt

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. Some data traffic between EARL and the firmware ASIC Metropolis is flow controlled.

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 that 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 %C7600_ES-3-KPFPGA_PARITY_ERR_INT: C7600-ES Line Card Packet Engine Supertycho KPFPGA Parity Error

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. A parity error occured during KPFPGA register access.

Error Message %C7600_ES-3-PE_INT_BUS_ACL_PARITY: C7600-ES Line Card Packet Engine
ACL Counter FPGA Parity ErrorIO Bus Error Address = [hex], IO Bus Error Data =
[hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. A parity error is detected when reading from the ACL Counter FPGA.

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 that 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 %C7600_ES-3-PE_INT_BUS_INV_ADDR_ERR: C7600-ES Line Card Packet Engine
Invalid Address Access on Earl CardIO Bus Error Address = [hex], IO Bus Error Data
= [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. An IO Bus transfer from the Baseboard goes to an undefined address on the EARL card.

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 that 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 %C7600_ES-3-PE_INT_BUS_PARITY: C7600-ES Line Card Packet Engine Bus
Parity ErrorIO Bus Error Address = [hex], IO Bus Error Data = [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. A parity error is detected on the IO Bus from the Baseboard.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES-3-PE_INT_BUS_PROTOCOL_ERR: C7600-ES Line Card Packet Engine
IO Bus Protocol ErrorIO Bus Error Address = [hex], IO Bus Error Data = [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. A transfer on the IO Bus between the Baseboard and the Earl FPGA did not follow the bus protocol.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES-3-PE_INT_BUS_ST_PARITY: C7600-ES Line Card Packet Engine
Supertycho Parity ErrorIO Bus Error Address = [hex], IO Bus Error Data = [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. A parity error is detected when reading from the Supertycho register.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES-3-PE_INT_BUS_TIMEOUT: C7600-ES Line Card Packet Engine Bus
Timeout: IO Bus Error Address = [hex], IO Bus Error Data = [hex]

Explanation An unexpected hardware error condition has occured on the C7600-ES Line Card. Supertycho or the ACL Counter FPGA failed to respond to a read or write access within 1 usec.

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. Issue 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/launch.do, or contact your Cisco technical support.

C7600_ES-5

Error Message %C7600_ES-5-BRIDGE_ASIC_INTR: The Bridge-ASIC-[chars][[dec]]
interrupt asserted. Addr[[hex]]=[hex]

Explanation The Bridge-ASIC on the linecard has experienced an interrupt. The recovery action is already taken and no further action is needed.

Recommended Action No action is required.

Error Message %C7600_ES-5-FPGA_IMAGE_CORRUPTED: [chars] failed to program at power up, presumed corrupted.

Explanation One of the FPGAs failed to program at boot. The board will not and cannot forward traffic in this state. Failure to program presumably caused by corrupted FPGA image. Likely cause of corrupted FPGA image: write failure during FPGA FPD upgrade. Likely cause of FPGA FPD upgrade fauilure: unexpected LC reset during FPD upgrade.

Recommended Action If failure occured during a FPGA FPD upgrade, ensure that LC was not or will not be inadvertently reset during upgrade. Some FPGA FPD upgrades might require a longer time to complete, and an inadvertent reset during the programming interval will corrupt the FPGA image. If failure did not occur during an FPD upgrade, the FPGA recovery logic will nevertheless necessitate a FPGA FPD upgrade. As a reminder, this requires an FPD bundle file on the supervisor to complete.

Error Message %C7600_ES-5-FPGA_RECOVERY: [chars] recovery invoked.

Explanation FPD is being invoked to recover corrupted FPGA FPD image. Allow a few minutes for programming to complete. FPD will report results from programming FPGA. If FPD reports success, recovery has completed successfully.

Recommended Action Verify that FPD successfully recovered image.

Error Message %C7600_ES-5-MET_TIMEOUT: Rewrite Engine Multicast Expansion Table
access timeout recovery action invoked, Address = [hex]

Explanation The linecard experienced an IO-BUS timeout while accessing the Multicast Expansion Table. The recovery action is already taken and no further action is needed.

Recommended Action No action is required

C7600 ES-LINK-3

Error Message %C7600_ES_LINK-3-FPGA_NOT_READY: [chars] reports Link FPGA is not ready (ConfigPLD status [hex])!

Explanation The Link FPGA configuration is not done properly. This could be caused by an incompleted Link FPGA update in a previous FPD upgrade process.

Recommended Action Restart the FPD upgrade. If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %C7600_ES_LINK-3-INIT_FAILED: Failed to initialize Link Daughtercard.

Explanation Link Daughter card initilization process failed caused by a Link FPGA not ready, memory allocation failure, or a fatal OS kernel error.

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 that 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 %C7600_ES_LINK-3-INTR_THROTTLE: Interface [chars] PHY interrupt is throttled. Total throttle count [dec].

Explanation A 10GE PHY interrupt burst has occurred on one of the interfaces on the link daughter card. The error message indicates that a throttling mechanism has been applied to this port to avoid any operational damage that could be provoked by this event. Possible causes of this problem include a bad transceiver, frequently flapping optical signals, or mismatched path signals (that is, receiving a 10GBASE-W signal on 10GE LAN interface).

Recommended Action Check the interface configuration and received signal characteristics. Verify the XFP transceiver and receive signal path to determine the exact root cause. If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical suppor

Error Message %C7600_ES_LINK-3-SEND_MSG: Link DC failed to notify driver process about a line state change in the interface port [dec]

Explanation A line state change has occurred on one of the interface ports on the link daughter card. The error message indicates the port number. The state change notification could not be sent to the link daughter card processor. The cause for this problem could be memory exhaustion.

Recommended Action Enter the **show memory summary** command to attempt to determine the cause of the error. If it is insufficient system memory, Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

C7600_ES-LINK-4

Error Message %C7600_ES_LINK-4-SCPBUF_ERR: Failed to get packet from SCP packet pool for [chars]

Explanation The Line Card failed to allocate a packet from the SCP packet pool for the transceiver control message specified in the error message.

Recommended Action No action is required.

C7600 ES-LINK-5

Error Message %C7600_ES_LINK-5-ALS_RESTARTREJ: ALS manual restart command on the Interface [chars] is rejected.

Explanation The most recent Automatic Laser Shutdown manual restart command (**als restart mode manual**) on the given interface was issued when the ALS statemachine was not in the IDLE state and could not be accepted.

Recommended Action No action is required.

.C7600_SIP200 Messages

This section contains SPA Interface Processor 200 (C7600_SIP200) messages.

C7600_SIP200-3

Error Message %C7600_SIP200-3-BADIFCTRL: Corrupted sip-200 information for interface
[chars] [[hex]]

Explanation The interface SIP 200 information is not valid. This message indicates an internal software error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the show memory command on the line card. 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 %C7600_SIP200-3-SONET_CLOCK_FAILED: SPA Sonet clock has failed (status = [hex])

Explanation The SPA SONET clock has failed. SPAs that rely on the SPA SONET clock for proper operation, such as PoS and ATM, will be affected.

Recommended Action If the SPA SONET clock does not recover, perform an OIR.

Error Message %C7600_SIP200-3-SONET_CLOCK_RECOVERED: SPA Sonet clock has recovered
(status = [hex])

Explanation The SPA SONET clock has recovered.

Recommended Action No action is required.

C7600 SIP200-4

Error Message %C7600_SIP200-4-MEM_MODULE_MISMATCH: Memory modules are not identical

Explanation The memory modules do not have identical parameters. This condition might impact performance.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Enter the **show memory** command on the line card. 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.

C7600_SIP200_MP Messages

This section contains SIP 200 multiprocessing (C7600_SIP200_MP) messages.

C7600 SIP200 MP-1

Error Message %C7600_SIP200_MP-1-UNSAFE: Multiprocessor error on [chars]

Explanation The line card CPU contains two CPU cores, one of which is the master CPU. The CPU specified in the error message attempted to perform an operation that is illegal for multiprocessor operation between the two CPU cores.

C7600_SIP200_MP-3

Error Message %C7600_SIP200_MP-3-INIT_FAILURE: Second CPU initialization failed

Explanation The line card CPU unit has two CPU cores in it. The second CPU core is not initialized successfully, so the line card is operating with one CPU core only. You may also see a SYS-2-MALLOCFAIL warning message.

Recommended Action If this message appears when a line card boots up, reload the line card by entering the **hw-module module** *slot* **reset** command. Also, check the amount of memory on the line card by entering the **show controller cwan** command.

C7600_SIP200_MP-4

Error Message %C7600_SIP200_MP-4-PAUSE: Non-master CPU is suspended for too long,
from [hex]([int]) to [hex] for [int] CPU cycles. [chars]

Explanation The line card CPU contains two CPU cores, one of which is the master CPU. The master CPU caused the second nonmaster CPU to be suspended for too long a time. This condition could cause the nonmaster CPU to drop packets. This warning indicates a transient software problem, and the line card should continue to operate normally.

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 %C7600_SIP200_MP-4-TIMEOUT: Master CPU request timed out [chars]

Explanation The line card CPU contains two CPU cores, one of which is the master CPU. The nonmaster CPU is not responding in time to the request from the master CPU. This warning indicates a transient software problem. The line card should continue to operate normally.

C7600_SIP200_SPIRX Messages

This section contains SIP 200 SPI4.2 bus ingress interface (C7600_SIP200_SPIRX) messages.

C7600_SIP200_SPIRX-3

Error Message %C7600_SIP200_SPIRX-3-INITFAIL: Failed to configure the ingress SPI4.2
device. Error = [hex]

Explanation The system cannot program or configure the ingress SPI4.2 device on the line card. This condition indicates an internal hardware error.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPIRX-3-SPA_INTERRUPT: SPA [int] - [chars], SPA Int
status = [hex]

Explanation A SPA interrupt from the ingress SPI4.2 device has occurred.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPIRX-3-SPI4_LINKERROR: SPA Bay [int], [int] SPI4 Link
Failures

Explanation Link errors from the ingress SPI4.2 device have occurred.

Recommended Action If this problem 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 output of the **show tech-support** command for the line card and the **show platform hardware spi4** spa-id **efc channel** [channel-id] command for the SPA.

Explanation An SRAM address and data dump has occurred.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPIRX-3-SRAM_INTERRUPT: [chars], Sram Int status = [hex]

Explanation An SRAM interrupt has occurred from the ingress SPI4.2 device.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPIRX-3-STATUS_INTERRUPT: [chars], Global Int status =
[hex]

Explanation A status interrupt has occurred from the ingress SPI4.2 device.

Recommended Action If this problem 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 output of the **show tech-support** command for the line card and the **show platform hardware spi4** *spa-id* **efc channel** [*channel-id*] command for the SPA.

C7600_SIP200_SPITX Messages

This section contains SIP 200 SPI4.2 bus egress interface (C7600_SIP200_SPIRX) messages.

C7600_SIP200_SPITX-3

Error Message %C7600_SIP200_SPITX-3-BADDESC: descriptor [hex], tag [hex], global
channel [int]

Explanation The egress SPI4.2 device on the line card returns a descriptor entry that is corrupted.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-BADPAK: corrupted packet to [chars]

Explanation The egress SPI4.2 device on the line card is handling a packet that is corrupted. This condition indicates that an internal software error has occurred. The corrupted packet has been dropped.

Recommended Action If this problem 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 output of the https://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/serviceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/serviceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/serviceRequestTool/create, or contact your Cisco technical support representative and provide the https://www.cisco.com/serviceRequestTool/creat

Error Message %C7600_SIP200_SPITX-3-CHANNEL_ENABLE_FAIL: SPI4 Channel [int] for Bay
[int], [chars] Failed

Explanation The specified SPI4 channel could not be enabled or disabled.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

```
Error Message %C7600_SIP200_SPITX-3-DESCR_ERR_SPA0: SPAstatus=[hex],
syndrome=[hex], RdRspOvf=[int], RdRspTo=[int], OvfVal=[int], OvfCh=[int],
OvfDescHi=[hex], OvfDescLo=[hex], DisChk=[int], SeqErrVal=[int], SeqErrCh=[int]
```

Explanation The egress SPI4.2 device on the line card detected a sequence or FIFO overflow error while processing a TX descriptor. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

```
Error Message %C7600_SIP200_SPITX-3-DESCR_ERR_SPA1: SPAstatus=[hex],
syndrome=[hex], RdRspOvf=[int], RdRspTo=[int], OvfVal=[int], OvfCh=[int],
OvfDescHi=[hex], OvfDescLo=[hex], DisChk=[int], SeqErrVal=[int], SeqErrCh=[int]
```

Explanation The egress SPI4.2 device on the line card detected a sequence or FIFO overflow error while processing a TX descriptor. This condition could cause packets to drop.

```
Error Message %C7600_SIP200_SPITX-3-DESCR_ERR_SPA2: SPAstatus=[hex],
syndrome=[hex], RdRspOvf=[int], RdRspTo=[int], OvfVal=[int], OvfCh=[int],
OvfDescHi=[hex], OvfDescLo=[hex], DisChk=[int], SeqErrVal=[int], SeqErrCh=[int]
```

Explanation The egress SPI4.2 device on the line card detected a sequence or FIFO overflow error while processing a TX descriptor. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

```
Error Message %C7600_SIP200_SPITX-3-DESCR_ERR_SPA3: SPAstatus=[hex],
syndrome=[hex], RdRspOvf=[int], RdRspTo=[int], OvfVal=[int], OvfCh=[int],
OvfDescHi=[hex], OvfDescLo=[hex], DisChk=[int], SeqErrVal=[int], SeqErrCh=[int]
```

Explanation The egress SPI4.2 device on the line card detected a sequence or FIFO overflow error while processing a TX descriptor. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

```
Error Message %C7600_SIP200_SPITX-3-DMA_SQERR: Syndrome=[hex], SPA=[int], Ch=[int],
RdSz=[int], RdOff=[int][chars]
```

Explanation The egress SPI4.2 device on the line card detected a sequence error while processing a DMA operation. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-EFC_ERR_SPA0: SPAstatus=[hex][chars]

Explanation The egress data path device on the line card detected an error condition with the extended flow control (EFC) bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFC_ERR_SPA1: SPAstatus=[hex][chars]

Explanation The egress data path device on the line card detected an error condition with the extended flow control (EFC) bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFC_ERR_SPA2: SPAstatus=[hex][chars]

Explanation The egress data path device on the line card detected an error condition with the extended flow control (EFC) bus interface. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-EFC_ERR_SPA3: SPAstatus=[hex][chars]

Explanation The egress data path device on the line card detected an error condition with the extended flow control (EFC) bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFCEVNT_ERR: [chars]

Explanation The egress data path device on the line card detected an error while processing internal extended flow-control events. This condition could cause a reduced packet rate.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFC_QUEUE_STUCK: [chars]

Explanation The egress data path device on the line card detected an error condition with the Extended Flow Control Bus interface. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-EFCSTAT_FAIL_SPA0: [chars]

Explanation The egress SPI4.2 device on the line card detected an EFC status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFCSTAT_FAIL_SPA1: [chars]

Explanation The egress SPI4.2 device on the line card detected an EFC status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-EFCSTAT_FAIL_SPA2: [chars]

Explanation The egress SPI4.2 device on the line card detected an EFC status clock or synchronization failure. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-EFCSTAT_FAIL_SPA3: [chars]

Explanation The egress SPI4.2 device on the line card detected an EFC status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-FCSTAT_FAIL_SPA0: [chars]

Explanation The egress SPI4.2 device on the line card detected a SPI4.2 status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-FCSTAT_FAIL_SPA1: [chars]

Explanation The egress SPI4.2 device on the line card detected a SPI4.2 status clock or synchronization failure. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-FCSTAT_FAIL_SPA2: [chars]

Explanation The egress SPI4.2 device on the line card detected a SPI4.2 status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-FCSTAT_FAIL_SPA3: [chars]

Explanation The egress SPI4.2 device on the line card detected a SPI4.2 status clock or synchronization failure. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-INITFAIL: Failed to configure the egress SPI4.2
device. Error = [hex]

Explanation The egress SPI4.2 device on the line card could not be programmed or configured. This indicates an internal hardware error.

Error Message %C7600_SIP200_SPITX-3-INT_PERR_SPA0: IntMemPerr=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an internal memory parity error. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-INT_PERR_SPA1: IntMemPerr=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an internal memory parity error. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-INT_PERR_SPA2: IntMemPerr=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an internal memory parity error. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-INT_PERR_SPA3: IntMemPerr=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an internal memory parity error. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-MISMATCH: Descriptor ring mismatch: expects
[int] got [int]

Explanation The egress SPI4.2 device on the line card returned a descriptor entry that did not match what the line card CPU expected. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the http://tools.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/ServiceRequestTool/create, or contact your Cisco technical support representative and provide the representative with the output of the https://www.cisco.com/serviceRequestTool/create, or contact your Cisco technical support representative and provide the https://www.cisco.com/serviceRequestTool/create</

Error Message %C7600_SIP200_SPITX-3-OVERRUN_DROP: SPI4 overrun drops packet for SPA
[int], queue [int], count [int]

Explanation While the egress SPI4.2 device on the line card sends an packet on the extended flow controlled channel, it overruns the SPI4 channel but cannot queue it to the internal hold queue. This indicates an internal software error.

Error Message %C7600_SIP200_SPITX-3-SPI4_ERR_SPA0: SPAstatus=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an error condition with the SPI4.2 bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-SPI4_ERR_SPA1: SPAstatus=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an error condition with the SPI4.2 bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-SPI4_ERR_SPA2: SPAstatus=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an error condition with the SPI4.2 bus interface. This condition could cause packets to drop.

Error Message %C7600_SIP200_SPITX-3-SPI4_ERR_SPA3: SPAstatus=[hex][chars]

Explanation The egress SPI4.2 device on the line card detected an error condition with the SPI4.2 bus interface. This condition could cause packets to drop.

Recommended Action If this problem 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 output of the show tech-support command for the line card and the show platform hardware spi4 spa-id efc channel [channel-id] command for the SPA.

Error Message %C7600_SIP200_SPITX-3-SRAM_ECCERR: EccSynd=[hex], Err1bit=[int],
ErrMbit=[int], SecHalf=[int], SPA=[int], Ch=[int], Addr=[hex], DataHi=[hex],
DataLo=[hex], DataEcc=[hex]

Explanation The egress SPI4.2 device on the line card detected a parity error in the egress packet memory. This condition could cause packets to drop.

C7600_SSC Messages

This section contains Services SPA Carrier Card (C7600_SSC) messages.

C7600_SSC-3

Error Message %C7600_SSC-3-BRDTYPE_INDEX_MISMATCH: [chars]: Board type ([dec]) and card index ([dec]) do not match

Explanation A mismatch was detected between the card index and board type. The C7600-SSC-400 board type is 4 and the card index is 191. The C7600-SSC-600 board type is 5 and the card index is 224.

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 %C7600_SSC-3-DCM_FAIL: [chars]: [chars] FPGA module DCM Lock Failure,
status:[hex]

Explanation One or more of the Digital Clock Managers (DCMs) for the data path FPGAs failed to lock. This indicates a hardware failure.

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 %C7600_SSC-3-DP_COUNTERS: [chars]: Failed to create DP counter process.

Explanation A process is initiated on bootup to monitor the counters of the data path FPGAs. There was an error creating this process.

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 %C7600_SSC-3-DP_ERROR: [chars]: Bus Error initializing [chars] FPGA, addr: [hex].

Explanation This FPGA could not be initialized due to a bus error. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

Recommended Action Enter the show hw-module slot fpd command. 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 %C7600_SSC-3-DP_PROGRAMMING: [chars]: [chars] FPGA failed to program.

Explanation This FPGA failed to program. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

Recommended Action Enter the show hw-module slot fpd command. 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 %C7600_SSC-3-DPRX_ERR: [chars]. [chars]

Explanation There was an error receiving data from the SPA, possibly due to data corruption.

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 %C7600_SSC-3-DPTX_ERR: [chars]: [chars].

Explanation There was an error sending data to the SPA, possibly due to data corruption.

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 %C7600_SSC-3-DPTX_ERR_MECC: [chars]: [chars]. ERR addr register: [hex].

Explanation There was an error sending data to the SPA, possibly due to data corruption.

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 %C7600_SSC-3-DPTX_ERR_SECC: [chars]: [chars]. Single bit error count:[hex], ECC ERR addr register:[hex].

Explanation A data corruption error that was automatically fixed was detected while sending data to the SPA.

Recommended Action No action is required if you see this message once. 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 %C7600_SSC-3-DPTX_QDR: [chars]: Error clearing QDR queue [dec].

Explanation One of the QDR queues did not flush completely.

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 %C7600_SSC-3-SINGLE_SPA_MODE: [chars]: Module will use only bay [dec].
Bay [dec] is shut.

Explanation The 7600-SSC is in single SPA mode.

Recommended Action No action is required.

Error Message %C7600_SSC-3-SSC_BAY_SHUT: [chars]: Bay [dec] is shutdown because [chars] is in single-spa-mode

Explanation The specified bay is shut down. In single SPA mode, only one bay is active.

Recommended Action Refer to the IPsec VPN SPA documentation for information about single SPA mode.

Error Message %C7600_SSC-3-SW_ERROR: [chars]: [chars]

Explanation This error is seen when there is a problem in internal software coding; it should not be seen under normal operation.

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 %C7600_SSC-3-UNKNOWN_BRDTYPE: [chars]: SSC board type [dec] is not supported

Explanation Board type does not belong to either C7600-SSC-600 or C7600-SSC-400.

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.

C7600_SSC-7

Error Message %C7600_SSC-7-DP_DISABLE: [chars]: [chars] FPGA is forced disabled.

Explanation This FPGA has been disabled. Forced disabling is a debugging feature.

Recommended Action No action is required.

C7600_SSC600 Messages

This section contains Services SPA Carrier Card (C7600_SSC600) messages.

C7600 SSC600-3

Error Message %C7600_SSC600-3-DCM_FAIL: [chars] FPGA module DCM Lock Failure,
status:[hex]

Explanation One or more of the Digital Clock Managers (DCM) for the data path FPGAs failed to lock. This condition indicates a hardware failure.

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 %C7600_SSC600-3-DP_COUNTERS: Failed to create DP counter process.

Explanation A process is initialized at bootup to monitor the counters of the data path FPGAs. There was an error in creating this process.

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 %C7600_SSC600-3-DP_ERROR: Bus Error initializing [chars] FPGA, addr:
[hex].

Explanation This FPGA could not be initialized because of a bus error. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

Recommended Action Enter the **show hw-module slot fpd** command to gather more information on the specific nature of the condition. 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 %C7600_SSC600-3-DP_PROGRAMMING: [chars] FPGA failed to program.

Explanation This FPGA failed to program. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

Recommended Action Enter the show hw-module slot fpd command to gather more information on the specific nature of the condition. 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 %C7600_SSC600-3-DPRX_ERR: [chars].

Explanation There was an error receiving data from the SPA, possibly due to data corruption.

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 %C7600_SSC600-3-DPTX_ERR: [chars].

Explanation There was an error sending data to the SPA, possibly due to data corruption.

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 %C7600_SSC600-3-DPTX_QDR: Error clearing QDR queue [dec].

Explanation One of the QDR queues did not clear completely.

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 %C7600_SSC600-3-SINGLE_SPA_MODE: Module will use only bay [dec]. Bay [dec] is shut.

Explanation The 7600-SSC-400 is in single SPA mode.

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

Error Message %C7600_SSC600-3-SSC_BAY_SHUT: Bay [dec] is shutdown because 7600-SSC-400 is in single-spa-mode

Explanation The specified bay is shut down. In single SPA mode, only one bay is active.

Recommended Action Refer to the IPsec VPN SPA documentation for information about single SPA mode.

Error Message %C7600_SSC600-3-SW_ERROR: NULL

Explanation This condition occurs when there is a problem in internal software coding; it should not occur under normal operation.

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.

C7600_SSC600-7

Error Message %C7600_SSC600-7-DP_DISABLE: [chars] FPGA is forced disabled.

Explanation This FPGA has been disabled. Forced disabling is a debugging feature.

Recommended Action No action is required.

CALL_HOME Messages

This section contains Call Home messages.

CALL_HOME-3

Error Message %CALL_HOME-3-CLI_CMD_RUN_FAILED: No VTY connection available to run CLI command for event notification message (ERR [dec])

Explanation Call Home was unable to open a VTY connection to run CLI commands and collect output for use in notification messages.

Recommended Action Increase the number of configured VTY lines or change the Alert Group subscriptions to make them more restrictive (to reduce the number of simultaneous event triggers).

Explanation The Call Home HTTP message failed to send to an HTTPS server.

Recommended Action Check whether you have configured a valid trustpoint certificate for secure HTTP messages.

Error Message %CALL_HOME-3-MESSAGE_SIZE_OVER_LIMIT: XML message size over limit, failed to send call-home message. configured message size limit ([dec]) is less than current message minimum length required ([dec]).

Explanation Unable to create the message because the message size exceeds the configured message size limit.

Recommended Action Increase the destination message size limit.

Error Message %CALL_HOME-3-REQUEST_MESSAGE_FAILED: call-home request message failed
to send (ERR [dec], [chars])

Explanation An attempt to send a call-home request message has failed.

Recommended Action Configure Call Home to send call-home request messages.

Error Message %CALL_HOME-6-REQUEST_MESSAGE_SUCCEEDED: call-home request message succeeded

Explanation A call-home request message was sent successfully.

Recommended Action No action is required.

Explanation Call Home was unable to send notification using any of the configured SMTP servers.

Recommended Action Verify the configuration of the Call Home SMTP servers and ports used to connect to the servers. Verify that the remote SMTP servers are reachable and that they are operating correctly.

CALL HOME-4

Error Message %CALL_HOME-4-MESSAGE_IS_TRUNCATED: message size over limit, call-home message is truncated. configured message size limit ([dec]) is less than current message total length required ([dec]).

Explanation The Call Home message is truncated because it exceeds the configured message size limit.

Recommended Action Increase the destination message size limit.

CALL_HOME-5

Error Message %CALL_HOME-5-HTTPS_NOT_SUPPORTED: This image version does not support HTTPS

Explanation The configured message destination is a secure HTTP (HTTPS) URL, but this image does not support secure HTTP.

Recommended Action Upgrade your system image to a crypto image, which supports secure HTTP.

CAMP Messages

This section contains Cooperative Asymmetric Multiprocessing (CAMP) messages.

CAMP-3

Error Message %CAMP-3-MP_INIT_FAILURE: Second CPU initialization failed

Explanation The module CPU unit has two CPU cores in it. The second CPU core did not initialize successfully, so the module is operating with only one CPU core.

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.

CAPI_EC Messages

This section contains card and EtherChannel limitation (CAPI_EC) messages.

CAPI_EC-4

Error Message %CAPI_EC-4-GROUP_RATE_LIMITED: Adding interfaces of the same port-group ([dec]-[dec]) on [chars] to an etherchannel will not increase the channel throughput!

Explanation Because ports on the specified slot use oversubscription, the total throughput of the port channel is limited by the port group.

Recommended Action If more throughput is required, either use ports from a line card that does not use oversubscription, or use ports from different line cards or port groupings on oversubscribed line cards. For example, if the line card has 48 ports in groups of 8, you can select ports 1, 9, 17, 25, 33, and 41 for the same port channel.

Error Message %CAPI_EC-4-RATE_LIMITED: Adding [chars] interfaces to an etherchannel will limit channel throughput to 1 Gbps!

Explanation Because ports on the indicated card type use oversubscription, throughput of the port channel is limited.

Recommended Action If more throughput is required, either use ports from a line card that does not use oversubscription, or use ports from different line cards or port-groupings on oversubscribed line cards. For example, if the line card has 48 ports in groups of eight, you can select ports 1, 9, 17, 25, 33, and 41 for the same port channel.

Error Message %CAPI_EC-4-SLOT_RATE_LIMITED: Adding interfaces on slot [dec] to an etherchannel will limit channel throughput to 1 Gbps!

Explanation Because ports on the indicated slot use oversubscription, the total throughput of the port channel is limited.

Recommended Action If more throughput is required, either use ports from a line card that does not use oversubscription, or use ports from different line cards or port-groupings on oversubscribed line cards. For example, if the line card has 48 ports in groups of eight, you can select ports 1, 9, 17, 25, 33, and 41 for the same port-channel.

CARDMGR Messages

This section contains SIP 400 Card Manager (data plane) (CARDMGR) messages.

CARDMGR-2

Error Message %CARDMGR-2-ESF_DEV_ERROR: An error has occurred on [chars]: [chars]

Explanation The ESF encountered an error during normal operation. Steps need to be taken to resolve the problem and allow traffic through the SIP 400 line card.

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 %CARDMGR-2-ESF_LOAD_FAIL: [chars] failed to load: [chars]

Explanation The ESF could not be loaded because one of the steps in the startup sequence failed. This ESF is now not operational, which stops the traffic through the SIP-400 line card.

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 %CARDMGR-2-SPABUS_ERROR: A [chars] FSM SPA bus error has occurred in subslot [dec]

Explanation An FSM SPA bus error occurred during normal operation.

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.

CARDMGR-4

Error Message %CARDMGR-4-ESF_DEV_RELOADED: The ESF microcode has automatically recovered from an internal inconsistency.

Explanation An ESF internal inconsistency was detected during normal operation. The ESF microcode was reloaded to resolve the inconsistency.

Recommended Action No action is required unless this message appears multiple times. 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 %CARDMGR-4-ESF_LOAD_WARN: [chars] microcode load: [chars]

Explanation The ESF was loaded even though a potential problem exists.

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 %CARDMGR-4-ESF_LOOPBACK_FAIL: ESF loopback packet test failed: tried
[dec] sent [dec] received [dec]

Explanation The ESF loopback packets sent after a microcode reload experienced excessive packet loss. This condition is usually an indication that data traffic through this line card is impacted as well.

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.

CARDMGR-5

Error Message %CARDMGR-5-ESF_DEV_INFO: ESF internal inconsistency corrected on
[chars]: [chars]

Explanation An ESF internal inconsistency was detected and corrected during normal operation.

Recommended Action No action is required unless this message appears multiple times. 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 %CARDMGR-5-ESF_UCODE_DONE: Microcode download complete for [chars],
time elapsed [time-stamp]

Explanation The ESF microcode was successfully downloaded and started. The forwarding engine is now configured and operational. The time elapsed is measured from the ESF_UCODE_START message.

Recommended Action This is a normal activity at Cisco IOS boot time or after a fatal ESF error occurs. No action is necessary.

Error Message %CARDMGR-5-ESF_UCODE_START: Downloading microcode [chars] for [chars],
version=[chars], [chars]

Explanation The platform code was starting to download a particular ESF microcode image.

Recommended Action This is a normal activity at Cisco IOS boot time or after a fatal ESF error occurs. No action is necessary.

CAT6000_SSC Messages

This section contain Services SPA Carrier Card (SSC) messages.

CAT6000 SSC-3

Error Message %CAT6000_SSC-3-BRDTYPE_INDEX_MISMATCH: [chars]: Board type ([dec]) and card index ([dec]) do not match

Explanation A mismatch was detected between the card index and board type. For the C7600-SSC-400, the board type is 4 and the card index is 191. For the C7600-SSC-600, the board type is 5 and the card index is 224.

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 %CAT6000_SSC-3-DCM_FAIL: [chars]: [chars] FPGA module DCM Lock
Failure, status:%08x

Explanation One or more of the digital clock managers (DCM) for the data path FPGAs failed to lock. This indicates a hardware failure.

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 %CAT6000_SSC-3-DPRX_ERR: [chars]. [chars]
```

Explanation An error occurred while receiving data from the SPA, possibly due to data corruption.

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 %CAT6000_SSC-3-DPTX_ERR: [chars]: [chars].
```

Explanation An error occurred while sending data to the SPA, possibly due to data corruption.

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 %CAT6000_SSC-3-DPTX_ERR_MECC: [chars]: [chars]. ERR addr
register:0x%081x.

Explanation An error occurred while sending data to the SPA, possibly due to data corruption.

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 %CAT6000_SSC-3-DPTX_ERR_SECC: [chars]: [chars]. Single bit error count:0x%08lx, ECC ERR addr register:0x%08lx.

Explanation A data corruption error was detected and automatically fixed while sending data to the SPA.

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 %CAT6000_SSC-3-DPTX_QDR: [chars]: Error clearing QDR queue [dec].

Explanation One of the QDR queues did not flush completely.

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 %CAT6000_SSC-3-DP_COUNTERS: [chars]: Failed to create DP counter
process.

Explanation A process is spawned on bootup to monitor the counters of the data path (DP) FPGAs. There was an error creating this process.

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 %CAT6000_SSC-3-DP_ERROR: [chars]: Bus Error initializing [chars] FPGA,
addr: 0x%08x.

Explanation This FPGA could not be initialized due to a bus error. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

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, show tech-support, and show hw-module slot fpd commands and your pertinent troubleshooting logs.

Error Message %CAT6000_SSC-3-DP_PROGRAMMING: [chars]: [chars] FPGA failed to program.

Explanation This FPGA failed to program. This condition indicates a hardware failure, possibly due to a failed FPD upgrade.

Recommended Action f 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, show tech-support, and show hw-module slot fpd commands and your pertinent troubleshooting logs.

Error Message %CAT6000_SSC-3-SINGLE_SPA_MODE: [chars]: Module will use only bay
[dec]. Bay [dec] is shut.

Explanation The 7600-SSC is in single SPA mode.

Recommended Action No action is required.

Error Message %CAT6000_SSC-3-SSC_BAY_SHUT: [chars]: Bay [dec] is shutdown because
[chars] is in single-spa-mode

Explanation The specified bay is shut down. In single SPA mode, only one bay is active.

Recommended Action Refer to the IPsec VPN SPA documentation for information about single SPA mode.

Error Message %CAT6000_SSC-3-SW_ERROR: [chars]: [chars]

Explanation This error indicates a problem in internal software coding.

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 %CAT6000_SSC-3-UNKNOWN_BRDTYPE: [chars]: SSC board type [dec] is not supported

Explanation The board type is not supported.

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.

CAT6000_SSC-7

Error Message %CAT6000_SSC-7-DP_DISABLE: [chars]: [chars] FPGA is forced disabled.

Explanation This FPGA has been forced disabled. This is a debugging feature.

Recommended Action No action is required.

CAT6000_SVC Messages

Error Message %CAT6000_SVC_APP_HW-0-DPFPGAINTFATALERR: [chars], hardware register
offset [hex] value [hex]

Explanation DPFPGA fatal error

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 %CAT6000_SVC_APP_HW-2-APP_PROC_ALERT: Service Application Processor
alert: [chars]

Explanation A hardware problem was detected on the Service Application Processor.

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 %CAT6000_SVC_APP_HW-2-HW_INTERRUPT: Hardware interrupt for Device:
[chars]

Explanation A hardware interrupt occurred on the Line card.

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 %CAT6000_SVC_APP_HW-2-UNSUPPORTED_HW: Unsupported Hardware: [chars]

Explanation Unsupported hardware was found on the Line card.

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 %CAT6000_SVC_APP_HW-3-BAD_IFCOMTYPE: Bad ifcom message type=[int]

Explanation A Trifecta module passed down a message that the RP software was not prepared to handle.

Recommended Action lcp-services

Error Message %CAT6000_SVC_APP_HW-3-DPFPGADRVFAIL: DPFPGA object driver [chars]
failure

Explanation DPFPGA object driver create or pll check or TSE and XAUIs bring-up or check all blocks except GLOBAL and XAUIs or check global interrupt register or check XAUIs global status or check XAUIs global error status failure

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 %CAT6000_SVC_APP_HW-3-DPFPGAHWFAIL: Hardware bring-up failure

Explanation The DPFPGA manager failed to bring-up the hardware prior to constructing the device object driver.

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 %CAT6000_SVC_APP_HW-3-DPFPGAIMAGE: DPFPGA image [chars] error, IOFPGA
config flash status register [hex]

Explanation DPFPGA image download or CRC error, the actual hardware reason is stored in IOFPGA config flash register

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 %CAT6000_SVC_APP_HW-3-DPFPGAINTERR: [chars], hardware register offset
[hex] value [hex]

Explanation DPFPGA error

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 %CAT6000_SVC_APP_HW-3-DPFPGAMNGRFAIL: DPFPGA manager [chars] failure

Explanation The DPFPGA manager create various processes failure or initialization failure

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 %CAT6000_SVC_APP_HW-3-DPFPGASEUERR: A [chars] occurred on the DPFPGA.
SEU_EMR_REG = [hex]

Explanation DPFPGA error

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 %CAT6000_SVC_APP_HW-3-DPFPGATIMEOUT: DPFPGA [chars] timeout after
[dec]ms

Explanation DPFPGA init done or pll lock timeout during bring-up

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 %CAT6000_SVC_APP_HW-3-IPCALLOCFAIL: Failed to allocate IPC buffer
[chars]

Explanation The Linecard failed to allocate a buffer for communication with the Route Processor (Draco).

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 %CAT6000_SVC_APP_HW-3-IPCPORT: Failed to [chars] IPC port '[chars]',
error [chars]

Explanation The Linecard failed to create a port for communication with the Route Processor (Draco).

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 %CAT6000_SVC_APP_HW-3-IPCSENDFAIL: Failed to send IPC message [chars]

Explanation The Linecard failed to send a message to the Route Processor (Draco).

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 %CAT6000_SVC_APP_HW-3-SHMEMFAIL: Shared memory write time out after
[dec]ms

Explanation The DPFPGA manager failed to get into the critical section for update the statistics counters in the PCI shared memory

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 %CAT6000_SVC_APP_HW-6-APP_FPGAVER_MISMATCH: Module [dec]: [chars]

Explanation Service application FPGA version mismatch.

Recommended Action No action is required.

Error Message %CAT6000_SVC_APP_HW-6-APP_RESTART_REASON: [chars] : [chars]

Explanation Service application restart reason.

Recommended Action No action is required.

Error Message %CAT6000_SVC_APP_HW-6-APPONLINE: Service application in slot [int] is online.

Explanation Service application has finished booting up and is online

Recommended Action No action is required.

CAT6000_TRIFECTA Messages

CAT6000_TRIFECTA-0

Error Message %CAT6000_TRIFECTA-0-DPFPGAINTFATALERR: [chars], hardware register
offset [hex] value [hex]

Explanation A DPFPGA fatal error has occurred.

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. Issue 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/launch.do, or contact your Cisco technical support.

CAT6000_TRIFECTA-2

Error Message %CAT6000_TRIFECTA-2-APP_PROC_ALERT: Service Application Processor
alert: [chars]

Explanation A hardware problem was detected on the Service Application Processor.

Recommended Action If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-2-HW_INTERRUPT: Hardware interrupt for Device:
[chars]

Explanation A hardware interrupt occured on the line card.

Recommended Action If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

CAT6000 TRIFECTA-3

Error Message %CAT6000_TRIFECTA-3-BAD_IFCOMTYPE: Bad ifcom message type=[int]

Explanation A Trifecta module passed down a message that the RP software was not prepared to handle.

Recommended Action If this message recurs, 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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGADRVFAIL: DPFPGA object driver [chars]
failure

Explanation DPFPGA object driver create or pll check or TSE and XAUIs bring-up or check all blocks except GLOBAL and XAUIs or check global interrupt register or check XAUIs global status or check XAUIs global error status failure

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGAHWFAIL: Hardware bring-up failure

Explanation The DPFPGA manager failed to bring-up the hardware prior to construct the device object driver

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGAIMAGE: DPFPGA image [chars] error, IOFPGA
config flash status register [hex]

Explanation DPFPGA image download or CRC error, the actual hardware reason is stored in IOFPGA config flash register

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGAINTERR: [chars], hardware register offset
[hex] value [hex]

Explanation A DPFPGA error has occurred.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGAMNGRFAIL: DPFPGA manager [chars] failure

Explanation The DPFPGA manager has created a processes failure or an initialization failure.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-DPFPGATIMEOUT: DPFPGA [chars] timeout after
[dec]ms

Explanation DPFPGA init done or pll lock timeout during bring-up

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-IPCALLOCFAIL: Failed to allocate IPC buffer
[chars]

Explanation The linecard failed to allocate a buffer for communication with the Route Processor (Draco).

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-IPCPORT: Failed to [chars] IPC port '[chars]',
error [chars]

Explanation The linecard failed to create a port for communication with the Route Processor (Draco).

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-IPCSENDFAIL: Failed to send IPC message [chars]

Explanation The linecard failed to send a message to the Route Processor (Draco).

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CAT6000_TRIFECTA-3-SHMEMFAIL: Shared memory write time out after
[dec]ms

Explanation The DPFPGA manager failed to get into the critical section for update the statistics counters in the PCI shared memory.

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. Issue 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/launch.do, or contact your Cisco technical support.

CBUS Messages

This section contain Cisco Bus Controller (CBUS) messages.

CBUS-3

Error Message %CBUS-3-CCBCMDFAIL3: Controller [dec], cmd ([dec] [hex], [hex])
failed ([hex])

Explanation A command control block (CCB) command sent from the system to an interface processor failed to complete successfully.

Recommended Action The system recovered by generating an error code for the requester. No action is necessary.

Error Message %CBUS-3-CCBSEMINFO: CCB semaphore [chars] traceback

Explanation Displays information about the sending and receiving of command control block (CCB) semaphores.

Recommended Action No action is required if the frequency of the message is not affecting the operation of the switch. Frequent messages may be the result of software bugs (CSCee82681, CSCin54713) in earlier Cisco IOS releases. If conditions warrant, upgrade to a later Cisco IOS release.

```
Error Message %CBUS-3-SRPRSET: Interface [chars], Error ([hex]) [chars] -
srp_reset()
```

Explanation A command to reset an SRP interface was issued by the RSP, but the interface did not respond to the command within the expected time delay. The delay is given for the processor to return the buffers that it has allocated and to perform any necessary cleanup. This condition may be caused by a large number of buffers that have been allocated by the interface due to either heavy traffic or a hardware problem with the interface.

Recommended Action Verify that the card is properly seated. 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.

CCE_DP Messages

This section contains Common Classification Engine Data Plane (CCE_DP) messages related to the application firewall for HTTP.

CCE DP-4

Error Message %CCE_DP-4-CCE_DP_DYNAMIC_CLASS: Sig:[dec] Content type does not match
the specified type - [chars] [chars] from %i:[dec] to %i:[dec]

Explanation The HTTP message violates the content-type-verification application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_ICMP: ICMP Classification Result Invalid

Explanation The HTTP message violates the request-method application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_NAMED_DB: Sig:[dec] Content type not found - [chars]
[chars] from %i:[dec] to %i:[dec]

Explanation The HTTP message violates the content-type-verification application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_PACKET_PATH: Sig:[dec] Content type: [chars] does not match the Accept-Type from %i:[dec] to %i:[dec]

Explanation The HTTP message violates the content-type-verification application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_POLICY: Sig:[dec] HTTP protocol violation detected [chars] [chars] from %i:[dec] to %i:[dec]

Explanation The HTTP message violates the strict-http application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_TARGET: content-length

Explanation The HTTP message violates the content-length application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_TIMERS: Sig:[dec] Content size %lu out of range [chars] [chars] from %i:[dec] to %i:[dec]

Explanation The HTTP message violates the content-type-verification application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_UDP: UDP Classification Result Invalid

 $\textbf{Explanation} \quad \text{The HTTP message violates the request-method application firewall inspection rule.}$

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

Error Message %CCE_DP-4-CCE_DP_VFR: Fragment classification result invalid

Explanation The HTTP message violates the max-uri-len application firewall inspection rule.

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

Error Message %CCE_DP-4-CCE_DP_VTCP: Virtual VTCP Classification result invalid

Explanation The HTTP message violates the max-hdr-len application firewall inspection rule.

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

CCH323 Messages

Error Message %CCH323-3-CANNOT_CREATE_CCB: [chars]: cannot create the H.323 ccb Tree

Explanation Creation of the H.323 CCB Tree failed. The system memory pool may be exhausted.

Recommended Action This can be a catastrophic error.

CE3 Messages

Error Message %CE3-1-CONFIGURE: Failed to configure [dec] interfaces in bay [dec], shutting down bay

Explanation The CE3 hardware failed. Some components on the board failed to initialize.

Recommended Action Replace the CE3 port adapter.

CFGMGR Messages

This section contains Configuration Manager (CFGMGR) messages.

CFGMGR-1

Error Message %CFGMGR-1-UNABLE_TO_SEND_RUN_CFG: unable to send running-cfg, bits:
[hex], retrying...

Explanation The system is attempting to push the running configuration to the slaves.

Recommended Action No action is required.

Error Message %CFGMGR-1-UNABLE_TO_SEND_STARTUP_CFG: unable to send startup-cfg, bits: [hex], retrying...

Explanation The system is attempting to push the startup configuration to the slaves.

Recommended Action No action is required.

CFGMGR-3

Error Message %CFGMGR-3-ERROR_APPLYING_STARTUP_CFG: Error Applying Startup Config to Running Config

Explanation The system encountered an error while automatically applying the startup configuration to the running configuration.

CFGMGR-4

Error Message %CFGMGR-4-SLAVE_WRITING_STARTUP_CFG: only master can do that

Explanation An attempt to write to the startup configuration was made on a slave, but is allowed only on the master.

Recommended Action No action is required.

CFGMGR-6

Error Message %CFGMGR-6-APPLYING_RUNNING_CFG: as new master

Explanation The new master is applying a backed-up running configuration.

Recommended Action No action is required.

Error Message %CFGMGR-6-SPURIOUS_SLAVE_ADD: CFG MGR Recvd Spurious New Slave Notification: [int]

Explanation Configuration Manager was notified about a slave that it already knows about.

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 %CFGMGR-6-UNABLE_TO_NVGEN_BUSY_RUNNING_CFG: config file busy,
retrying...

Explanation The master is temporarily unable to complete the nonvolatile generation process (NVGEN) to construct the running configuration.

Recommended Action No action is required.

Error Message %CFGMGR-6-UNABLE_TO_NVGEN_RUNNING_CFG: config file too large...

Explanation The master is unable to complete the nonvolatile generation process (NVGEN) to construct the running configuration because the configuration file is too large.

Recommended Action Remove some configuration commands.

CFIB Messages

This section contains Constellation Forwarding Information Base (CFIB) messages.

CFIB-3

Error Message %CFIB-3-CFIB_UNEXPECTED_OCE_CHAIN: Unexpected oce length obj: Unrecognized format '%p' type: [dec]

Explanation The Output Chain Element(OCE) specified in the system message is invalid because it has exceeded the maximum depth. One known cause is invalid static route configuration. Traffic for this path will be dropped.

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CFIB-3-REQ_VPN_MAPPER_IPV4_FAIL: CFIB vpn mapper request fails for ipv4 appid [chars]

Explanation All vpn ids for ipv4 app are used

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. Issue 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/launch.do, or contact your Cisco technical support.

Error Message %CFIB-3-REQ_VPN_MAPPER_IPV6_FAIL: CFIB vpn mapper request fails for ipv6 appid in [chars]

Explanation All vpn ids for ipv6 app are used.

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. Issue 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/launch.do, or contact your Cisco technical support.

CFIB-7

Error Message %CFIB-7-CFIB_ADJBASE: Failed to free adjacency base from hash table
(entry not found)

Explanation An error has occurred while attmepting to free an adjacency from a hash table. This condition might be caused by an inconsistent use of hash key during creation of the adjacency hash table. This condition might cause a memory leak

Recommended Action Copy the message exactly as it appears on the console or in the system log. To check memory usage over time, enter the show process memory command to gather data that may help identify the cause of the error. 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 that 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 %CFIB-7-CFIB_EXCEPTION: FIB TCAM exception, Some entries will be software switched

Explanation Because there are no free memory blocks in the FIB TCAM, some switching will be done in software rather than hardware.

Explanation Because free memory blocks have become available in the FIB TCAM, switching will be done in hardware.

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.

CFIB_TUNNEL_RP Messages

This section contains Constellation Forwarding Information Base (CFIB) messages.

CFIB TUNNEL RP-4

Error Message %CFIB_TUNNEL_RP-4-TUN_RECIR_FORCED: The current configuration of hardware and software requires MPLS tunnel recirculation to be enabled. 'mls mpls tunnel-recir' has been added to the running configuration

Explanation When the chassis contains a SIP-600 line card, and VRF forwarding is configured on a tunnel interface, MPLS tunnel recirculation must be enabled to prevent the creation of corrupted packets from EARL. The **mls mpls tunnel-recir** command has been added to the running configuration automatically.

Recommended Action No action is required.

CFM_CONST Messages

This section contains Connectivity Fault Management (CFM) messages.

CFM_CONST-3

Error Message %CFM_CONST-3-AEB_ON_EC_UNSUPPORTED: CFM AEB mode is unsupported on etherchannels. Cannot set CFM AEB mode

Explanation CFM AEB mode is unsupported on etherchannels.

Recommended Action Set CFM AEB mode only on physical (unbundled) ports.

Error Message %CFM_CONST-3-CFM_ON_SUPERVISOR_PORTS_DISABLED: CFM is enabled system wide except it's disabled on supervisor ports due to spanning tree configuration.

Explanation Unable to program all port ASIC MAC match registers on supervisor ports for CFM due to hardware limitations on these ports. Continued with enabling CFM system-wide to allow coexistence with other protocols such such as PVST.

Recommended Action System has handled this by disabling CFM on all supervisor ports. If this is unacceptable configure STP mode to MST and re-enable CFM or disable CFM completely.

Error Message %CFM_CONST-3-CFM_ON_SUPERVISOR_PORTS_DISALLOWED: CFM is enabled system wide except on supervisor ports due to spanning tree configuration.

Explanation Unable to program all port ASIC MAC match registers on supervisor ports for CFM due to hardware limitations on these ports. Continued with enabling CFM system-wide to allow coexistence with other protocols such such as PVST.

Recommended Action Administrator action may be required. Ensure no CFM traffic is presented to any supervisor ports via configuration. If not possible configure STP mode to MST and re-enable CFM or disable CFM completely

Error Message %CFM_CONST-3-MAC_OPERATIONALLY_ERROR: The set MAC operationally action on interface [chars] has encountered an error.

Explanation The set MAC operationally action failed and ended abnormally.

Recommended Action No action is required.

Error Message %CFM_CONST-3-MATCH_REG_GLOBAL_RESERVE_FAILED: Unable to program port ASIC MAC match register on one or more slots. Cannot run CFM

Explanation The Content Flow Monitor (CFM) attempted to reserve and program the port ASIC MAC match registers, but there are insufficient match registers available. CFM cannot be run.

Recommended Action To free MAC match registers, disable protocols that use the MAC match register. Protocols using port ASIC match registers can be viewed with the **remote command switch show platform mrm info** command.

Error Message %CFM_CONST-3-MATCH_REG_RESERVE_FAILED: Unable to reserve port ASIC MAC match register on slot [dec]. Cannot run CFM

Explanation CFM attempted to reserve a port ASIC MAC match register for the slot indicated and there is no register available. CFM cannot be run without support from all line cards.

Recommended Action To free MAC match registers, disable protocols that use the MAC match register. Protocols using port ASIC match registers can be viewed with the **remote command switch show platform mrm info** command.

Error Message %CFM_CONST-3-MATCH_REG_RESERVE_ON_SUPERVISOR_FAILED: Unable to program port ASIC MAC match register on supervisor slot [dec]. Cannot run CFM on supervisor ports

Explanation CFM attempted to reserve a port ASIC MAC match register for the indicated supervisors' slot and there is no register available. CFM cannot run on supervisors ports.

Recommended Action Protocols that use the MAC match register must be disabled to free MAC match registers. Protocols using port ASIC match registers can be can be viewed with **remote command switch show platform mrm info**.

Error Message %CFM_CONST-3-MST_SIMULATE_PVST_PLAT_ENABLED_FAILED: Unable to enable CFM when spanning tree mode is MST and PVST simulation is enabled on the platform

Explanation CFM does not work along with MST plus PVST simulation.

Recommended Action Disable PVST simulation on the platform.

Error Message %CFM_CONST-3-STP_MODE_CHANGE_NOT_ALLOWED: Unable to change STP mode while CFM is enabled

Explanation STP modes PVST and rapid PVST are not compatible with CFM due to hardware limitations.

Recommended Action Either configure STP mode MST or disable CFM.

CFM_CONST-6

Error Message %CFM_CONST-6-CFM_ON_SUPERVISOR_PORTS_ENABLED: CFM is enabled on supervisor ports also due to spanning tree mode change to mst configuration.

Explanation Able to program all port ASIC MAC match registers on supervisor ports for CFM due to spanning tree mode change to mst configuration.

Recommended Action No action is required.

Error Message %CFM_CONST-6-MAC_OPERATIONALLY: Interface [chars] is MAC operationally [chars].

Explanation The specified interface is MAC operationally up or down.

Recommended Action No action is required.

CH-1 Messages

Error Message %CH-1-RM_STATE: _state_ attribute still available

Explanation The _state_ attribute was still available in CH db re_auth recand it should have been removed by now as part of the re_auth process.

Recommended Action No action required.

CHARLOTTE Messages

This section contains Dual OC-3 PoS port adapter (CHARLOTTE) messages.

CHARLOTTE-1

Error Message %CHARLOTTE-1-INITFAIL: Failed to initialize port [dec].

Explanation The dual OC-3 PoS port adapter failed to complete IDB initialization.

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 %CHARLOTTE-1-PCIINITFAIL: PCI initialization failed.

Explanation The dual OC-3 PoS port adapter failed to complete hardware initialization.

CHARLOTTE-3

Error Message %CHARLOTTE-3-INVALIDPCI: Device reported [hex]

Explanation The dual OC-3 PoS port adapter hardware failed. The PCI device has an invalid ID.

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 %CHARLOTTE-3-UNSUPPORTED: [chars]

Explanation The dual OC-3 PoS port adapter hardware is not supported on the specified platform.

Recommended Action Upgrade your system so that it supports the dual OC-3 PoS port adapter.

CHKPT Messages

This section contains checkpointing (CHKPT) messages.

CHKPT-3

Error Message %CHKPT-3-INVALID_CALLBACK_ARG: Attempt to add a checkpointing client with an invalid [chars] argument

Explanation An invalid argument was supplied to an internal application program interface (API). As a result, the system state between one or more checkpointing clients might not be properly synchronized. The message output identifies the type of error that occurred. This failure is probably caused by a software error.

Error Message %CHKPT-3-ISSU_MSG_NOT_COMPATIBLE: Checkpointing message type not
compatible

Explanation An error was detected when verifying the checkpointing message type compatibility between checkpointing client peers. As a result, the system state between one or more checkpointing clients might not be properly synchronized. This failure is probably caused by a software error.

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, show tech-support, show logging, show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %CHKPT-3-ISSU_NEGO_FAILED: Checkpointing Facility failed to start ISSU
negotiation with the peer ([chars])

Explanation The checkpointing facility was unable to start the ISSU negotiation successfully. The failure to start negotiation is a fatal error condition and is probably caused by a software error.

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 %CHKPT-3-ISSU_RCV_TRANSFORM_FAILED: Checkpointing receive message
header transformaton failed ([chars])

Explanation An error was detected while performing a receive-level transformation on a checkpointing message. As a result, the system state between one or more checkpointing clients might not be properly synchronized. The message output identifies the type of error that occurred. This failure is probably caused by a software error.

following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support**, and **show checkpoint client** commands and your pertinent troubleshooting logs.

Error Message %CHKPT-3-ISSU_XMIT_TRANSFORM_FAILED: Checkpointing transmit message header transformaton failed ([chars])

Explanation An error was detected while performing a transmit-level transformation on a checkpointing message. As a result, the system state between one or more checkpointing clients might not be properly synchronized. The message output identifies the type of error that occurred. This failure is probably caused by a software error.

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, show tech-support, and show checkpoint client commands and your pertinent troubleshooting logs.

Error Message %CHKPT-3-RMI_CALLBACK: Checkpointing Facility encountered an error
while processing a callback from the Resource Manager (RMI), [chars]

Explanation The checkpointing facility registers with the Resource Manager (RMI) to receive status notifications about resources (such as IPC) and uses them to throttle the sending of messages to the peer. The checkpointing facility encountered an error while processing a callback from RMI. This error is probably caused by a software error.

Error Message %CHKPT-3-RMI_FAILED: Checkpointing Facility failed to register with
the Resource Manager (RMI), [chars]

Explanation The checkpointing facility registers with the Resource Manager (RMI) to get status notifications about resources (such as IPC) and uses them to throttle the sending of messages to the peer. The checkpointing facility was unable to register itself with RMI and cannot throttle the sending of any messages. The system may still operate normally. This error is probably caused by a software error.

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 %CHKPT-3-SYSMGR_LOOKUP: Failed to get process Job ID from SysMgr

Explanation The checkpointing facility was unable to get a job ID for an ION (run-time Modular IOS) process from the System Manager. The job ID lookup is done when any ION checkpointing facility client first registers itself with the checkpoint facility. The error does not affect the checkpointing capabilities of the system. The job ID is used by the reset manager for tracking process restarts.

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 %CHKPT-3-TRANSFORMFAILED: Checkpointing msg header transform failed
([dec])

Explanation A transform error related to check pointing occurred.

following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging**, **show tech-support**, and **show checkpoint client** commands and your pertinent troubleshooting logs.

Error Message %CHKPT-3-TRANSMIT_FAILED: Checkpointing message transmission failure
([chars])

Explanation An error was detected when transmitting a checkpointing message between checkpointing client peers. As a result, the system state between one or more checkpointing clients might not be properly synchronized. The failure is probably caused by a software error. The message output identifies the type of error that 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, show tech-support, and show checkpoint client commands and your pertinent troubleshooting logs.

CHKPT-4

 $\textbf{Error Message} \ \, \text{\ensuremath{\$CHKPT-4-GET_BUFFER: Checkpointing ISSU session ([dec]) failed to get buffer}$

Explanation The checkpointing ISSU session failed to get a buffer.

Error Message %CHKPT-4-INIT: Checkpoint [chars] initialization failed in RF state
([chars])

Explanation The checkpointing standby initialization failed.

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 %CHKPT-4-INVALID_STATE: Checkpoint State ([dec]) is invalid

Explanation The checkpointing state is invalid.

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.

Explanation The checkpointing ISSU session failed to send a negotiate message to the peer.

```
Error Message %CHKPT-4-NOCLIENT: CF client is NULL, ([chars])
```

Explanation The checkpointing facility cannot send the message because the client is NULL.

Recommended Action This is a warning message; no action is required.

```
Error Message %CHKPT-4-NOIPCPORT: IPC port is NULL, ([chars])
```

Explanation The checkpointing facility cannot send the message because the IPC port information is NULL.

Recommended Action This is a warning message; no action is required.

```
Error Message %CHKPT-4-NOMESSAGE: Message is NULL, ([chars])
```

Explanation The checkpointing facility cannot send the message because the message is NULL.

Recommended Action This is a warning message; no action is required.

CHOPIN Messages

This section contains Versatile Interface Processor (VIP) multichannel port adapter messages.

CHOPIN-2

```
Error Message %CHOPIN-2-TXBADVC: [chars], vc [dec]
```

Explanation The VIP multichannel port adapter had a bad transmit VC.

CI Messages

This section contains chassis interface (CI) messages and temperature alarms.

CI-0

Error Message %CI-0-SHUT_LC_CRITICALTEMP: Line cards shutdown as critical
temperature exceeded [chars]

Explanation The chassis temperature has exceeded a critical threshold and line cards have been shut down.

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 %CI-0-SHUT_LC_FANFAIL: Line cards are being shut on fan failure

Explanation The chassis fan tray failure timer has expired and line cards have been shut down.

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 %CI-0-SHUT_LC_FANGONE: Line cards are being shut as fan tray is missing

Explanation The chassis fan missing timer has expired and line cards have been shut down.

CI-1

Error Message %CI-1-CHASSISFAULTYSENSOR: Alarm: Chassis temperature sensor is faulty

Explanation This error indicates that the chassis temperature sensor is faulty.

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 %CI-1-CHASSISTEMPCRITICAL: Chassi temperature CRITICAL limit exceeded

Explanation The system chassis temperature critical limit has been exceeded.

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 %CI-1-CRITICALTEMP_LC_SHUT: Alarm: [chars], [chars], [chars], [chars], [chars]

Explanation This error indicates that line cards have been shut down due to the core temperature exceeding the critical threshold.

Error Message %CI-1-FAN_FAILURE_LC_SHUT: Alarm: [chars], [chars], [chars], [chars], [chars]

Explanation This error indicates that line cards have been shut down due to total fan failure or a missing fan tray.

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.

CI-3

Error Message %CI-3-CHASSISTEMPLOW: Chassis temperature too low

Explanation The system chassis temperature is below -15 degrees Celsius.

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 %CI-3-CHASSISTEMPMAJOR: Chassis temperature major limit exceeded

Explanation The system chassis temperature major limit has been exceeded.

Error Message %CI-3-CHASSISTEMPMINOR: Chassis temperature minor limit exceeded

Explanation The system chassis temperature minor limit has been exceeded.

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 %CI-3-MIB_ALM_SUBMIT: MIB alarm: [chars], [chars], [chars], [chars], [chars]

Explanation An alarm message is contained in the MIB.

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 %CI-3-PS_FAIL: Power supply module [dec] failure

Explanation The specified power supply module has failed.

CI-4

Error Message %CI-4-MULTIPLE_FAN_FAILURE: [chars] [dec] [chars]
[chars]

Explanation When two or more of the fans in the chassis fan tray have failed or the fan try is missing, the line cards will be powered down after the user-configured timer interval. This warning message is generated one minute after the fans have failed or the fan tray is detected to be missing.

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.

CI-6

Error Message %CI-6-CHASSIS_SHUTDOWN: Chassis shutdown. Card/subcard not powered up

Explanation The chassis is shut down. Line cards will not be powered up.

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 %CI-6-FANOK: Fan tray module OK

Explanation The chassis fan tray is operating normally.

Recommended Action No action is required.

Error Message %CI-6-LINECARD_SHUTDOWN: [chars]

Explanation When two or more of the fans in the chassis fan tray have failed or the fan tray is missing, the line cards will be powered down after a user configured timer interval. This message is generated before shutting down line cards.

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 %CI-6-PS_MISSING: Power supply module [dec] missing

Explanation The specified power supply module is not present in the system

Recommended Action No action is required.

Error Message %CI-6-PSNORMAL: Power supply [int] normal

Explanation A failed power supply is working normally now.

Recommended Action If the situation does not correspond with a normal operation of the system's power supplies, 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 %CI-6-PS_OK: Power supply module [dec] OK

Explanation The specified power supply module is operating normally.

Recommended Action No action is required.

Error Message %CI-6-PS_PRESENT: Power supply module [dec] present

Explanation The specified power supply module is present in the system.

Recommended Action No action is required.

CLNS Messages

This section contains OSI Connectionless Network Service messages.

CLNS-3

Error Message CLNS-3-CKSUMERR: [chars]: L[dec] LSP [chars] database checksum error, restarting

Explanation A hardware or software error occurred.

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. Issue 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/launch.do, or contact your Cisco technical support.

```
Error Message %CLNS-3-IPLIST: ISIS: [chars] [hex], [IP_address] [IP_address]
```

Explanation An internal error has occurred in the intermediate system-to-intermediate system (ISIS).

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 that 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 %CLNS-3-LSPLIST: ISIS: [chars] [hex], index [dec]
```

Explanation An internal error has occurred in the intermediate system-to-intermediate system (ISIS).

Error Message %CLNS-3-NSF_CP_INIT_ERR: Checkpoint initialization error ([chars])

Explanation An unrecoverable error occurred during initialization of the check point client.

Recommended Action At this time there is no workaround. 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 that 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.

CLNS-4

Error Message %CLNS-4-AUTH_FAIL: [chars]: [chars] authentication failed

Explanation An ISIS packet (IIH, CSNP, PSNP, or LSP) was received and did not pass the authentication check.

Recommended Action If the error persists, check the originating router for matching authentication mode and password.

Error Message CLNS-4-BADINTFCLNSMTU: [chars] Invalid interface clns MTU [dec]

Explanation The interface MTU has become unusable while ISIS is running on the interface. This condition may be temporary and recoverable.

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 %CLNS-4-LSP_MAXSEQ: [chars][chars]: attempt to exceed LSP maximum sequence number for LSP [chars]

Explanation An attempt was made to exceed the maximum sequence number for an LSP.

Recommended Action Protocol will shut down for a period of (max-lsp-lifetime) + 1 minute. This is an unprobable natural occurrence. Investigate to find the source of any out-of-order reception, generation, or incrementing of this LSP's sequence number.

CLNS-5

Error Message %CLNS-5-NSF_ISSU_NEGO_FAIL: ISIS NSF cancelled - ISSU negotiation failed for NSF CISCO

Explanation ISIS cancelled the nonstop forwarding (NSF) restart because ISSU negotiation failed in Cisco mode.

Recommended Action Enter the **show issu negotiated version** command and look for additional information in the output of the command.

CLUE Messages

This section contains Compact Local Unit Exchange (CLUE) messages.

CLUE-3

Error Message %CLUE-3-CHECKSUM_ERROR: CLUE record checksum error in record, id
[dec], record starting address %#x, new checksum %#x, previous checksum %#x

Explanation A Compact Local Unit Exchange (CLUE) record stored in the CLUE memory has a bad checksum and cannot be accessed. The CLUE record was either modified by a CLUE client but not committed or it was modified by memory corruption.

Recommended Action Internal CLUE client software will attempt to automatically correct the error. If the error persists, reload the unit.

Error Message $CLUE-3-CLIENT_REGISTRY_FULL:$ Maximum of [dec] CLUE clients registered. Cannot register callback x

Explanation No more Compact Local Unit Exchange (CLUE) clients can be registered because the client registry for callback service is full. Unregistered CLUE clients will not be informed about CLUE service events such as CLUE service ready status or CLUE record corruptions.

Error Message %CLUE-3-COMMIT FAILED: CLUE cannot commit record, id [dec]

Explanation The specified CLUE record was not committed in the CLUE storage memory, so the CLUE record cannot be accessed. Either the CLUE record was not allocated by the CLUE client before committing or there was an error in the internal CLUE record index table.

Recommended Action The internal CLUE client software will attempt to automatically correct the error. 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 $CLUE-3-EOR_CORRUPT$: CLUE record corruption in end of record field, record id [dec], record starting address π

Explanation A CLUE record's end of record delimiter was corrupted in the CLUE storage memory, so the CLUE record cannot be accessed. The CLUE record was overwritten by the previous CLUE record or by a memory corruption.

Recommended Action Internal CLUE client software will attempt to automatically correct the error. If the error persists, reload the unit.

Error Message %CLUE-3-INDEX_BUILD_FAIL: Failed to build CLUE internal record index
due to [chars]

Explanation CLUE could not build an internal record index table, so the CLUE service will not be available and any data in the CLUE storage cannot be accessed. This failure can occur either when CLUE storage does not exist or when any CLUE record within the CLUE storage is corrupted.

Recommended Action Internal CLUE client software will attempt to automatically correct the error. If the error persists, reload the unit.

Error Message %CLUE-3-INIT_ERROR: Failed to initialise the reserved memory for new CLUE context due to [chars]

Explanation Reserved memory for the Compact Local Unit Exchange (CLUE) storage area was not initialized due to the reason given. The CLUE storage area will not be available to provide any CLUE service.

Error Message %CLUE-3-INTERNAL_SW_ERROR: [chars]

Explanation An internal Compact Local Unit Exchange (CLUE) software error was reported.

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, show tech-support, and show clue commands and your pertinent troubleshooting logs.

Error Message %CLUE-3-INVALID_AREA: Either address %#x or size [dec] reserved for CLUE storage area is invalid

Explanation An internal Compact Local Unit Exchange (CLUE) software error occurred. In order to initialize and use the reserved area as a CLUE storage area, CLUE expected a non-zero reserved memory address and a non-zero reserved memory size.

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, show tech-support, and show clue commands and your pertinent troubleshooting logs.

Error Message %CLUE-3-INVALID_REC_DATA_SIZE: CLUE record size [dec] is invalid to allocate CLUE record [dec]

Explanation An internal Compact Local Unit Exchange (CLUE) software error occurred. When the CLUE client requested to allocate the CLUE record, the record size was zero or was not the same as expected. The CLUE record was not allocated.

Error Message %CLUE-3-INVALID_REC_ID: Invalid CLUE record id [dec] has been received
so CLUE cannot [chars] it

Explanation An internal Compact Local Unit Exchange (CLUE) software error occurred. The indicated action cannot be carried out on the specified CLUE record ID because the record ID is not valid.

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, show tech-support, and show clue commands and your pertinent troubleshooting logs.

Error Message %CLUE-3-NOT_ENOUGH_CLUE_STORAGE: CLUE storage has not enough space to
allocate record, id [dec] and data size [dec]

Explanation An internal Compact Local Unit Exchange (CLUE) software error occurred. The CLUE record was not allocated for the record ID because not enough space for CLUE storage was reserved or the CLUE storage contingency space was full.

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, show tech-support, and show clue commands and your pertinent troubleshooting logs.

Error Message %CLUE-3-NOT_ENOUGH_MEMORY: [dec]-bytes of local memory has not enough space left to reserve [dec]-bytes of CLUE storage

Explanation Insufficient local memory was available to reserve the required Compact Local Unit Exchange (CLUE) storage space.

Recommended Action Add more local memory.

Error Message %CLUE-3-NO_SIGNATURE: CLUE cannot [chars] record, id [dec]

Explanation The specified CLUE record was not serviced because CLUE storage was not available or because the CLUE storage signature was invalid.

Recommended Action The internal CLUE client software will attempt to automatically correct the error. 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 %CLUE-3-SOR_CORRUPT: CLUE record corruption in start of record field,
record id [dec], record starting address %#x

Explanation A CLUE record's start of record delimiter was corrupted in the CLUE storage memory, so the CLUE record cannot be accessed. The CLUE record was overwritten by the previous CLUE record or by a memory corruption.

Recommended Action The internal CLUE client software will attempt to automatically correct the error. 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.

CMP Messages

This section contains Cluster Membership Protocol (CMP) module messages.

CMP-5

Error Message %CMP-5-NBR_UPD_SIZE_TOO_BIG: Number of neighbors in neighbor update is [int], maximum number of neighbors allowed in neighbor update is [int]

Explanation The number of cluster neighbors in the clustering neighbor update packet exceeds the number of neighbors supported by the clustering module design.

Recommended Action No action is required.

CNS Messages

This section contains Cisco Networking Services (CNS) messages.

CNS-3

```
Error Message %CNS-3-MEMORY: [chars]
```

Explanation CNS subsystem has experienced a problem gettting the required memory to complete this operation.

Recommended Action Check system memory for other memory allocation errors and contact Technical support for problem resolution. In the absence of IOS errors, upgrading the memory in the network device may be required.

```
Error Message %CNS-3-TRANSPORT: [chars]
```

Explanation The CNS subsystem has experienced a problem contacting an external application.

Recommended Action See specific message text for an indication of what the cause might be. Check the network configuration and cables to make sure that the remote application is running and the address is accessible.

```
Error Message %CNS-3-WARNING: [chars]
```

Explanation The CNS subsystem has encountered an unexpected condition while executing a set of commands that did not cause a failure but suggests things did not go totally correctly.

Recommended Action Check the error log for additional information. This is an informational message and does not necessarily indicate that an error occurred.

```
Error Message %CNS-3-XML_SEMANTIC: [chars]
```

Explanation The CNS subsystem has encountered an error while processing the XML encapsulation of configuration command.

Recommended Action The externally supplied XML has errors in it and connot be processed. See the specific message text for an indication of what the cause might be. This condition could possibly require that the command be checked and reissued from the server.

CNS-5

Error Message %CNS-5-CONFIG_SUCCESS: SUCCESSFUL_COMPLETION

Explanation The configuration download has been applied successfully.

Recommended Action No action is required.

CNS-6

Error Message %CNS-6-NO_EVENT_AGENT: CNS EVENT AGENT IS NOT CONFIGURED

Explanation The CNS event agent is not configured. The event that was to be sent to it will be dropped

Recommended Action Configure the CNS event agent.

COLLECTION Messages

This section contains COLLECTION messages.

COLLECTION-3

Error Message %COLLECTION-3-MODE_PROCESS_MISMATCH: Attempted to start a walk with incompatible mode and process (mode [chars] process [chars])

Explanation An internal error occurred in the collection process.

Error Message %COLLECTION-3-PROC_INIT: Initialization of process [chars] failed,
unable to [chars]

Explanation An internal error occurred in the collection process.

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.

COMMON_FIB Messages

This section contains CEF address Forwarding Information Base (FIB) messages.

COMMON_FIB-3

Error Message %COMMON_FIB-3-ACL_PBR_NAMETOOLONG: IPV6_SWSB_CTRL name length error,
[chars] (acl_in [dec] ([dec]), acl_out [dec] ([dec]), pbr [dec] ([dec]))

Explanation In an IPC eXternal Data Representation (XDR) message, the name of an IPv6 ACL or an IPv6 policy-based route (PBR) was too long. To prevent buffer overrun errors, the names will not be used. Either the XDR message or an internal IPv6 FIB structure may be corrupted.

COMMON_FIB-4

Error Message %COMMON_FIB-4-CHAIN_REMOVE_INCONS1: Attempting to remove [hex] but it has no prev [hex]

Explanation COMMON_FIB_INTERNAL_ERROR.

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 %COMMON_FIB-4-CHAIN_REMOVE_INCONS2: Attempting to remove [hex] but prev [hex] points at [hex] instead

Explanation COMMON_FIB_INTERNAL_ERROR.

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 %COMMON_FIB-4-CHAIN_REMOVE_INCONS3: Attempting to remove [hex] with next thinks its prev is [hex]

Explanation COMMON_FIB_INTERNAL_ERROR.

COMMON_FIB-6

Error Message %COMMON_FIB-6-FIB_RECURSION_VIA_SELF: [chars] is found to resolve via itself during [chars]

Explanation Cisco Express Forwarding (CEF) discovered that the routing for a prefix has recursive paths that lead back to itself. CEF was forced to terminate an operation on the entry for that prefix.

Recommended Action If the problem persists, use **show** commands to display the RIB and CEF information for the prefix in question and check its configuration.

COMP_MATRIX Messages

This section contains ISSU Compatibility Matrix messages.

COMP_MATRIX-3

Error Message %COMP_MATRIX-3-PRST_VBL_DELETE: ISSU Compatibility Matrix was unable
to delete a persistent variable from the [chars] system (rc = [dec]).

Explanation The ISSU compatibility matrix was unable to delete a persistent variable. There is no way to determine whether ISSU image version compatibility checking should be enabled or disabled.

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, show tech-support, and show persistent variable commands and your pertinent troubleshooting logs.

Error Message %COMP_MATRIX-3-PRST_VBL_GET: ISSU Compatibility Matrix was unable to read a persistent variable from the local system (rc = [dec]).

Explanation The ISSU compatibility matrix was unable to access a persistent variable. There is no way to determine whether ISSU image version compatibility checking should be enabled or disabled.

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, show tech-support, and show persistent variable commands and your pertinent troubleshooting logs.

Error Message %COMP_MATRIX-3-PRST_VBL_WRITE: ISSU Compatibility Matrix was unable to write to persistent variables on the [chars] system (rc = [dec]).

Explanation The ISSU compatibility matrix was unable to write a persistent variable. There is no way to determine whether ISSU image version compatibility checking should be enabled or disabled.

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, show tech-support, and show persistent variable commands and your pertinent troubleshooting logs.

COMP_MATRIX-4

Error Message %COMP_MATRIX-4-DISABLED: Compatibility Matrix has been disabled. No image compatibility checking will be done.

Explanation The ISSU compatibility matrix check has been disabled by the **no service image-version compatibility** configuration command. When the standby comes up, no image compatibility checking will be done. The system will enter SSO redundancy mode even if the active and standby supervisors are running different images.

Recommended Action If you require ISSU compatibility matrix checking, enter the **service image-version compatibility** command.

CONST_BOOT Messages

This section contains Constellation boot messages.

CONST_BOOT-3

Error Message %CONST_BOOT-3-QUEUE_CLEANUP: Could not clean up reload netboot buffer
after error

Explanation The error processing encountered problems trying to free buffers while attempting to clean up the allocated buffer for reload netboot.

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.

CONST_DIAG Messages

This section contains Online Diagnostics (CONST_DIAG) messages.

CONST DIAG-2

Error Message %CONST_DIAG-2-DIAG_SW_LPBK_TEST_MAJ: Module [[dec]/[dec]]:
TestMgmtPortsLoopback detected a major error for port [dec]

Explanation The module failed the loopback test. The module will be power cycled.

Recommended Action Re-run the test with the NO RESET option after resetting the module. If it fails again with the same error message, copy the message exactly as it appears. Include the system configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message %CONST_DIAG-2-HM_FAB_SWOVER: Fabric card switchover due to unrecoverable errors, Reason: Failed [chars]

Explanation The fabric module has switched over because of unrecoverable error. The failure is specified in the message.

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 %CONST_DIAG-2-HM_LC_CRSH: Module [dec] crashed due to unrecoverable
errors, Reason: Failed [chars]

Explanation The system detected an unrecoverable error that caused the specified module to fail.

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 %CONST_DIAG-2-HM_MOD_RESET: Resetting Module [dec] for software
recovery, Reason: Failed [chars]

Explanation The system detected an unrecoverable error that caused the specified module to reset.

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 %CONST_DIAG-2-HM_SUP_CRSH: Standby supervisor crashed due to unrecoverable errors, Reason: Failed [chars]

Explanation The system detected an unrecoverable error that caused the redundant supervisor engine to fail.

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 %CONST_DIAG-2-HM_SUP_CRSH: Supervisor crashed due to unrecoverable errors, Reason: Failed [chars]

Explanation The supervisor engine has halted or restarted due to unrecoverable errors.

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 %CONST_DIAG-2-HM_SUP_SWOVER: Supervisor card switchover due to unrecoverable errors, Reason: Failed [chars]

Explanation The system detected an unrecoverable error that caused this supervisor engine switchover.

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 %CONST_DIAG-2-HM_TEST_FAIL: Module [dec] [chars] consecutive failure
count:[dec]

Explanation The system detected an unrecoverable error.

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 %CONST_DIAG-2-HM_TEST_WARNING: Sup switchover will occur after [dec]
consecutive failures

Explanation The system detected an unrecoverable error. A supervisor engine switchover will occur after the specified number of consecutive failures.

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 %CONST_DIAG-2-MOD_PWR_DOWN: [chars] is powering down. Reason: Failed
[chars]

Explanation The module will power down due to the detection of an unrecoverable error.

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.

Explanation You must reset the module after a disruptive diagnostic test.

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.

CONST_DIAG-3

```
Error Message %CONST_DIAG-3-BOOTUP_TEST_FAIL: [chars]: [chars] failed [chars]
```

Recommended Action The indicated test failed during bootup diagnostics.

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 %CONST_DIAG-3-DIAG_FIB_TCAM_TEST: Fib Tcam test: Missed at address
[hex], device #[dec], HRR = [hex], lookup value = [hex]-[hex]
```

Explanation The FIB TCAM device might not be functional because the test failed to get a response at the reported address and look-up value.

Recommended Action Rerun the test with the NO RESET option after resetting the module. If the test fails again at the same address, 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 %CONST_DIAG-3-DIAG_FW_TEST_CARD_DOWN: Failed to disable module [dec]

Explanation The module could not be powered down after firmware diagnostics failed.

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 %CONST_DIAG-3-DIAG_FW_TEST_CARD_RESET: Failed to reset module [dec]

Explanation The module could not be reset after firmware diagnostics failed.

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 %CONST_DIAG-3-DIAG_TEST_PORT_SKIP: Module [dec] [chars] skipped
multiple ports due to high traffic (Traffic=[dec]%)

Explanation Online diagnostics did not take place on multiple ports in the specified module because of high traffic volume.

Recommended Action No action is required.

Error Message %CONST_DIAG-3-DIAG_TEST_SKIP: Module [dec] [chars] skipped due to high
traffic (Traffic=[dec]%)

Explanation Online diagnostics were not performed on the specified module because of high traffic volume.

Recommended Action No action is required.

Error Message %CONST_DIAG-3-HM_ALL_PORT_ERR: All ports on module [dec] failed
[chars].

Explanation The data paths that correspond to all ports of the module have failed.

Recommended Action Check your network configuration for spanning tree loops, excessive flooding, and other related conditions. Reset the line card to see if the problem resolves itself. If the condition 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.

Error Message %CONST_DIAG-3-HM_CHAN_ERR: All ports in channel [dec] on module [dec]
failed [chars]. Disabled the channel.

Explanation The data path that corresponds to the channel has failed. All ports that are part of the channel are put into errdisable state.

Recommended Action Check your network configuration for spanning tree loops, excessive flooding, and other related conditions. Reset the line card to see if the problem resolves itself. If the condition 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.

Error Message %CONST_DIAG-3-HM_CONFIG_FAIL: [chars] failed in health monitoring
configuration (error code [dec])

Explanation The system has detected an unrecoverable error.

Recommended Action Contact your Cisco technical support representative.

Error Message %CONST_DIAG-3-HM_FCI_0_STUCK: Flow control stuck at 0 error on module
[dec]!

Explanation The signal LDBUS_FCI_L0 is stuck on active-low. The line card is powered down.

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 %CONST_DIAG-3-HM_PORT_ERR: Port [dec] on module [dec] failed [dec]
consecutive times. Disabling the port.

Explanation The data path that corresponds to the port has failed. The port is put into errdisable state.

Recommended Action Reset the line card to see if the problem resolves itself. If the condition 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.

Error Message %CONST_DIAG-3-HM_PORT_ERR_3X: Port [dec] on module [dec] is not allowed to clear err-disabled state due to 3rd series of [chars] failures. Port will remain in err-disabled state.

Explanation The data path that corresponds to the port has failed. The port is put into a disabled state.

Recommended Action Reset the line card to see if the problem resolves itself. If the condition 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.

Error Message %CONST_DIAG-3-LTL_PORT_ERR: Port [dec] on module [dec] failed [chars].
Disabling the port.

Explanation The datapath corresponding to the port is bad. The port is put into err-disabled state.

Recommended Action No action required.

Error Message %CONST_DIAG-3-SUP_FAILURE: [chars] supervisor has [chars] online
diagnostic failure [hex]: [chars]

Explanation The specified supervisor engine has experienced an online diagnostic failure.

Recommended Action Depending on whether failure is minor, major, or critical, the supervisor engine will display a warning message during the boot process, or the supervisor engine will fail and go into ROM monitor mode.

CONST DIAG-4

Error Message %CONST_DIAG-4-DIAG_DETECT_FABRIC_CHAN_LOW_RATE: Module [dec] fabric
channel [dec] [chars] is low ([hex] instead of [hex]).

Explanation The diagnostic test has detected a fabric low buffer rate for the fabric channel.

Recommended Action Flow control is occurring in the system. Analyze the system traffic, and remove the traffic source that causes flow control. Enter the **show fabric utilization** command to determine the overall traffic pattern.

Error Message %CONST_DIAG-4-DIAG_RESET_WARNING: Please reset module [dec] prior to normal use

Explanation The specified module must be reset after the diagnostic test.

Recommended Action Reset the specified module after the diagnostic test.

Error Message %CONST_DIAG-4-DIAG_SUGGEST_ACTION_DUE_TO_FABRIC_CHAN_FLOW_CONTROL: Flow control is occurring in the system. Analyze the system traffic and remove the traffic source that causes flow control.

Explanation This message appears when a diagnostic test has detected a low buffer rate in the switch fabric.

Recommended Action Flow control is occurring in the system. Analyze the system traffic and remove the traffic source that causes flow control. Enter the **show fabric utilization** command to check the overall traffic pattern.

Error Message %CONST_DIAG-4-DIAG_SUGGEST_ACTION_DUE_TO_FABRIC_CHAN_LOW_RATE: Flow control is occurring in the system. Analyze the system traffic and remove the traffic source that causes flow control.

Explanation The diagnostic test has detected a low buffer rate for the fabric channel. Flow control is occurring in the system.

Recommended Action Analyze the system traffic and remove the traffic source that is causing flow control. Enter the **show fabric utilization** command to determine the overall traffic pattern.

Error Message %CONST_DIAG-4-ERROR_COUNTER_WARNING: Module [dec] Error counter exceeds threshold, system operation continue.

Explanation The TestErrorCounterMonitor has detected that an error counter in the specified module has exceeded a threshold. Specific data about the error counter will be sent in a separate system message. The TestErrorCounterMonitor is a non-disruptive health-monitoring background process that periodically polls the error counters and interrupt counters of each line card or supervisor module in the system.

Recommended Action To determine the cause of the error, 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show module, show logging, and show diagnostic events commands, the contents of the CONST_DIAG-4-ERROR_COUNTER_DATA system message, and your pertinent troubleshooting logs.

Error Message %CONST_DIAG-4-ERROR_COUNTER_DATA: ID:[dec] IN:[dec] PO:[dec] RE:[dec]
RM:[dec] DV:[dec] EG:[dec] CF:[dec] TF:[dec]

Explanation The TestErrorCounterMonitor has detected that an error counter in the specified module has exceeded a threshold. This message contains specific data about the error counter, including the ASIC and register of the counter, and the error count.

Recommended Action To determine the cause of the error, 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 that you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show module, show logging, and show diagnostic events commands and your pertinent troubleshooting logs.

CONST_DIAG-6

Error Message %CONST_DIAG-6-DIAG_ONDEMAND_NOT_SUPPORTED: [chars] is not supported
on-demand for module [dec]

Explanation The specified on-demand online diagnostics are not supported on the specified module.

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

Error Message %CONST_DIAG-6-DIAG_PORT_SKIPPED: Module [dec] port [dec] is skipped in [chars] due to: [chars].

Explanation The specified diagnostic test was not performed on this port because the port loopback could not be configured at test time.

Recommended Action No action is required. Although the test cannot be run at this time, this message does not indicate a problem.

Error Message %CONST_DIAG-6-DIAG_RERUN_RESET: Resetting Module [dec] to re-run
[chars] diagnostic

Explanation The system is resetting the module to rerun diagnostics.

Recommended Action No action is required. The system is working properly.

Error Message %CONST_DIAG-6-DIAG_SW_LPBK_TEST_INFO: Module [[dec]/[dec]]:
TestMgmtPortsLoopback detected a minor error for port [dec]

Explanation The module failed the loopback test. The is an informational message.

Error Message Re-run the test with the NO RESET option after resetting the module. If it fails again with the same error message, copy the message exactly as it appears. Include the system configuration along with any other relevant information. Contact your technical support representative for assistance.%CONST_DIAG-6-HM_MESSAGE: High traffic/CPU util seen on Module [dec] [SP=[dec]%, RP=[dec]%, Traffic=[dec]%]

Explanation The system bypassed the health-monitoring test on the specified module because of high utilization of system resources.

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

Error Message %CONST_DIAG-6-HM_TEST_INFO: CPU util(5sec): SP=[dec]% RP=[dec]%
Traffic=[dec]% netint_thr_active[[dec]], Tx_Rate[[dec]], Rx_Rate[[dec]]

Explanation This message provides system resource information during an event.

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

Error Message %CONST_DIAG-6-HM_TEST_RECOVERED: Module [dec] [chars] recovered after
[dec] consecutive failure(s)

Explanation The health-monitoring test recovered from transient failure on the specified module.

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

```
Error Message %CONST_DIAG-6-HM_TEST_SP_INFO: [chars][[dec]]:
last_busy_percent[[dec]%], Tx_Rate[[dec]], Rx_Rate[[dec]]
```

Explanation This message provides system resource information during an event.

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

Error Message %CONST_DIAG-6-RW_ENGINE_DROP_INFO: Rewrite engine over-subscription detected for module [dec] channel [dec]: At least [int] packets were dropped.

Explanation Rewrite engine over-subscription detected.

Recommended Action No action required.

CONST_DIAG Messages