# **DBUS Messages**

This section contains data bus (DBUS) messages.

### **DBUS-3**

Error Message %DBUS-3-MSGPABADCONFIG: Slot [dec] has an unsucessfully configured PA
in bay [dec]

**Explanation** The port adapter (PA) in the slot is not successfully configured, either because the VIP is incompatible with it or because the Cisco IOS has no pertinent drivers.

**Recommended Action** Refer to the documentation of the PA to get a list of compatible VIPs. If the VIP that contains the PA is listed as supported, verify that your Cisco IOS version supports the PA. Otherwise, place the PA in one of the supported VIPs and verify that the Cisco IOS version supports the PA.

Error Message %DBUS-3-MSGPAUNSUP: Slot [dec] has an unsupported PA in bay [dec]

**Explanation** The port adapter (PA) in the slot is not supported, either because the VIP is incompatible with it or because the Cisco IOS has no pertinent drivers.

**Recommended Action** Refer to the documentation of the PA to get a list of compatible VIPs. If the VIP that contains the PA is listed as supported, verify that your Cisco IOS version supports the PA. Otherwise, place the PA in one of the supported VIPs and verify that the Cisco IOS version supports the PA.

Error Message %DBUS-3-ORFS\_NOTINITIALIZED: ORFS is not initialized

**Explanation** When the OIR Remove Failing Slot (ORFS) feature is configured, the software attempts to initialize parameters. This initialization failed and the service will not be available.

**Recommended Action** Try entering the **service oir-remove-failing-slot** command again. This error message should not cause any functional failures. If the message causes a Cisco IOS performance issue, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at

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

# **DEV\_SELENE Messages**

This section contains messages related to the Selene FPGA device.

#### **DEV-SELENE-3**

Error Message %DEV\_SELENE-3-DEV\_INIT\_FAILURE: Selene [dec] initialization failed.

**Explanation** The initalization of the Selene FPGA device on this linecard failed.

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 %DEV\_SELENE-3-EFIFO\_ECC: Selene [dec] Egress [dec] Burst FIFO Read ECC
error

**Explanation** A FIFO ECC error condition was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-FIFO\_ECC: Selene [dec] Ingress [dec] [chars] Priority
FIFO Read ECC Error

**Explanation** An ECC Error was detected while reading from a queue in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-FIFO\_FULL: Selene [dec] Ingress [dec] [chars] Priority
FIFO Full

**Explanation** An ingress packet queue full condition was detected in a FPGA device on the linecard. This may be caused by a flow-control misconfiguration due to incorrect software.

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 %DEV\_SELENE-3-FIFO\_SEQ: Selene [dec] Egress [dec] Burst FIFO Read
Sequence error

**Explanation** A FIFO sequence error condition was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-INV\_POE: Selene [dec] Egress [dec] Invalid POE error,
[hex]

**Explanation** An invalid Port of Exit error condition was detected in a FPGA device on the linecard. This may be caused by incorrect software.

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 %DEV\_SELENE-3-INV\_VLAN: Selene [dec] Egress [dec] Invalid Vlan error

**Explanation** An invalid vlan error condition was detected in a FPGA device on the linecard. This may be caused by a software error.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-MRX\_CRC: Selene [dec] Metropolis Rx [dec] Packet CRC
Error

**Explanation** A packet checksum error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-MRX\_FCS: Selene [dec] Metropolis Rx [dec] Packet Header Checksum Error

**Explanation** A packet header checksum error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-MRX\_GNT: Selene [dec] Metropolis Rx [dec] Giant Packet
Error

**Explanation** A giant frame was received in a FPGA device on the linecard. This may be due to incorrect software.

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 %DEV\_SELENE-3-MRX\_LEN: Selene [dec] Metropolis Rx [dec] Packet Length
Mismatch

**Explanation** An incorrect length was detected for packet received in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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** %DEV\_SELENE-3-MRX\_MIN: Selene [dec] Metropolis Rx [dec] Minimum Packet Length Error

**Explanation** A frame smaller than the minimum size was received in a FPGA device on the linecard. This may be due to incorrect software.

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 %DEV\_SELENE-3-MRX\_SEQ: Selene [dec] Metropolis Rx [dec] Sequence Error

**Explanation** A sequence error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-SRAM\_ECC: Selene [dec] SRAM [chars] [chars] ECC error,
error status: [hex]

**Explanation** An ECC error was detected in SRAM memory in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-XAUI\_CODE: Selene [dec] XAUI [dec] Coding Error

**Explanation** A XAUI lane coding error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction

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 %DEV\_SELENE-3-XAUI\_CRC: Selene [dec] XAUI [dec] Checksum Error

**Explanation** A XAUI interface checksum error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction

**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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-XAUI\_FRM: Selene [dec] XAUI [dec] Framing error

**Explanation** XAUI interface framing error was detected on a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-XAUI\_GNT: Selene [dec] XAUI [dec] Giant Frame Error

**Explanation** A giant frame was detected in a FPGA device on the linecard. This may be due to incorrect software.

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 %DEV\_SELENE-3-XAUI\_LEN: Selene [dec] XAUI [dec] Packet Length Error

**Explanation** A packet with bad length value was detected in a FPGA device on the linecard. This may be caused by incorrect Network Processor software.

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 %DEV\_SELENE-3-XAUI\_MIN: Selene [dec] XAUI [dec] Min Packet Size Error

**Explanation** A frame smaller than the minimum allowed size was detected in a FPGA device on the linecard. This may be due to incorrect software.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-XAUI\_RX\_RDY: Selene [dec] XAUI [dec] Rx Rdy changed
state

**Explanation** XAUI interface on a FPGA device on the linecard changed receive ready state. This may be caused by a hardware malfunction.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-XAUI\_SEQ: Selene [dec] XAUI [dec] Sequence Error

**Explanation** A XAUI interface sequence error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction

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 %DEV\_SELENE-3-XAUI\_TX\_ECC: Selene [dec] XAUI [dec] Tx FIFO ECC error

**Explanation** A FIFO queue ECC error was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

**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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %DEV\_SELENE-3-XAUI\_TX\_FULL: Selene [dec] XAUI [dec] Tx FIFO Full

**Explanation** A FIFO queue full condition was detected in a FPGA device on the linecard. This may be caused by a hardware malfunction.

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 %DEV\_SELENE-3-XAUI\_TX\_RDY: Selene [dec] XAUI [dec] Tx Rdy changed
state

**Explanation** XAUI interface on a FPGA device on the linecard changed transmit ready state. This may be caused by a hardware malfunction.

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.

### **DEV-SELENE-5**

Error Message %DEV\_SELENE-5-FC\_CS: Selene [dec] Channel [int] Egress Flow-control
Status change

**Explanation** A flow-control status change was detected between a FPGA device and a network processor on the linecard.

**Recommended Action** No action is required.

# **DFP Messages**

This section contains Dynamic Feedback Protocol messages.

Error Message %DFP-4-ENQUEUE: Process enqueue failed: [chars]

**Explanation** An unexpected error occurred while enqueueing a DFP element.

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

# **DHCPD Messages**

This section contains Dynamic Host Configuration Protocol daemon (DHCPD) messages.

### **DHCPD-2**

**Error Message** %DHCPD-2-(-1): DHCP could not start its [chars] process.

**Explanation** The DHCP process could not start one of its processes.

**Recommended Action** Upgrade to a larger memory configuration.

# **DHCP\_SNOOPING Messages**

This section contains Dynamic Host Configuration Protocol Snooping (DHCP\_SNOOPING) messages.

## **DHCP\_SNOOPING-3**

Error Message %DHCP\_SNOOPING-3-DHCP\_SNOOPING\_INTERNAL\_ERROR: DHCP Snooping internal
error, [chars]

**Explanation** A software verification test failed in the DHCP snooping process.

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

## **DHCP\_SNOOPING-4**

Error Message %DHCP\_SNOOPING-4-AGENT\_OPERATION\_FAILED: DHCP snooping binding
transfer failed. [chars]

**Explanation** This message provides the reason for failure when a database transfer has failed.

**Recommended Action** No action is required.

Error Message %DHCP\_SNOOPING-4-AGENT\_OPERATION\_FAILED\_N: DHCP snooping binding
transfer failed([dec]). [chars]

**Explanation** This message provides the reason for failure when a database transfer has failed. This log message is rate limited.

**Recommended Action** No action is required.

Error Message %DHCP\_SNOOPING-4-DHCP\_SNOOPING\_ERRDISABLE\_WARNING: DHCP Snooping
received [dec] DHCP packets on interface [chars]

**Explanation** DHCP Snooping detected a DHCP packet rate limit violation on a particular interface. The interface will be error disabled.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-4-IP\_SOURCE\_BINDING\_PVLAN\_WARNING: IP source filter may not take effect on secondary vlan [dec] where IP source binding is configured. [chars]

**Explanation** If the private VLAN feature is enabled, the IP source filter on the primary VLAN will automatically propagate to all secondary VLANs.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-4-QUEUE\_FULL: Fail to enqueue DHCP packet into processing queue: [chars], the queue is most likely full and packet will be dropped.

**Explanation** DHCP packets are coming into the CPU at a much higher rate than the DHCP snooping process can handle them. These unhandled DHCP packets will be dropped to prevent system from denial of service attack.

**Recommended Action** No action is required.

Error Message %DHCP\_SNOOPING-4-SSO\_SYNC\_ACK\_ERROR: Error is encountered in processing acknowledgement for DHCP snooping binding sync, %s. ack message txn id: 0x%x

**Explanation** An error occurred in handling the acknowledgement of DHCP snooping binding synchronization. This message is usually caused by the ACK message being ignored.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-4-STANDBY\_AGENT\_OPERATION\_FAILED: DHCP snooping binding transfer failed on the Standby Supervisor. %s

**Explanation** This message provides the reason of failure when a database transfer has failed on the standby supervisor.

**Recommended Action** No action is required.

## **DHCP\_SNOOPING-5**

 $\textbf{Error Message} \; \texttt{%DHCP\_SNOOPING-5-DEST\_NOT\_FOUND: \$s: Could not find destination port. } \\ \textbf{Destination MAC \$e}$ 

**Explanation** The switch is unable to determine the destination port for a DHCP reply. This message may be an indication of a malicious user connected to the port.

**Recommended Action** Using debug commands, identify the users that are attached to the port. Enter the **debug ip dhcp snooping** mac-addr command, where mac-addr is the MAC address shown in the error message. Any subsequent DHCP packet that is received with mac-addr as the source MAC or DHCP CHADDR (client hardware address) will cause a message to appear on the console indicating the port from which the packet originated. If the error message recurs, check the user connected to the port indicated in the debug message.

### **DHCP SNOOPING-6**

**Error Message** %DHCP\_SNOOPING-6-AGENT\_OPERATION\_SUCCEEDED: DHCP snooping database [chars] succeeded.

**Explanation** The given binding transfer has succeeded. This message is logged only once after some failure to indicate that the switch has recovered from failures.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-6-BINDING\_COLLISION: Binding collision. [dec] bindings ignored

**Explanation** The given number of bindings from the database file have been ignored when the file is read. The bindings are ignored because the system has a binding for the given MAC address and VLAN combination by the time the switch read the ignored binding from the file.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-6-INTERFACE\_NOT\_VALID: Interface not valid. [dec] bindings ignored.

**Explanation** The given number of bindings from the database file have been ignored when the file is read. The bindings are ignored because the interface specified by the ignored binding either does not exist in the system or it's a router or DHCP snooping trusted port.

**Recommended Action** No action is required.

Error Message %DHCP\_SNOOPING-6-LEASE\_EXPIRED: Lease Expired. [dec] bindings ignored.

**Explanation** The specified number of bindings from the database file have been ignored when the file is read. The bindings are ignored because their lease has expired.

**Recommended Action** No action is required.

Error Message %DHCP\_SNOOPING-6-PARSE\_FAILURE: Parsing failed for [dec] bindings.

**Explanation** The specified number of bindings from the database file have been ignored when the file is read. The bindings are ignored because of parsing failures.

**Recommended Action** No action is required.

**Error Message** %DHCP\_SNOOPING-6-VLAN\_NOT\_SUPPORTED: Vlan not supported. [dec] bindings ignored.

**Explanation** The specified number of bindings from the database file have been ignored when the file is read. The bindings are ignored because the VLAN specified by the ignored binding no longer exists in the system.

**Recommended Action** No action is required.

## DHCP\_SNOOPING\_CAT3550 Messages

This section contains Dynamic Host Configuration Protocol Snooping (DHCP\_SNOOPING) messages for the Cisco Catalyst 3550.

## DHCP\_SNOOPING\_CAT3550-3

Error Message %DHCP\_SNOOPING\_CAT3550-3-MVR\_INSTALL: Cannot install [chars] ACLs for DHCP Snooping, probably no TCAM space

**Explanation** There is insufficient space in the TCAM to install the specified ACLs for DHCP snooping.

**Recommended Action** Reduce the number of PACLs or VACLs to make space in the TCAM.

 $\label{lem:continuous} \textbf{Error Message} \quad \text{%DHCP\_SNOOPING\_CAT3550-3-UNEXPECTED\_EVENT: Process received unknown event (major [hex], minor [hex]).}$ 

**Explanation** A process can register to be notified when various events occur in the router. This message indicates that a process received an event it did not know how to handle.

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

## DHCP\_SNOOPING\_ISSU Messages

This section contains Dynamic Host Configuration Protocol Snooping (DHCP\_SNOOPING) in-service software upgrade (ISSU) messages.

### **DHCP SNOOPING ISSU-2**

**Error Message** %DHCP\_SNOOPING\_ISSU-2-GET\_BUFFER: DHCP Snooping ISSU client failed to get buffer for message. Error: %d (%s)

**Explanation** The DHCP snooping 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 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-2-INIT: DHCP Snooping ISSU client initialization
failed to %s. Error: %d (%s)

**Explanation** The DHCP snooping 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %DHCP\_SNOOPING\_ISSU-2-SEND\_NEGO\_FAILED: DHCP Snooping ISSU client
failed to send negotiation message. Error: %d (%s)

**Explanation** The DHCP snooping 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.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-2-SESSION\_NEGO: DHCP Snooping ISSU client
encountered unexpected client nego\_done. Error: %d (%s)

**Explanation** An ISSU-compliant client transitions through a series of internal states. The DHCP snooping 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.

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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** %DHCP\_SNOOPING\_ISSU-2-SESSION\_REGISTRY: DHCP Snooping ISSU client failed to register session information. Error: %d (%s)

**Explanation** The DHCP snooping ISSU client failed 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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.

## DHCP\_SNOOPING\_ISSU-3

**Error Message** %DHCP\_SNOOPING\_ISSU-3-INVALID\_SESSION: DHCP Snooping ISSU client does not have a valid registered session.

**Explanation** The DHCP snooping ISSU client does not have a valid registered session.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-3-MSG\_NOT\_OK: DHCP Snooping ISSU client 'Message
Type %d' is not compatible

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

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-3-MSG\_SIZE: DHCP Snooping ISSU client failed to
get the MTU for Message Type %d. Error: %d (%s)

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

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-3-SESSION\_UNREGISTRY: DHCP Snooping ISSU client
failed to unregister session information. Error: %d (%s)

**Explanation** The DHCP snooping ISSU client failed to unregister session information.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %DHCP\_SNOOPING\_ISSU-3-TRANSFORM\_FAIL: DHCP Snooping ISSU client %s
transform failed for 'Message Type %d'. Error: %d (%s)

**Explanation** The DHCP snooping 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 DHCP snooping 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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.

# **DHCPV6C Messages**

This section contains DHCPv6 client messages.

Error Message %DHCPV6C-3-NOPACKET: Cannot setup or duplicate a socket packet

**Explanation** An error occurred that is probably related to a resource problem within the system.

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

Error Message %DHCPV6C-3-NOSOCKET: Cannot create DHCPv6 client socket

**Explanation** A DHCPv6 socket could not be created. This error is probably the result of either IP not being enabled on any interface or a resource problem with the system.

**Recommended Action** Enable IP on the interface. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration.

# **DHCPV6S Messages**

This section contains DHCPv6 server messages.

Error Message %DHCPV6S-3-DBNOTLOADED: Binding database not loaded

**Explanation** A DHCPv6 binding database could not be loaded.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %DHCPV6S-3-DBOPEN: Openning [chars]: [chars]

**Explanation** A DHCPv6 binding database file could not be opened.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center 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 %DHCPV6S-3-DBREAD: Reading file: [chars]

**Explanation** A DHCPv6 binding database file could not be read.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %DHCPV6S-3-DBWRITE: Writing file: [chars]

**Explanation** The system could not write to a DHCPv6 binding database file.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %DHCPV6S-3-NOPACKET: Cannot setup or duplicate a DHCPv6 server socket
packet

**Explanation** An error occurred that is probably due to a resource problem within the system.

**Recommended Action** No action is required.

## **DIAG Messages**

This section contains online diagnostics (DIAG) messages.

#### DIAG-3

Error Message %DIAG-3-ALWAYS\_ENABLE\_TEST: [chars]: The users are not allow to disable monitoring for Test #[dec]

**Explanation** The specified health monitoring test cannot be disabled.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-3-FIXED\_INTERVAL\_TEST: [chars]: The users are not allow to change monitoring interval of Test #[dec]

**Explanation** The specified health monitoring test interval cannot be changed.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-3-INVALID\_DEVICE: Invalid device number : [chars]

**Explanation** The system made a diagnostics request on a device that does not exist.

**Recommended Action** Ensure that the specified device number exists and is valid.

Error Message %DIAG-3-INVALID\_MONITORING\_INTERVAL: [chars]: The [chars][ID=[dec]]
monitoring interval must be at least [dec] millisec

**Explanation** The specified test monitoring interval is too small.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-3-INVALID\_TEST: Invalid test: [chars]

**Explanation** A test that does not exist was requested. [chars] describes the test.

**Recommended Action** Ensure the specified test is supported by the switching module. The list of available tests and their associated test IDs can be retrieved using the **show diagnostic content** command.

Error Message %DIAG-3-MONITOR\_DISABLE: [chars]: The monitoring test:[dec] is disable
since default interval is Zero

**Explanation** The specified test is no longer a health-monitoring test.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-3-MONITOR\_INTERVAL\_ZERO: [chars]: Monitoring interval is 0.
Cannot enable monitoring for Test #[dec]

**Explanation** The system cannot enable health monitoring for the specified test because the interval is set to zero.

**Recommended Action** Reset the health monitoring interval for the test, and reenable health monitoring.

**Error Message** %DIAG-3-NOT\_MONITORING\_TEST: [chars]: The test:[dec] cannot be used as health monitoring test

**Explanation** The specified test is not a health-monitoring test.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-3-TEST\_SKIPPED: [chars]: [chars]{ID=[dec]} is skipped

**Explanation** The diagnostic test cannot be run.

**Recommended Action** No action is required. The system is working properly.

#### DIAG-4

**Error Message** %DIAG-4-CONFIG\_REAPPLY: Please reapply config command [chars] after the card is online.

**Explanation** This message appears when the specified configuration command cannot be applied. [chars] is the configuration command that you must reapply.

**Recommended Action** The system is working properly and the specified command cannot be applied. Reapply the configuration command after the module is online.

### DIAG-6

Error Message %DIAG-6-SCHEDULE\_IS\_REMOVED: [chars]: Schedule Diagnostic for [[chars]
[chars] [dec]:[dec].] is removed

**Explanation** The scheduled online diagnostics test was removed because the test is no longer applicable.

**Recommended Action** No action is required. The system is working properly.

Error Message %DIAG-6-SIMULATED\_TEST\_RESULT: [chars]: [chars] test result is simulated.

**Explanation** The result of the specified test is simulated. The message does not indicate a software or hardware fault. The first [chars] is the message notification and the second [chars] is the test name.

Recommended Action No action is required. The test failure is simulated as specified by the user.

**Error Message** %DIAG-6-SKIP\_ONDEMAND\_ACTIVE\_TO\_STANDBY\_TEST: [chars]: [chars] cannot be executed.

**Explanation** The diagnostics test is bypassing the specified redundant test because the redundant test cannot be executed.

**Recommended Action** No action is required. The system is working properly.

**Error Message** %DIAG-6-TEST\_SKIPPED\_FROM\_ACTIVE: [chars]: [chars] cannot be executed from active supervisor.

**Explanation** The specified test cannot be run from the active supervisor engine.

**Recommended Action** No action is required. The test cannot be run, but the system is working properly.

### **DIAG-SP**

Error Message %DIAG-SP-6-DIAG\_OK: %s: Passed %s

**Explanation** The diagnostic tests did not detect any error on the card.

**Recommended Action** This is an informational message stating that the line card passed the diagnostic tests.

**Error Message** %OIR-SP-6-DOWNGRADE\_EARL: Module %d %s installed is not identical to system PFC and will perform at current system operating mode.

**Explanation** The PFC/DFC module is at a higher hardware revision than the level of the system PFC. The PFC/DFC module will operate at the same level as that of the system PFC.

Recommended Action No action is required.

Error Message %DIAG-SP-6-RUN\_MINIMUM: %s: Running Minimal Diagnostics...

**Explanation** Minimum Diagnostic is running on the card

**Recommended Action** This is an informational message and the system is working properly.

# **DLSWC Messages**

This section contains Data-link Switching System messages.

### **DLSWC-3**

Error Message %DLSWC-3-NOPEER: [chars]

**Explanation** A data-link switching system 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.

# **DLSWP Messages**

Error Message %DLSWP-3-PEERFAILURE: [chars] [chars]

#### **Explanation** A DLSW peer failed:

- keepalive failure, dlsw between cisco peers is sending a peer keepalive by default every 30 sec. After missing 3 consecutive keepalives the peer is taken down.
- We are not promiscuous, Rej conn from peer a.b.c.d

The local dlsw peer is not configured for promiscuous and we receive a request to open a dlsw peer for which we have no corresponding dlsw remote peer statement.

- received tcp fini, dlsw peer code has received a tcp fini from the underlaying tcp subsystem. To obey the tcp fini dlsw wring bring down the peer connection for which the tcp fini was received.

Recommended Action - keepalive failure. Check end to end connectivity between the DLSW peers

- -We are not promiscuous, Rej conn from peer a.b.c.d correct your configuration.
- received tcp fini, Check the underlaying tcp connection between the two dlsw peers.

# **DM Messages**

This section contains Dispatch Manager (DM) messages.

Error Message %DM-1-CORRUPT\_MLIST: [chars]: attached-message list corrupted -[[dec],[dec]] overlaps [[dec],[dec]]

**Explanation** A Dispatch Manager list of attached messages was found to be corrupt.

**Recommended Action** This is an internal error and should be reported to TAC. A memory dump should be taken (to assist TAC) and the application should be restarted.

Error Message %DM-4-FATTACH: [chars]: event\_file\_attach failure for fd [dec], cond
[dec]: [chars].

**Explanation** An ionotify call to request a file-state notification has failed.

**Recommended Action** This is an internal error and should be reported to TAC. The server process for the failed fd has died or there is a connectivity failure. If you can determine which server failed, restart that server and the application with the ionotify error. If that fails, reboot the router.

Error Message %DM-1-HANDLE: [chars]: invalid dispatch danager handle -- [hex]

**Explanation** A Dispatch Manager call was made with an invalid dispatch manager handle.

**Recommended Action** This is an internal error and should be reported to TAC. The application process making the call has corrupted data or some other internal error. Restart the application. If that fails, reboot the router.

Error Message %DM-7-HEAP: [chars]: could not allocate from heap

**Explanation** A Dispatch Manager library function was not able to obtain HEAP memory space.

**Recommended Action** Either some process is using too much memory or there is not enough physical memory available in the router. Determine if an application is misbehaving by checking the amount of memory allocated to each application and noting whether one is unusually large. If there are no misbehaving applications, memory should be added to the router.

**Error Message** DM-4-RMCONTEXT: [chars]: could not allocate memory for Resource Manager context

**Explanation** The Dispatch Manager could not allocate memory to construct a Resource Manager context when delivering an RM message.

**Recommended Action** Either some process is using too much memory or there is not enough physical memory available in the router. Determine if an application is misbehaving by checking the amount of memory allocated to each application and noting whether one is unusually large. If there are no misbehaving applications, memory should be added to the router.

Error Message %DM-4-SIGACTION: [chars]: could not install signal handler for signal
[dec] [chars]

**Explanation** The Dispatch Manager signal thread must install a signal handler for each signal that it is watching.

Recommended Action This is an internal 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %DM-4-SIGHEAP: [chars]: could not allocate memory to deliver signal
[dec] [attempt [dec] of [dec]]

**Explanation** The Dispatch Manager signal thread could not allocate memory needed to deliver a signal message to the Dispatch Manager message channel. The Dispatch Manager will try to work around the problem by sending itself the same signal a few times.

**Recommended Action** Either some process is using too much memory or there is not enough physical memory available in the router. Determine if an application is misbehaving by checking the amount of memory allocated to each application and noting whether one is unusually large. If there are no misbehaving applications, memory should be added to the router.

Error Message %DM-1-SIGPATCH: [chars]: unexpected signal [dec] received

**Explanation** The Dispatch Manager signal handler should never be invoked directly.

Recommended Action This is an internal 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %DM-1-TIMEOUT: [chars]: timeout call failed, handle [hex]
```

**Explanation** A Dispatch Manager blocking call was made with an invalid timeout specification. The application process making the call has corrupted data or some other internal error.

**Recommended Action** Restart the application. If that fails, reboot the router. This is an internal error and should be reported. 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.

# **DMA Messages**

This section contains dynamic memory access (DMA) messages.

### DMA-3

Error Message %DMA-3-DTQ\_DISPATCH\_DIRTY\_PAK: pak not cleaned up by Egress processing
(appId [dec])

**Explanation** After DTQ dispatched a packet to egress processing, the packet was not cleaned up by the application.

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

# **DMB Messages**

This section contains Dynamic Message Broker (DMB) messages.

### DMB-0

Error Message %DMB-0-DMB\_EMERG: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying

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

### **DMB-1**

Error Message %DMB-1-DMB\_ALERT: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

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

### DMB-2

Error Message %DMB-2-DMB\_CRIT: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

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

### **DMB-3**

Error Message %DMB-3-DMB\_ERR: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

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

#### **DMB-4**

Error Message %DMB-4-DMB\_WARNING: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

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

## DMB-5

Error Message %DMB-5-DMB\_NOTICE: %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support

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

### **DMB-6**

Error Message %DMB-6-DMB\_INFO: %s

**Explanation** This message displays information from the Dynamic Message Broker (DMB).

**Recommended Action** No action is required.

#### **DMB-7**

Error Message %DMB-7-DMB\_ASSERT: Assertion Failure ( %s @%s:%d ) : %s

**Explanation** An internal error occurred in the Dynamic Message Broker (DMB).

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

# **DNET Messages**

Error Message %DNET-3-HEARSELF: Hello type [hex] for my address from [dec].[dec] via
[chars]

**Explanation** The system is receiving its own DECnet packets. Either a serial line is looped back or another host with the same DECnet address is already present on the LAN.

Recommended Action Check the serial lines (if present) and the DECnet configuration.

## **DOSFS Messages**

This section contains DOS file system (DOSFS) messages.

### DOSFS-3

Error Message %DOSFS-3-RESETERR: [chars] [chars]

**Explanation** The disk could not be reset while the system has initiated reload. A transient disk error or disk timeout error will occur when the ROMMON initialization code tries to reads the device information block. This is a transient error and the system will be able to access the disk and continue normal operation.

**Recommended Action** No action is required.

### DOSFS-4

Error Message %DOSFS-4-DFS\_FSCK\_ERR: Error while running fsck on the file [chars].

**Explanation** The file system consistency check (fsck) program became stuck in a loop while walking through the cluster chain of a file and has aborted.

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

### DOSFS-5

Error Message %DOSFS-5-DFS\_CLOSE\_ERR: Error during close of the file [chars].
[chars]

**Explanation** An error occurred during a file-close operation.

**Recommended Action** Enter the **fsck** *filesystem prefix:* command to check and attempt to repair the disk. If this does not fix the problem, format the disk.

Error Message %DOSFS-5-DIBERR: [chars] [chars]

**Explanation** The system cannot boot an image from the flash disk because the device information block (DIB) is different. The flash disk can be read by the router, but will require formatting by the router before an image can be booted from it.

**Recommended Action** Follow any instructions provided in the error message. Before storing an image to the flash disk and trying to boot from this device, enter the **format** command to format the flash disk from the router. Copy the desired image to the flash disk and boot from the device.

## **DOT1AD Messages**

This section contains 801.1ad messages.

### DOT1AD-4

**Error Message** %DOT1AD-4-DOT1QTUNNEL\_PORT: Port %s is a dot1q-tunnel port, it conflicts with Dot1ad configuration

**Explanation** IEEE 802.1ad configuration cannot coexist with 802.1q tunnel ports.

**Recommended Action** Disable the 802.1q tunnel configuration on the ports before enabling 802.1ad.

 $\textbf{Error Message} ~ \texttt{%DOT1AD-4-DOT1X\_PORT:} ~ \texttt{Port \$s is configured for DOT1X, it conflicts with Dot1ad configuration}$ 

**Explanation** IEEE 802.1ad configuration cannot coexist with 802.1X enabled ports.

Recommended Action Disable the 802.1X configuration on the ports before enabling 802.1ad.

**Error Message** %DOT1AD-4-ETHERTYPEMISMATCH\_PORT: Port %s ethertype cannot be changed to Dot1ad ethertype, it conflicts with Dot1ad configuration

**Explanation** The Ethertype on the port cannot be changed to 802.1ad Ethertype.

**Recommended Action** Replace the module with a unit that supports Ethertype change, or power down the module before enabling 802.1ad.

**Error Message**  $DOT1AD-4-L2PT_PORT$ : Port %s is a 12protocol-tunnel port, it conflicts with Dot1ad configuration

**Explanation** IEEE 802.1ad configuration cannot coexist with a Layer 2 protocol tunnel port.

**Recommended Action** Disable the Layer 2 protocol tunnel configuration on the port before enabling 802.1ad.

**Explanation** IEEE 802.1ad configuration cannot coexist with LACP ports.

**Recommended Action** Disable the LACP configuration on the port before enabling 802.1ad.

**Error Message** %DOT1AD-4-OAM\_PORT: Port %s is configured for OAM, it conflicts with Dot1ad configuration

**Explanation** IEEE 802.1ad configuration cannot coexist with OAM-enabled ports.

Recommended Action Disable the OAM configuration on the port before enabling 802.1ad.

**Error Message** %DOT1AD-4-PLATFORM\_RESOURCE\_UNAVAILABLE: Platform does not have resouces to support dot1ad configuration

**Explanation** The hardware match registers required by 802.1ad are not available.

**Recommended Action** Unconfigure the features that use the match registers (such as CFM or CGVRP) before enabling 802.1ad.

**Error Message** %DOT1AD-4-STP\_CONFLICT: STP mode conflicts with Dot1ad configuration as it is not in MST mode

**Explanation** The current Spanning Tree Protocol (STP) mode conflicts with the 802.1ad configuration.

**Recommended Action** Change the STP mode to Multiple Spanning Tree (MST) before enabling 802.1ad.

# **DOT1Q\_TUNNELLING Messages**

This section contains 801.1Q tunnelling messages.

### **DOT1Q TUNNELLING-4**

Error Message %DOT1Q\_TUNNELLING-4-MTU\_WARNING:

System MTU of [dec] might be insufficient for 802.1Q tunnelling. 802.1Q tunnelling requires system MTU size of [dec] to handle maximum size ethernet frames.

**Explanation** The system MTU setting might not be a large enough value to support 802.1Q tunnelling. When 802.1Q tunnelling is being used, the system MTU setting might need to be adjusted to add the 4-byte overhead associated with the additional 802.1Q tag.

**Recommended Action** Enter the **system mtu** command in global configuration mode to adjust the system MTU setting to take into account the additional 802.1Q tag.

# **DOT1X Messages**

This section contains IEEE 802.1X (DOT1X) messages.

### **DOT1X-4**

Error Message %DOT1X-4-UNKN\_ERR: An unknown operational error occurred.

**Explanation** The 802.1X process cannot operate due to an internal system error.

Recommended Action Reload the device.

### **DOT1X-5**

**Explanation** Authentication using 802.1X is not allowed for a host whose MAC address is configured as a drop entry in the MAC address table.

**Recommended Action** Remove the drop entry if this host is to be allowed access.

Error Message %DOT1X-5-ERR\_INVALID\_AAA\_ATTR: Got invalid AAA attribute settings
[chars]

**Explanation** The authorization settings that were obtained are either unsupported or are invalid.

**Recommended Action** Change the value so that the correct settings are obtained.

Error Message %DOT1X-5-ERR\_INVALID\_TUNNEL\_MEDIUM\_TYPE: Got an invalid value [chars]
for TUNNEL\_MEDIUM\_TYPE [chars]

**Explanation** The provided TUNNEL\_MEDIUM\_TYPE is either unsupported or invalid.

**Recommended Action** Change the tunnel medium type value to one that is supported.

Error Message %DOT1X-5-ERR\_INVALID\_TUNNEL\_TYPE: Got an invalid value of [chars] for TUNNEL\_TYPE [chars]

**Explanation** The provided TUNNEL\_TYPE is either unsupported or invalid.

**Recommended Action** Change the tunnel type value to one that is supported.

**Explanation** The 802.1X process could not successfully apply a per-user IP ACL. A possible reason for this condition could be an invalid per-user base (or pub) ACL from the RADIUS server.

**Recommended Action** Examine the per-user base configuration for the RADIUS server and configure a correct one.

**Explanation** The 802.1X process could not successfully apply a per-user MAC ACL. A possible reason for this condition could be an invalid per-user base (or pub) ACL from the RADIUS server.

**Recommended Action** Examine the per-user base configuration for the RADIUS server and configure a correct one.

Error Message %DOT1X-5-ERR\_PVLAN: Dot1x cannot be enabled on private vlan port
[chars]

**Explanation** 802.1X could not be enabled on the specified private VLAN port. This condition was caused by trying to set 802.1X port control to automatic mode on a PVLAN port.

**Recommended Action** Change the port to access or routed mode, and retry enabling 802.1X on the port.

**Error Message** %DOT1X-5-ERR\_PVLAN\_EQ\_VVLAN: Dot1x can not be enabled on a port with Access VLAN equal to Voice VLAN.

**Explanation** A port could not enable 802.1X because the access VLAN is equal to a voice VLAN. This condition was caused by trying to set 802.1X port control to automatic or force-unauthorized mode on a voice VLAN that is equal to an access VLAN port.

**Recommended Action** Change the voice VLAN or the access VLAN on the interface, and retry the 802.1X operation.

**Error Message**  $DOT1X-5-ERR_PVLAN_TRUNK: Dot1x can not be enabled on private VLAN trunk ports.$ 

**Explanation** 802.1X cannot coexist with private VLAN trunking on the same port.

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

**Error Message** %DOT1X-5-ERR\_RADIUSVLAN\_EQ\_VVLAN: RADIUS attempted to assign a VLAN to Dot1x port [chars] whose Voice VLAN is same as AccessVlan

**Explanation** The RADIUS server attempted to assign a VLAN to a supplicant on a port with a voice VLAN that is equal to an access VLAN.

**Recommended Action** Either update the RADIUS configuration so that an access VLAN is not equal to voice VLAN or change the voice VLAN on the specified port.

**Error Message** %DOT1X-5-ERR\_STATIC\_MAC: Dot1x can not be enabled on a port configured with Static MAC addresses.

**Explanation** A port could not enable 802.1X because the port is configured with static MAC addresses. This condition was caused by trying to set 802.1X port control to auto or force-unauthorized mode on a port that is configured with static MAC addresses.

Recommended Action Remove the static MAC addresses on the port, and retry the 802.1X operation.

 $\textbf{Error Message} ~ \text{%DOT1X-5-ERR\_VLAN\_INTERNAL:} ~ \text{The VLAN [dec] is being used internally and cannot be assiged for use on the Dot1x port [chars] Vlan}$ 

**Explanation** The VLAN is used internally and cannot be assiged for use again on this port

**Recommended Action** Update the configuration to not use this VLAN.

**Error Message** %DOT1X-5-ERR\_VLAN\_INVALID: The VLAN [dec] is invalid and cannot be assiged for use on the Dot1x port [chars] Vlan

**Explanation** The VLAN specified is out of range and cannot be assiged for use on this port.

Recommended Action Update the configuration to use a valid VLAN.

**Error Message** %DOT1X-5-ERR\_VLAN\_RESERVED: The VLAN [dec] is a reserved vlan and cannot be assiged for use on the Dot1x port [chars] Vlan

**Explanation** The VLAN specified is a reserved VLAN and cannot be assigned for use on this port.

**Recommended Action** Update the configuration to not use this VLAN.

 $\label{lem:configured:configure$ 

**Explanation** 802.1X cannot coexist on the same port with Voice VLANs.

**Recommended Action** Remove voice VLANs configuration on this port and retry the 802.1X operation.

Error Message %DOT1X-5-FAIL: Authentication failed for client (%s) on Interface %s

**Explanation** Authentication was unsuccessful for the specified client.

**Recommended Action** No action is required.

 ${\bf Error\; Message}\;$  %DOT1X-5-SUCCESS: Authentication successful for client (%s) on Interface %s

**Explanation** Authentication was successful for the specified client.

Recommended Action No action is required.

# **DOT1X\_SWITCH Messages**

This section contains 802.1X switch messages.

## DOT1X\_SWITCH-4

Error Message %DOT1X\_SWITCH-4-PROC\_START\_ERR: Unable to start dot1x switch process.

**Explanation** The system failed to create the 802.1X switch process.

Recommended Action Reload the device.

## DOT1X\_SWITCH-5

Error Message %DOT1X\_SWITCH-5-ERR\_ADDING\_ADDRESS: Unable to add address %e on %s

**Explanation** The authenticated host's address could not be added. This is probably because either the TCAM is full or the address exists as a secure address on another port.

**Recommended Action** If the TCAM is full, clear some dynamic addresses to make room for the host's address. If the host's address is secured on another port, manually remove it from that port.

 $Error\ Message\ \text{%DOT1X\_SWITCH-5-ERR\_INVALID\_PRIMARY\_VLAN:}$  Attempt to assign primary VLAN %d to 802.1x port %s

**Explanation** An attempt was made to assign a primary VLAN to an 802.1x port, which is not allowed.

**Recommended Action** Update the configuration to use a different VLAN.

Error Message %DOT1X\_SWITCH-5-ERR\_INVALID\_SEC\_VLAN: Attempt to assign invalid
secondary VLAN %d to PVLAN host 802.1x port %s

**Explanation** An attempt was made to assign a non-secondary VLAN to a PVLAN host 802.1x port.

**Recommended Action** Change the mode of the port so that it is no longer a PVLAN host port or use a valid secondary VLAN.

Error Message %DOT1X\_SWITCH-5-ERR\_PRIMARY\_VLAN\_NOT\_FOUND: Primary VLAN for VLAN
[dec] does not exist or is shutdown for dot1x port [chars]

**Explanation** An attempt was made to use a private VLAN whose primary VLAN does not exist or is shut down.

**Recommended Action** Make sure the primary VLAN exists and is not shut down. Also verify that the private VLAN is associated with a primary VLAN.

**Error Message** %DOT1X\_SWITCH-5-ERR\_RADIUS\_VLAN\_NOT\_FOUND: Attempt to assign non-existent VLAN %s to dot1x port %s

**Explanation** An attempt was made by RADIUS to assign a VLAN with a particular name or ID to a supplicant on a port, but the name or ID could not be found on the switch.

Recommended Action Make sure a VLAN with the specified name or ID exists on the switch.

Error Message %DOT1X\_SWITCH-5-ERR\_SEC\_VLAN\_INVALID: Attempt to assign secondary VLAN
%d to non-PVLAN host 802.1x port %s

**Explanation** An attempt was made to assign a secondary VLAN to a port that is not a PVLAN host port, which is not allowed.

**Recommended Action** Change the mode of the port so that it is configured as a PVLAN host port or use a different VLAN that is not configured as a secondary VLAN.

**Error Message** %DOT1X\_SWITCH-5-ERR\_SPAN\_DST\_PORT: Attempt to assign VLAN %d to 802.1x port %s, which is configured as a SPAN destination

**Explanation** An attempt was made to assign a VLAN to an 802.1x port that is configured as a SPAN destination port.

**Recommended Action** Change the SPAN configuration so that the port is no longer a SPAN destination port or change the configuration so that no VLAN is assigned.

Error Message %DOT1X\_SWITCH-5-ERR\_VLAN\_EQ\_MDA\_INACTIVE: Multi-Domain Authentication
cannot activate because Data and Voice VLANs are the same on port %s

**Explanation** Multi-Domain Authentication (MDA) host mode cannot be activated if the configured data VLAN on a port is the same as voice VLAN.

**Recommended Action** Change either the voice VLAN or the access (data) VLAN on the interface so they are not equal.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_EQ\_VVLAN: Data VLAN [dec] on port [chars] cannot equal to Voice VLAN.

**Explanation** The 802.1x assigned VLAN on a port cannot be the same as the voice VLAN.

**Recommended Action** Change either the voice VLAN or the access 802.1X assigned VLAN on the interface so they are not equal anymore. This change will cause the authentication to proceed normally on the next retry.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_INTERNAL: The VLAN [dec] is being used internally and cannot be assiged for use on the Dot1x port [chars] Vlan

**Explanation** The VLAN is used internally and cannot be assiged for use again on this port.

**Recommended Action** Update the configuration to not use this VLAN.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_INVALID: The VLAN [dec] is invalid and cannot be assiged for use on the Dot1x port [chars] Vlan

**Explanation** The VLAN specified is out of range and cannot be assiged for use on this port.

**Recommended Action** Update the configuration to use a valid VLAN.

**Explanation** An attempt was made to assign a VLAN to a supplicant on a port, but the VLAN was not found in the VTP database.

Recommended Action Make sure the VLAN exists and is not shutdown or use another VLAN.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_NOT\_VALID: Attempt to assign non-existent group or shutdown VLAN to 802.1x port [chars]

**Explanation** An attempt was made to assign a VLAN to an 802.1x port, but the VLAN was not found in the VTP database. Group not found.

Error Message Make sure the VLAN exists and is not shutdown or use another VLAN.%DOT1X\_SWITCH-5-ERR\_VLAN\_ON\_ROUTED\_PORT: Attempt to assign VLAN %d to routed 802.1x port %s

**Explanation** An attempt was made to assign a VLAN to a routed 802.1x port, which is not allowed.

**Recommended Action** Change the mode of the port so that it is no longer a routed port or change the configuration so that no VLAN is assigned.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_PROMISC\_PORT: Attempt to assign VLAN %d to promiscuous 802.1x port %s

**Explanation** An attempt was made to assign a VLAN to a promiscuous 802.1x port, which is not allowed.

**Recommended Action** Change the mode of the port so that it is no longer a promiscuous port or change the configuration so that no VLAN is assigned.

**Error Message** %DOT1X\_SWITCH-5-ERR\_VLAN\_RESERVED: The VLAN [dec] is a reserved vlan and cannot be assiged for use on the Dot1x port [chars] Vlan

**Explanation** The VLAN specified is a reserved VLAN and cannot be assigned for use on this port.

**Recommended Action** Update the configuration not to use this VLAN.

**Explanation** Remote SPAN should not be enabled on a VLAN in which ports are configured with 802.1X enabled.

**Recommended Action** Either disable the remote SPAN configuration on the VLAN OR disable 802.1X on all of the ports in this VLAN.

## **DP83815 Messages**

This section contains DP83815 10/100 Mbps Integrated PCI Ethernet Media Access Controller messages.

### DP83815-1

**Error Message** %DP83815-1-DISCOVER: Only found [dec] interfaces on bay [dec], shutting down bay

**Explanation** The software could not identify the interface card.

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

Error Message %DP83815-1-INITFAIL: [chars] failed to initialized

**Explanation** The software failed to initialize or restart an Ethernet or Fast Ethernet interface.

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

Error Message %DP83815-1-MEMERR: [chars] status = [hex]

**Explanation** The interface could not access system resources for a long time. This problem may occur under very heavy loads.

Recommended Action The system should recover. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

### DP83815-3

Error Message %DP83815-3-OWNERR: [chars] packet buffer, pak=[hex]

**Explanation** The software detected an error in descriptor ownership.

Recommended Action Clear the interface. If the 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %DP83815-3-UNDERFLO: [chars] transmit error

**Explanation** While transmitting a frame, the controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

**Recommended Action** The system should recover. No action is required.

### **DP83815-5**

Error Message %DP83815-5-LATECOLL: [chars] transmit error

**Explanation** Late collisions occurred on the Ethernet or Fast Ethernet interface.

**Recommended Action** If the interface is Fast Ethernet, verify that both peers are in the same duplex mode. For regular Ethernet, the system should recover. No action is required.

Error Message %DP83815-5-LOSTCARR: [chars] cable/transceiver problem?

**Explanation** The cable or transceiver is not connected.

**Recommended Action** Connect the cable or transceiver. No action is required.

### DP83815-6

Error Message %DP83815-6-EXCESSCOLL: [chars]

**Explanation** Ethernet or Fast Ethernet is seeing multiple collisions. This condition may occur under heavy loads.

**Recommended Action** The system should recover. No action is required.

Error Message %DP83815-6-NOTDP83815: Slot [dec] device ID seen as [hex], expected
[hex]

**Explanation** The software did not recognize the interface chips.

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

# **DTP Messages**

This section contains Dynamic Trunking Protocol (DTP) filtering messages.

**Error Message** %DTP-5-DOMAINMISMATCH: Unable to perform trunk negotiation on port [chars] because of VTP domain mismatch.

**Explanation** The two ports involved in trunk negotiation belong to different VTP domains. Trunking is possible only when the ports involved belong to the same VTP domain.

**Recommended Action** Ensure that the two ports that are involved in trunk negotiation belong to the same VTP domain.

# **DUAL Messages**

This section contains Distributed Update Algorithm (DUAL) Enhanced Interior Gateway Routing Protocol (EIGRP) messages.

### **DUAL-3**

**Error Message** %DUAL-3-BADIGRPSAP: Cannot send incremental SAP update to peer on %s. Increasing output-sap-delay may help

**Explanation** An incremental SAP update could not be sent because it might cause a loss of synchronization of the SAP tables between peers.

Recommended Action Increase the output SAP delay on the listed interface to reduce buffer usage. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %DUAL-3-BADIGRPSAPTYPE: Unsupported SAP type for EIGRP being %s - type x

**Explanation** This message appears when you receive or attempt to send a SAP message with a type code that is neither a general query nor a general response, or when you receive a general query that is not addressed to the broadcast address.

**Recommended Action** Copy the error message exactly as it appears, and report it to your technical support representative. If possible, also provide the output of the **debug ipx sap activity** and **debug ipx sap event** commands for the period during which this message appeared.

Error Message %DUAL-3-PFXLIMIT: %s %d: %s prefix limit reached.

**Explanation** The number of prefixes for the Enhanced Interior Gateway Routing Protocol (EIGRP) has reached the configured or default limit.

**Recommended Action** Take preventive action by identifying the source of the prefixes. Enter the **show** ip eigrp accounting command for details.

### **DUAL-4**

Error Message %DUAL-4-PFXLIMITTHR: %s %d: %s threshold prefix level reached.

**Explanation** The number of prefixes in the topology database has reached the configured or default threshold level.

**Recommended Action** Take preventive action by identifying the source of the prefixes. Enter the **show** ip eigrp accounting command for details.

### **DUAL-5**

Error Message %DUAL-5-NBRCHANGE: [chars] [dec]: Neighbor [chars] ([chars]) is
[chars]: [chars]

**Explanation** A neighbor has gone up or down. The displayed information is [routing protocol] [Autonomous System number]: Neighbor [IP address] ([interface]) is [up or down]: [reason].

**Recommended Action** No action is required.

# **DUAL\_ACTIVE Messages**

This section contains dual-active chassis (DUAL\_ACTIVE) messages.

### **DUAL ACTIVE-1**

Error Message %DUAL\_ACTIVE-1-DETECTION: Dual-active condition detected: shutting
down all non-VSL interfaces

**Explanation** A dual-active situation has occurred because VSL went down. The VSL has become inactive and both virtual switches have taken over the role of the active virtual switch. To fix this condition, the standby virtual switch has become active and taken control of the network. All non-VSL interfaces on the original active virtual switch will be internally shut down in hardware.

**Recommended Action** Attempt to determine the reason why VSL has gone down and correct it. Once VSL has been reestablished, the original active virtual switch will reload. Enter all variations of the commands:

show switch virtual troubleshooting last show vslp lmp status show switch virtual dual-active summary show switch virtual dual-active pagp show switch virtual dual-active bfd

If you cannot determine the cause of the problem from the commands you entered, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %DUAL\_ACTIVE-1-RECOVERY: BFD running on [chars] triggered dual-active recovery

**Explanation** Bidirectional Forwarding Detection (BFD) detected a dual-active scenario on the specified interface and caused the switch to go into recovery mode.

Recommended Action No action is required.

Error Message %DUAL\_ACTIVE-1-VSL\_DOWN: VSL is down - switchover, or possible
dual-active situation has occurred

**Explanation** The virtual switch link (VSL) between the active and standby switches has gone offline. The following are possible reasons for the switchover condition:

- A switchover has occurred and the standby virtual switch has become the active virtual switch.
- A dual-active situation has occurred, and the original active virtual switch has gone into recovery mode, which would bring down all non-VSL interfaces on the original active virtual switch.
- A dual-active situation has occurred, but the original active virtual switch did not detect the dual
  active state and did not go into recovery mode. This condition may be the result of multiple
  system failures or an incorrect configuration that caused the dual-active situation to not be
  detected.

**Recommended Action** Attempt to determine the reason why the VSL has gone offline and correct it if it is a dual-active situation. Enter all variations of the commands:

show switch virtual troubleshooting last show vslp lmp status show switch virtual dual-active summary show switch virtual dual-active pagp show switch virtual dual-active bfd

If you cannot determine the cause of the problem from the commands you entered, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools

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

Error Message %DUAL\_ACTIVE-1-VSL\_RECOVERED: VSL has recovered during dual-active situation: Reloading switch [dec]

**Explanation** The virtual switch link (VSL) between the two active virtual switches in a dual-active situation has gone online. The virtual switch in recovery mode must be reloaded to reenable all non-VSL interfaces that were shut down when the dual-active situation first occurred.

Recommended Action No action is required.

## **DUAL\_ACTIVE-3**

Error Message %DUAL\_ACTIVE-3-PORT\_ERR\_IN\_RECOVERY: Port [chars] [chars] error

**Explanation** Port information could not be extracted or a non-VSL port could not be disabled while the active virtual switch was going into recovery mode.

**Recommended Action** Attempt to determine why the port information could not be extracted or why the non-VSL port could not be disabled.

Error Message %DUAL\_ACTIVE-3-REGISTRY\_ADD\_ERR: Failure in adding to [chars] registry

**Explanation** Could not add a function to the registry.

**Recommended Action** No action is required.

### **DUAL ACTIVE-4**

Error Message %DUAL\_ACTIVE-4-CONFIG: [chars]

**Explanation** If VSL goes down due to any reason, standby switch will take over as active immediately. If the original active chassis is still operational, both chassis are now active. This situation is called a dual-active scenario. A dual-active scenario can have adverse affects on network stability, because both chassis use the same IP addresses, SSH keys, and STP bridge ID. The virtual switching system (VSS) must detect a dual-active scenario and take recovery action for which at least one of the following detection methods should be configured: a/ Ehanced Pagp b/ IP BFD c/ Fast-hello. Please refer to Software configuration guide for more details.

**Recommended Action** Configure one or more dual-active detection methods as per configuration guide.

## **DVMRP Messages**

This section contains Dense wavelength division multiplexing messages.

### **DVMRP-5**

Error Message %DVMRP-5-NBRUP: Neighbor [IP\_address] is up on [chars]

**Explanation** A DVMRP multicast neighbor is active on the specified interface. This is caused by the arrival and acceptance of DVMRP probes via that interface. This may indicate that a multicast session has been subscribed via a path passing through this router. Note that DVMRP activity is mutually exclusive of tagswitching, so this will cause tagswitching to be disabled on that interface.

Recommended Action No action is required.

# **DWDM Messages**

This section contains EDistance Vector Multicast Routing Protocol (DVMRP) messages.

### DWDM-3

Error Message %DWDM-3-CLEAR\_G709\_CTR: 23414.2.c:205:64: backslash and newline
separated by spaceUnable to clear g709 counter in slot [dec] rc = [dec]

**Explanation** The SPA driver was unable to clear the G.709 OTN protocol counters for bit errors.

**Recommended Action** Please check the configuration of the interfaces and controllers and correct the configuration if necessary. If the problem persists contact your Cisco technical support representative.

Error Message %DWDM-3-CONFIG\_ALARM\_REPORT: Failed to config report alarm [chars]
slot [dec] rc = [dec]

**Explanation** The SPA driver could not configure one of the reporting status of the alarms.

**Recommended Action** Please check the configuration of the interfaces and controllers and correct the configuration if necessary. If the problem persists contact your Cisco technical support representative.

Error Message %DWDM-3-CONFIG\_ALARM\_THRESHOLD: Failed to config threshold
 alarm [chars] slot [dec] rc = [dec]

**Explanation** The SPA driver could not configure one of the threshold alarms for the optical data or transport unit.

**Recommended Action** Please check the configuration of the interfaces and controllers and correct the configuration if necessary. If the problem persists contact your Cisco technical support representative

Error Message %DWDM-3-CONFIG\_TX\_POWER: Failed to config transmit power [dec] on slot
[dec] rc = [dec]

**Explanation** The SPA driver detected a error in configuring the Tx power level for the UT2 transponder module

**Recommended Action** Please power down and reseat the indicated SPA card. If the condition persists, 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 %DWDM-3-DWDM\_CONFIG\_FAIL: Failed to [chars] [chars] in slot [dec] rc = [dec]

**Explanation** The SPA driver detected failure during configuring one of the DWDM parameters

**Recommended Action** Reload the SPA card and if the problem persists, contact the technical support representative.

Error Message %DWDM-3-DWDM\_GET\_INFO\_FAIL: Failed receiving [chars] from slot [dec]
rc = [dec]

**Explanation** The SPA driver did not receive the necessary optics information from the slot.

**Recommended Action** Please check the configuration of the interfaces and controllers and correct the configuration if necessary. If the problem persists contact your Cisco technical support representative.

Error Message %DWDM-3-DWDM\_NULL\_INFO: DWDM info is NULL in [dec]

**Explanation** The SPA driver detected NULL information for DWDM.

**Recommended Action** Reload the SPA and if the problem persists contact the technical support representative.

Error Message %DWDM-3-IPC\_SHIM\_INIT: DWDM IPC SHIM init failed

**Explanation** The SPA driver detected failure during DWDM IPC SHIM initialization

**Recommended Action** Please power down and reseat the indicated SPA cardIf the problem persists please contact yourtechnical support representative

Error Message %DWDM-3-LC\_ERR\_STATS: error sending LC stats to RP

**Explanation** The SPA driver encountered an error while sending the LC stats to the RP.

**Recommended Action** Reload the SPA card and if the problem persistscall the technical support representative.

Error Message %DWDM-3-MALLOC\_FAIL: malloc failure creating G.709 port on slot [dec]

**Explanation** The SPA driver detected a memory error on the SPA card.

**Recommended Action** Reload the card and if the problem persists call TAC.

Error Message %DWDM-3-RPC\_FAILED: Application error rc = [dec]:

**Explanation** The system failed to retrieve the information required to execute the command.

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 %DWDM-3-RPC\_INIT\_FAIL: DWDM RPC init failure

**Explanation** The system failed to create the resources required to process user interface commands for transceivers. The error is not fatal but some **show** commands could fail.

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 %DWDM-3-RPC\_PROCESSING\_ERROR: DWDM RPC error: [chars]

**Explanation** Non Fatal error occurred in processing an RPC messsage.

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 %DWDM-3-RX\_G709\_INFO: Failed receiving G709 info from slot [dec] rc =
[dec]

**Explanation** The SPA driver did not receive the necessary G.709 OTN protocol information from the slot.

**Recommended Action** Please check the configuration of the interfaces and controllers and correct the configuration if necessary. If the problem persists contact your Cisco technical support representative.

Error Message %DWDM-3-RX\_LOS\_THRESHOLD: Failed to config rx los threshold = [dec] on
slot [dec] rc = [dec]

**Explanation** The SPA driver detected an error in configuring the transponder receive power threshold.

**Recommended Action** Reload the SPA card and if the problem persistscall TAC.

Error Message %DWDM-3-TIMER\_ERR: Timer error

**Explanation** The Driver did not obtain an expired timer from the timer tree for the DWDM process.

**Recommended Action** The SPA driver has encountered an error event on the SPA card. If the condition persists, 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.

### DWDM-4

Error Message %DWDM-4-G709ALARM: [chars]: [chars] [chars]

**Explanation** The specified G709 Alarm has been declared or released.

**Recommended Action** Repair the source of the alarm.

## **EAP Messages**

This section contains Extensible Authentication Protocol (EAP) messages.

### EAP-2

Error Message %EAP-2-PROCESS\_ERR: [chars]

**Explanation** A critical condition exists that prevents the system from performing an operation related to an EAP process.

**Recommended Action** Reload the system.

### EAP-4

Error Message %EAP-4-BADPKT: IP=[IP\_address] | HOST=[chars]

Explanation The system received an invalid or malformed EAP packet from the specified host.

**Recommended Action** Check the specified host for the EAP operation.

### EAP-6

Error Message %EAP-6-MPPE\_KEY: IP=[chars] | MPPE\_RECV\_KEY\_LENGTH=[dec]

**Explanation** The system received an MPPE key for the specified host.

**Recommended Action** No action is required.

# **EARL Messages**

This sections contains Enhanced Address Recognition Logic (EARL) messages.

### EARL-0

Error Message %EARL-0-TASK\_SPAWN\_FAIL: Failed to initialize task "[chars]"

**Explanation** The EARL component failed to start a task required by the system to work properly. The task name is specified in the error message. Most errors will cause a system reload. However, in some cases, only the feature that failed to start will be affected.

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

### **EARL-2**

**Error Message** %EARL-2-PATCH\_INVOCATION\_LIMIT: [dec] Recovery patch invocations in the last 30 secs have been attempted. Max limit reached

**Explanation** The system attempted the EARL recovery for the maximum number of times that are permitted in the last 30 seconds. The module has been automatically reset instead of attempting recovery.

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

Error Message %EARL-2-SWITCH BUS IDLE: Switching bus is idle for [dec] seconds

**Explanation** The EARL did not switch any packets on the EARL bus. A module or line card attempted to access the bus and could not. In most cases, this error appears when a card is not properly seated. A recovery mechanism will attempt to fix the problem. The system reloads if the problem cannot be corrected.

**Recommended Action** Reseat all modules and line cards on the switch. If the error message recurs after reseating the cards, a hardware problem may exist.

**Error Message** %EARL-2-SWITCH\_BUS\_STALL: Switching bus stall detected. Backplane bus stall status: [dec]

**Explanation** The EARL did not switch any packets on the EARL bus. A recovery mechanism will attempt to fix the problem. The system reloads if the problem cannot be corrected.

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

### **EARL-3**

**Error Message** %EARL-3-FABRIC\_CONNECTION : Recovering from sequence error detected on fabric connection.

**Explanation** A sequence error was detected by the crossbar and bus fabric interface. This error can be fatal. Recovery is being attempted.

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

Error Message %EARL-3-RESET\_LC: Resetting module in slot [dec]. (Errorcode [dec])

**Explanation** The specified module did not respond to a critical message. This condition indicates a hardware error and might be a transient error only. The system has reset the module to fix the error.

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

#### EARL-4

**Error Message** %EARL-4-BUS\_CONNECTION : Interrupt [chars] occurring in EARL bus connection.

**Explanation** An error interrupt is occurring for the switching bus interface.

Recommended Action Enter the show earl status command on the consoles of the switch supervisor engine and any DFC-enabled modules. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EARL-4-EBUS\_SEQ\_ERROR: Out of Sync error.

**Explanation** The EARL has detected an out-of-synchronization condition on the bus. A recovery mechanism will attempt to fix the problem.

**Recommended Action** Reseat and then reset the module. If the error remains, upgrade the software to Cisco IOS Release 12.2(18)SXF or later.

Error Message %EARL-4-NF\_USAGE: Current Netflow Table Utilization is [dec]%

**Explanation** The NetFlow table utilization exceeds a preset threshold percentage.

**Recommended Action** No action is required.

## EARL\_ACL\_FPGA Messages

This section contains Enhanced Address Recognition Logic ACL field-programmable gate array (EARL\_ACL\_FPGA) messages.

### **EARL ACL FPGA-2**

Error Message %EARL\_ACL\_FPGA-2-INTR\_FATAL: EARL ACL FPGA : Non-fatal interrupt
[chars]

**Explanation** The EARL ACL FPGA detected the specified unexpected fatal condition. 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 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

### **EARL ACL FPGA-3**

Error Message %EARL\_ACL\_FPGA-3-INTR\_WARN: EARL ACL FPGA: Non-fatal interrupt
[chars]

**Explanation** The EARL ACL FPGA detected the specified unexpected nonfatal condition.

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

### **EARL ACL FPGA-4**

Error Message %EARL\_ACL\_FPGA-4-CPU\_PAR\_ERR: EARL ACL FPGA : CPU Parity error [chars]

**Explanation** The EARL ACL FPGA detected a CPU parity error.

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

Error Message %EARL\_ACL\_FPGA-4-MEM\_PAR\_ERR: EARL ACL FPGA: Counter Memory Parity
error. Error address [hex]

**Explanation** The EARL ACL FPGA detected a memory parity error.

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

# **EARL\_DRV\_API Messages**

This section contains Enhanced Address Recognition Logic Driver API (EARL\_DRV\_API) messages.

### EARL DRV API-0

Error Message %EARL\_DRV\_API-0-TASK\_SPAWN\_FAIL: Failed to spawn task "[chars]"

**Explanation** The system failed to perform the specified task.

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

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

### EARL\_DRV\_API-2

Error Message %EARL\_DRV\_API-2-SIG\_INST\_FAIL: [chars]: Failed to install signal
handler

**Explanation** The system failed to install the process signal handler.

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

### EARL\_DRV\_API-4

Error Message %EARL\_DRV\_API-4-NOMEM: Malloc failed: [chars] [dec]

**Explanation** The system is running out of memory.

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

## **EARL\_L2\_ASIC Messages**

This section contains Enhanced Address Recognition Logic Layer 2 ASIC (EARL\_L2\_ASIC) messages.

## EARL\_L2\_ASIC-0

Error Message %EARL\_L2\_ASIC-0-EXCESSIVE\_FT\_TBL\_ECC\_ERR: EARL L2 ASIC [dec]: Too many bad entries in L2 Forwarding Table

**Explanation** The EARL Layer 2 ASIC detected too many errors in the forwarding table. This condition indicates hardware malfunction and causes the system to reload.

Recommended Action If this problem is seen more than once, it could be a case of faulty hardware. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EARL\_L2\_ASIC-0-FATAL\_INTR: L2 Forwarding Engine: fatal interrupt:
interrupt status [hex], interrupt mask [hex]

**Explanation** Critical interrupts might have caused system forwarding to cease.

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

### EARL L2 ASIC-2

Error Message %EARL\_L2\_ASIC-2-PARITY\_ERR: L2 Forwarding Engine: parity interrupt
#[dec]: address [hex], Data: [hex], [hex], [hex]

**Explanation** A parity error was detected while accessing the Layer 2 forwarding table.

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

### EARL\_L2\_ASIC-3

Error Message %EARL\_L2\_ASIC-3-INTR\_FATAL: EARL L2 ASIC [dec]: fatal interrupt
[chars]

**Explanation** The EARL Layer 2 ASIC detected an unexpected fatal condition. This message indicates a hardware failure or malfunction. The system will reload to fix the problem.

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

Error Message %EARL\_L2\_ASIC-3-INTR\_WARN: EARL L2 ASIC [dec]: Non-fatal interrupt
[chars]

**Explanation** The EARL Layer 2 ASIC detected an unexpected nonfatal condition.

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support

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

### EARL\_L2\_ASIC-4

Error Message %EARL\_L2\_ASIC-4-DBUS\_HDR\_ERR: EARL L2 ASIC #[dec]: Dbus Hdr. Error
occurred. Ctrl1 [hex]

**Explanation** The EARL Layer 2 ASIC detected an invalid header in the DBUS. This error is due to hardware that has failed, an incorrect configuration of the module software, or invalid packets that were dropped because of an OIR operation.

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

Error Message %EARL\_L2\_ASIC-4-DBUS\_SEQ\_ERR: EARL L2 ASIC #[dec]: Dbus Seq. Error
occurred (Ctrl1 [hex])

**Explanation** The EARL Layer 2 ASIC detected a DBUS sequence mismatch error.

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

Error Message %EARL\_L2\_ASIC-4-FT\_ERR: EARL L2 ASIC [dec]: Forwarding table bank
[dec] encountered [chars] ecc error at address [hex]

**Explanation** The EARL Layer 2 ASIC detected a nonfatal condition in one of the banks of the forwarding table. The bank and address of the forwarding table are specified in the error message.

**Recommended Action** This message is informational. The device has detected and corrected the error.

Error Message %EARL\_L2\_ASIC-4-FT\_INVLD\_ADDR: Forwarding table bank [dec] encountered
invalid address [hex]

**Explanation** The EARL Layer 2 ASIC attempted to access an invalid address in the forwarding table. Because there are only 12 pages (0–11) per line, access to page 12–15 will be invalid.

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

Error Message %EARL\_L2\_ASIC-4-INTR\_THROTTLE: Throttling "[chars]" interrupt
exceeded permitted [int]/[dec] interrupts/msec

**Explanation** Excessive interrupts were generated by the EARL ASIC. Interrupt throttling has been performed to protect the supervisor engine.

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

Error Message %EARL\_L2\_ASIC-4-INV\_REG: EARL L2 ASIC: Attempt to [chars] invalid
register

**Explanation** An attempt was made to read or write to an invalid register of the EARL Layer 2 ASIC.

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

Error Message %EARL\_L2\_ASIC-4-L2L3\_SEQ\_ERR: EARL L2 ASIC #[dec]: L2L3 Mismatch seq
#[hex]

**Explanation** The EARL Layer 2 ASIC detected a Layer 2-Layer 3 sequence mismatch error. A recovery mechanism will attempt to fix the problem.

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

Error Message %EARL\_L2\_ASIC-4-SRCH\_ENG\_FAIL: EARL L2 ASIC Search Engine has failed

**Explanation** The EARL Layer 2 ASIC search engine failed to terminate a search. A recovery mechanism fixes the unexpected condition.

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

# EARL\_L3\_ASIC Messages

This section contains Enhanced Address Recognition Logic (EARL) Layer 3 ASIC messages.

### EARL\_L3\_ASIC-3

Error Message %EARL\_L3\_ASIC-3-INTR\_FATAL: EARL L3 ASIC: fatal interrupt [chars]

**Explanation** The EARL Layer 3 ASIC detected an unexpected fatal condition. This message indicates a hardware failure or malfunction. The system will reload to attempt to fix the problem.

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance,

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

Error Message %EARL\_L3\_ASIC-3-INTR\_WARN: EARL L3 ASIC: Non-fatal interrupt [chars]

**Explanation** The EARL Layer 3 ASIC detected an unexpected non-fatal condition. This indicates that a bad packet was received and dropped. Several conditions can cause a packet to be considered bad; for example, the size of an Ethernet frame was reported to be different than the expected IP packet size. In older Cisco IOS releases, these packets are normally dropped without being logged.

**Recommended Action** This message is informational only, and can occur due to conditions such as bad NIC cards, bad NIC drivers, or a bad application. Use a network sniffer or configure a SPAN session to identify the source device that is sending the erroneous packets. Also, examine the adjacent Cisco device for errors. The following commands can be configured to stop verifying checksum or length errors:

no mls verify ip checksum — Disables checking of packets for checksum errors
 no mls verify ip length — Disables checking of packets for length errors
 no mls verify ip same-address — Disables checking of packets for having the same source and destination IP address

## EARL\_L3\_ASIC-4

Error Message %EARL\_L3\_ASIC-4-CPU\_PAR\_ERR: EARL L3 ASIC: CPU Parity error. Error
data [hex]. Error address [hex]

**Explanation** The EARL Layer 3 ASIC detected a CPU parity error. This condition is caused by an interprocess communication error between the CPU and Layer 3 ASIC.

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

Error Message %EARL\_L3\_ASIC-4-INTR\_THROTTLE: Throttling "[chars]" interrupt
exceeded permitted [int]/[dec] interrupts/msec

**Explanation** Excessive interrupts were generated by the EARL ASIC. Interrupt throttling has been performed to protect the supervisor engine.

## **EARL\_NETFLOW Messages**

This section contains Enhanced Address Recognition Logic NetFlow (EARL\_NETFLOW) messages.

## **EARL\_NETFLOW-0**

**Error Message** %EARL\_NETFLOW-0-NF\_ECC\_MAX: Netflow ECC Error Threshold Reached, Total Ecc Errors [[dec]]

**Explanation** The total number of NetFlow ECC errors has crossed the maximum threshold. The maximum allowable of NetFlow ECC errors is 2000. The system will perform a crash dump and will be inoperable. The output of the **show tech-support** command will also be displayed.

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

## **EARL NETFLOW-3**

Error Message %EARL\_NETFLOW-3-NF\_ECC\_RSRV: Netflow ECC Error Occured, Reserved NF
location [[hex]]

**Explanation** The number of ECC errors per NetFlow TCAM entry has reached the maximum threshold (three or more ECC errors). The NetFlow TCAM location will now be marked as reserved and can no longer be used.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support

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

**Error Message** %EARL\_NETFLOW-3-NF\_ECC\_SOFT\_MAX: Too many Netflow ECC errors have occurred, Total Ecc Errors [[dec]]

**Explanation** The total number of NetFlow ECC errors has exceeded the soft limit number. The soft limit of NetFlow ECC errors is 2500. The hard limit is 5000. When the hard limit is reached, the line card will reboot.

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

## **EARL\_NETFLOW-4**

Error Message %EARL\_NETFLOW-4-ICAM\_THRLD: Netflow ICAM threshold exceeded, ICAM
Utilization [[dec]%]

**Explanation** The NetFlow ICAM is almost full. Aggressive aging is temporarily enabled.

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

 $\label{lem:condition} \textbf{Error Message} \ \ \& \texttt{EARL\_NETFLOW-4-NF\_AGG\_CACHE\_THR} : \ \texttt{Netflow} \ \ [\texttt{chars}] \ \ \texttt{aggregation} \ \ \texttt{cache} \ \ \texttt{is} \ \ \texttt{almost} \ \ \texttt{full}.$ 

**Explanation** The aggregation cache for NetFlow is almost full. This condition might cause a high CPU load.

**Recommended Action** Consider increasing the size of the aggregation cache, or remove the aggregation cache configuration specified in the error message.

Error Message %EARL\_NETFLOW-4-NF\_FULL: Netflow Table Full, ICAM occupancy [[dec]%],
TCAM occupancy [[dec]%], Entry creation failures [[dec]]

**Explanation** The NetFlow table is full, possibly because of faulty hashing behavior.

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

**Error Message** %EARL\_NETFLOW-4-NF\_TIME\_SAMPLING: Time-based sampling requests could not be processed in time.

**Explanation** Time-based sampling requests could not be processed in a timely fashion. This condition means that the sampling result might not be accurate.

**Recommended Action** Consider using packet-based sampling. Packet-based sampling uses an algorithm that ensures the sampling results will be accurate, even if they are not processed in the allotted time.

Error Message %EARL\_NETFLOW-4-TCAM\_THRLD: Netflow TCAM threshold exceeded, TCAM
Utilization [[dec]%]

**Explanation** The NetFlow TCAM is almost full. Aggressive aging is temporarily enabled.

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

### **EARL NETFLOW-5**

Error Message %EARL\_NETFLOW-5-NF\_ECC\_REMOVE: Netflow ECC Error Occured, Deleted NF
entry [[hex]]

**Explanation** A NetFlow ECC error occurred. The affected NetFlow entry has been deleted at the address specified so that a new entry will be created.

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

# **EC Messages**

This section contains EtherChannel, Link Aggregation Control Protocol (LACP), and Port Aggregation Protocol (PAgP) messages.

### EC-5

 $\label{lem:condition} \textbf{Error Message} \ \mbox{\ensuremath{\$EC-5-CANNOT\_BUNDLE\_QOS1: Removed [chars] from port channel as QoS attributes of port and port-channel are different.}$ 

**Explanation** The port specified in the error message cannot join the port channel, because the QoS attributes of this port are not consistent withthe QoS attributes of the port channel.

**Recommended Action** Match the QoS attributes of the specified port to the QoS attributes of other member ports in the port channel. Use the **show queueing interface** command to display the QoS attributes of a port.

Error Message %EC-5-COMPATIBLE: [chars] is compatible with port-channel members

**Explanation** The specified port was not operational earlier because its attributes were different from the attributes of the port channel or the attributes of the ports within the port channel. The system detects that the attributes of the specified port now match the port channel attributes.

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

Error Message %EC-5-DONTBNDL2: [chars] suspended: port in half-duplex for LACP

**Explanation** For LACP EtherChannel, if the member port is in half-duplex mode, the port will be in a suspended state.

**Recommended Action** Configure port duplex to full duplex.

Error Message %EC-5-MINLINKS\_MET: Port-channel [chars] is up as its bundled ports
([dec]) meets min-links

**Explanation** The administrative configuration of minimum links is equal to or less than the number of bundled ports. As a result, this port channel is operational.

**Recommended Action** No action is required.

Error Message %EC-5-MINLINKS\_NOTMET: Port-channel [chars] is down bundled ports
([dec]) doesn't meet min-links

**Explanation** The administrative configuration of minimum links is greater than the number of bundled ports. As a result, this port channel is no longer operational.

**Recommended Action** Reduce the number of minimum links for the specified group, or add more ports to this port channel so that they bundle.

**Error Message** %EC-5-PROTO\_MISMATCH: Port-Channel [dec] has one aggregator with protocol mismatch

**Explanation** EtherChannel software disabled an aggregator under this port-channel and encountered a protocol mismatch on the aggregator. This means that the ports in the port-channel have not been all configured with the same protocol and this needs to be fixed.

**Recommended Action** Please verify the port-channel members configuration and fix it so that all the ports use the same protocol.

**Error Message** %EC-5-SUSPENDED: Port [chars] in port-channel [chars] is being suspended

**Explanation** EtherChannel software is unable to bundle the physical port in the port-channel. As the standalone disable feature is enabled, the port is going in the suspended state. Please check the configuration on the peer side of this port-channel.

**Recommended Action** Please verify the port-channel configuration of the port connected to the port for which this error messsage appeared.

Error Message %EC-5-VSS\_MINLINKS\_MET: Members of the Port-channel [chars] on switch
[dec] is up as its bundled ports ([dec]) meets min-links

**Explanation** The administrative configuration of minimum links is equal or less than the number of bundled ports from the switch. Therefore all the ports in the port channel from that switch has been brought up.

Recommended Action None.

**Error Message** %EC-5-VSS\_MINLINKS\_NOTMET: All the members of the Port-channel [chars] is down on switch [dec] as the number of bundled ports ([dec]) doesn't meet min-links

**Explanation** The administrative configuration of minimum links is greater than the number of bundled ports from the switch. Therefore all the ports in port-channel from that switch has been brought down.

**Recommended Action** Reduce the min-links configuration for this group or add more ports to this port-channel from the switch to have them bundle.

## **EM Messages**

This section contains Event Manager (EM) messages.

### **EM-3**

Error Message %EM-3-EXCEED: EM exceed maximum open events ([dec]).

**Explanation** The total number of open events exceeded the maximum number of possible open events. The maximum number that the EM server permits is specified in the error message. EM clients are either opening too many events or not closing events within the permitted time period.

Recommended Action Enter the show em state | inc em\_type 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EM-3-FAIL: The specified EM Function failed ([chars]).

**Explanation** The specified EM function failed. This condition might be caused by incorrect logic or a memory corruption.

Recommended Action Enter the show em state command and the show em status 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %EM-3-NOMEM: The EM failed to allocate memory resources for the specified EM function ([chars]).

**Explanation** The EM failed to allocate memory resources for the specified function because memory is running low.

Recommended Action Enter the show memory summary 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** EM-3-NULLPTR: The pointer in a specified EM function ([chars]) is incorrectly NULL.

**Explanation** The pointer in the specified EM function is incorrectly NULL. This condition might be caused by incorrect logic or a memory corruption.

Recommended Action Enter the show em state command and the show em status 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

#### **EM-4**

**Error Message** EM-4-AGED: The specified EM client (type=[dec], id=[dec]) did not close the EM event within the permitted amount of time ([dec] msec).

**Explanation** A timeout occurred. This condition is minor and should not affect the functionality of the switch.

Recommended Action Enter the show em state 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EM-4-INVALID: The specified EM function ([chars]) received Invalid
operands <[dec]>.

**Explanation** The EM client used invalid API parameters.

Recommended Action Enter the show em state command and the show em status 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EM-4-LIMIT: EM exceed open events limit ([dec]).

**Explanation** The EM has exceeded the permitted number of open events. The open event limit is 5000.

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

Error Message %EM-4-NOTUP: The EM is not available ([chars]).

**Explanation** The EM is not available because some basic initialization failed. This condition might be caused by failure of a basic infrastructure functionality or a memory corruption.

Recommended Action Enter the show em state command and the show em status 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %EM-4-SEARCH: The EM function ([chars]) searched for the specified open event ([dec]), but the search failed.

**Explanation** The specified EM function could not find the specified open event. This condition might be caused by a memory corruption.

Recommended Action Enter the show em state command and the show em status 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %EM-4-SENDFAILED: The specified EM client (type=[dec]) failed to send messages to standby.

**Explanation** The redundant supervisor engine is not updated because the specified EM client failed to send messages to the redundant supervisor engine. Do not attempt to failover to redundant supervisor engine.

Recommended Action Enter the show checkpoint clients command. If you cannot determine the cause of the error from the error message text or from the show checkpoint clients output, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

# **EM\_ISSU** Messages

This section contains Event Manager (EM) in-service software upgrade messages.

### EM\_ISSU-2

Error Message %EM\_ISSU-2-GET\_BUFFER: Event Manager ISSU client failed to get buffer
for message. Error: %d (%s)

**Explanation** The Event Manager 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.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %EM\_ISSU-2-INIT: Event Manager ISSU client initialization failed to
%s. Error: %d (%s)

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

Error Message %EM\_ISSU-2-SEND\_NEGO\_FAILED: Event Manager ISSU client failed to send
negotiation message. Error: %d (%s)

**Explanation** The Event Manager 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.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %EM\_ISSU-2-SESSION\_NEGO: Event Manager ISSU client encountered
unexpected client nego\_done. Error: %d (%s)

**Explanation** The Event 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.

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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** %EM\_ISSU-2-SESSION\_REGISTRY: Event Manager ISSU client failed to register session information. Error: %d (%s)

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

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.

#### EM\_ISSU-3

**Error Message** %EM\_ISSU-3-INVALID\_SESSION: Event Manager ISSU client does not have a valid registered session.

**Explanation** The Event Manager ISSU client does not have a valid registered session.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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.

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

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %EM\_ISSU-3-MSG\_SIZE: Event Manager ISSU client failed to get the MTU
for Message Type %d. Error: %d (%s)

**Explanation** The Event Manager ISSU client was unable to calculate the MTU for the specified message. The Event Manager ISSU client is unable to send the message to the standby device.

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying

information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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, show issu message group, and show issu negotiated version commands and your pertinent troubleshooting logs.

Error Message %EM\_ISSU-3-OPAQUE\_MSG\_NOT\_OK: Event Manager ISSU client 'Opaque
Message Type %d' is not compatible

**Explanation** The Event Manager ISSU client received an incompatible (opaque) message from the peer device. The message cannot be processed.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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, and show issu negotiated version commands and your pertinent troubleshooting logs.

**Error Message** %EM\_ISSU-3-SESSION\_UNREGISTRY: Event Manager ISSU client failed to unregister session information. Error: %d (%s)

**Explanation** The Event Manager ISSU client failed to unregister session information.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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 %EM\_ISSU-3-TRANSFORM\_FAIL: Event Manager ISSU client %s transform
failed for 'Message Type %d'. Error: %d (%s)

**Explanation** The Event 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 Event 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with 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.

### **ENT\_ALARM Messages**

This section contains entity alarm messages.

### ENT\_ALARM-3

Error Message %ENT\_ALARM-3-NOALARMENT: [chars]

**Explanation** All entities that could have alarm conditions set for them should be registered with the alarm subsystem for the Cisco IOS software. This message indicates that the normal registration of entities in the Cisco IOS software alarm subsystem has failed, and that one or more entities could not be registered. The message text indicates the alarm entity that could not be registered. Any alarm conditions against the entity specified in the message text cannot be reported. This message does not indicate that the entity specified in the message has undergone an error condition.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

#### **ENT ALARM-6**

Error Message %ENT\_ALARM-6-INFO: [chars] [chars] [chars] [chars] [chars]

**Explanation** This message provides alarm assertion or deassertion information.

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

# **ENT\_API Messages**

This section contains Entity MIB API (ENT\_MIB) messages.

### ENT\_API-4

**Error Message** %ENT\_API-4-NOALIAS: Physical entity not found when adding an alias with physical index = [dec] and logical index = [dec] to the Entity MIB

**Explanation** A timing issue was detected when the system or the module is brought up. This issue has no impact on system performance or management functionality.

**Recommended Action** No action is required.

Error Message %ENT\_API-4-NOPORT: Physical entity does not have a Port PhysicalClass
when adding an alias with physical index = [int], logical index = [int], phyDescr
= [chars], phyName = [chars], phyClass = [int], phyContainedIn = [int], to the
Entity MIB

**Explanation** An attempt to add an alias entry to the Entity MIB was made. The physical entity with the specified index does not have an entPhysicalClass of 10 (Port class) and so the alias entry creation failed. See RFC2737 for the definition of the PhysicalClass textual convention and the aliasMappingEntry object.

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

## **ENVIRONMENT Messages**

This section contains environment messages.

#### **ENVIRONMENT-3**

Error Message %ENVIRONMENT-3-OVERTEMP: [chars] [chars] [chars] [chars]

**Explanation** The internal chassis temperature has exceeded the maximum temperature threshold.

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

Error Message %ENVIRONMENT-3-RPS\_FAILED: [chars] [chars] [chars]

**Explanation** Only one power supply was detected for the system in dual-power mode, or the power supply is failing.

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

Error Message %ENVIRONMENT-3-UNDERTEMP: [chars] [chars] [chars] [chars]

**Explanation** The internal chassis temperature is below the minimum temperature threshold.

**Recommended Action** No action is required.

#### **ENVIRONMENT-4**

Error Message %ENVIRONMENT-4-CONFIG\_OVERTEMP: [chars] [chars] [chars] [chars]

**Explanation** The chassis inside temperature has exceeded the configured threshold, but is less than or equal to the maximum allowable internal chassis temperature.

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

## **ENVM Messages**

This section contains environmental monitoring (ENVM) messages.

#### ENVM-2

**Error Message** %ENVM-2-TEMP\_SENSOR\_READFAIL: Failed to access the Temperature sensor on the linecard. Resetting the linecard.

**Explanation** The local CPU on the Enhanced FlexWAN module was unable to access the temperature sensor on the module. The module will attempt to recover by resetting itself.

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

#### ENVM-3

Error Message %ENVM-3-DISABLE: Environmental monitoring for [chars] disabled
([chars])

**Explanation** Environmental monitoring for the indicated hardware component could not be initiated. This error message is displayed if environmental monitoring for the whole system, or a particular hardware component is disabled. Operating the system with the environmental monitoring disabled can be dangerous.

Recommended Action Address the cause for the environmental monitoring being disabled as indicated in the error message. Depending on whether a particular hardware component is affected or the whole system, either the card should be removed or the entire system taken offline for a power shutdown until the problem is resolved. Reduce other system activity to ease memory demands. If conditions warrant, upgrade to a larger memory configuration. 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 <a href="http://www.cisco.com/tac.">http://www.cisco.com/tac.</a> With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %ENVM-3-ENVDATA\_MISSING: Environmental monitoring information for card in [chars] is not present in the IDPROM

**Explanation** Environmental threshold data for the card in the specified slot is not present in the board IDPROM. The system will not monitor the voltage and temperature readings for the specified card.

Recommended Action Enter the show diag slot-number command for the specified slot. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %ENVM-3-ENVINFO\_MISSING: Voltage threshold information for [chars] is
not present in the [chars]IDPROM for the card in [chars]

**Explanation** Environmental threshold data for the specified voltage is missing from the threshold table in the IDPROM. The system will not monitor the voltage and temperature readings for the specified card.

Recommended Action Enter the show diag slot-number command for the specified slot. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %ENVM-3-SUBSLOT\_SHUTDOWN: Environmental monitor initiated shutdown of the card in subslot [dec]/[dec] ([chars] measured at [chars])

**Explanation** The environmental monitor initiated a subslot shutdown due to a temperature or voltage condition.

Recommended Action Look at previous environmental messages to determine the cause of the shutdown and correct if possible. If you think the shutdown was in 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

**Error Message** %ENVM-3-TEMP\_SENSOR\_DISABLED: Access to Temperature sensor on module in slot [dec] is disabled

**Explanation** During previous reloads, this module experienced a timeout while accessing the temperature sensor. All further access to the temperature sensor will be disabled. This condition indicates a possible problem with the temperature sensor.

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

#### ENVM-4

**Error Message** %ENVM-4-LONGBUSYREAD: C2W Interface busy for long time reading temperature sensor [dec]

**Explanation** The Cisco 2 wire (C2W) interface has taken an unusually long time to read the specified temperature sensor.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ENVM-4-LONGBUSYWRITE: C2W Interface busy for long time writing
temperature sensor [dec]

**Explanation** The Cisco 2 wire (C2W) interface has taken an unusually long time to write to the specified temperature sensor.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ENVM-4-RPSFAIL: [chars] may have a failed channel

**Explanation** One of the power supplies in a dual (redundant) power supply may have failed.

**Recommended Action** Check the inputs to the power supply or replace the faulty power supply as soon as possible to avoid an unplanned outage. 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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support

Error Message %ENVM-4-WRITEERROR: Error writing temperature sensor [dec]

**Explanation** The Cisco 2 wire (C2W) interface has encountered an error while writing to the specified temperature sensor.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

# **ENV\_MON Messages**

This section contains environmental monitor (ENV\_MON) messages.

### **ENV MON-2**

**Explanation** The specified temperature sensor has signaled an overtemperature condition.

Recommended Action Check the supply. Attempt to resolve the temperature problem. Check to ensure that all router doors are in place and are closed. Check to ensure that the fans are operating. Remove the affected cards, check their temperature and, if required, allow them to cool and reinsert them. Operation of overtemperature equipment is not recommended because the equipment might become damaged. If the condition is not resolved, power the unit off. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

### **ENV MON-5**

**Error Message** %ENV\_MON-5-CSC\_FAIL\_SUPPLY\_POWER\_TO\_FANS: CSC in slot [dec] could not supply power to fan tray

**Explanation** The indicated clock and scheduler card (CSC) could not supply power to the fan trays.

**Recommended Action** Turn the router off and then on to attempt to clear the problem. Remove and reinsert the fan tray, and then the CSC. If the problem persists, contact your Cisco technical support representative to replace the indicated CSC.

### **ENV\_MON-6**

Error Message %ENV\_MON-6-CANTSHUT: Cannot shut down card in this slot

**Explanation** The attempt to shut down the line card has failed.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-INSALM: ALARMCARD [chars] was inserted in slot [dec]

**Explanation** The OIR facility has detected the insertion of an alarm card from the slot specified in the message text.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-INSFAN: The Fan tray has been inserted into slot [dec]

**Explanation** The OIR facility has detected the insertion of a PEM from the slot specified in the message text.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-INSPEM: PEM number [chars] inserted into slot [dec]

**Explanation** The OIR facility has detected the insertion of a PEM from the slot specified in the message text.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-INSPEM\_GSR\_POWERSHELF: Powersupply [chars] inserted

**Explanation** The OIR facility detected the insertion of a PEM on the power shelf-basedinternet router.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-INTERNAL\_ERROR: Internal error [dec] in [chars] - contact
Cisco technical support

**Explanation** An unexpected internal error occurred.

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

Error Message %ENV\_MON-6-REMALM: ALARMCARD [chars] was removed from slot [dec]

**Explanation** The OIR facility detected the removal of alarm card from the slot specified in the message text.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-REMFAN: The Fan tray has been removed from slot [dec]

**Explanation** The OIR facility has detected that the fan tray has been removed.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-REMPEM: PEM number [chars] removed from slot [dec]

**Explanation** The OIR facility has detected the removal of a PEM from the slot specified in the message text.

**Recommended Action** No action is required.

Error Message %ENV\_MON-6-REMPEM\_GSR\_POWERSHELF: Powersupply [chars] removed

**Explanation** The OIR facility has detected the removal of a PEM on a power shelf-based internet router.

**Recommended Action** No action is required.

# **EOBC Messages**

This section contains Ethernet out-of-band channel (EOBC) messages.

#### EOBC-0

**Error Message** %EOBC-0-EOBC\_JAM\_FATAL: [chars] in slot [dec] is jamming the EOBC channel. It has been disabled.

**Explanation** The primary supervisor engine EOBC hardware is faulty. There is no redundant supervisor engine to take over, so the switch has been shut down.

**Recommended Action** Immediately replace the supervisor engine in the slot specified in the error message.

#### EOBC-2

**Error Message** %EOBC-2-EOBC\_JAM: EOBC channel is jammed. Attempting to diagnose the source of the problem and recover if possible.

**Explanation** The SP is unable to communicate with other processors in the system because of a problem with the EOBC channel. The problem could be due to faulty EOBC hardware on the supervisor engine or due to a module with a faulty connector to the EOBC channel. The SP will attempt to recover automatically. The success of this automatic recovery will be communicated through more messages.

**Recommended Action** No action is required.

**Error Message** %EOBC-2-EOBC\_JAM\_RECOVERED: [chars] in slot [dec] is jamming the EOBC channel. It has been disabled. [chars]

**Explanation** The specified module has faulty hardware and is adversely affecting the operation of the switch. The remaining modules will be power cycled and brought online.

Recommended Action Immediately replace the module in the slot specified in the error message.

### EOBC-3

Error Message %EOBC-3-NOEOBCBUF: No EOBC buffer available. Dropping the packet.

**Explanation** The EOBC receive buffer pool has been exhausted. No further input packets can be processed until some buffers are returned to the pool.

**Recommended Action** After buffers are returned to the pool, if processing continues normally, no action is required. 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 you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

## **EOS Messages**

This section contains EOS ASIC (EOS) messages.

#### **EOS-2**

 $\textbf{Error Message} \ \, \text{\%EOS-2-EOS\_INIT\_FAILURE} : \ \, \text{The EOS FPGA initialization failed due to} \\ [\text{chars}]$ 

**Explanation** The EOS FPGA initialization was not successful because of a hardware problem with the board. This condition will cause packet drops.

**Recommended Action** Contact your Cisco technical support representative to obtain a replacement board.

Error Message %EOS-2-EOS\_INT : [chars]

**Explanation** A fatal interrupt has occurred. As a result, the device has been reinitialized.

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

Error Message %EOS-2-INT : [chars]

**Explanation** A fatal interrupt has occurred. As a result, the device has been reinitialized. If the reported condition is a CRC or ECC parity error, the device will attempt to correct the error. Infrequent parity errors can usually be ignored, but persistent parity errors may indicate a hardware failure.

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

Error Message %EOS-2-NULL\_EOS\_OBJECT : The EOS device object pointer is set to NULL

**Explanation** The memory location of the EOS device object is invalid. The EOS FPGA operation is disabled and the device interrupt is now masked.

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

#### **EOS-3**

Error Message %EOS-3-EOS\_PAUSE\_FAIL: [chars]

**Explanation** An attempt to pause the forwarding of traffic from an EOS ASIC interface FPGA to another ASIC has timed out. Depending on the status register value of the ASIC interface FPGA, traffic disruption might occur.

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

Error Message %EOS-3-EOS\_UNPAUSE\_FAIL : EOS status register is 0x[hex]

**Explanation** An attempt to unpause traffic from the EOS FPGA to the Hyperion ASIC timed out. This condition may lead to traffic disruption.

Recommended Action If normal traffic processing does not resume, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EOS-3-QUEUE\_ALLOC\_FAILED: Failed to allocate queue in the EOS FPGA
for SPA in bay ([dec])

**Explanation** The system failed to allocate the EOS ASIC queue for the SPA in the specified bay. This condition might lead to traffic disruption.

Recommended Action If normal traffic processing does not resume, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

#### **EOS-4**

Error Message %EOS-4-EOS\_WARN\_INT: [chars]

**Explanation** The EOS ASIC interface FPGA received a nonfatal interrupt. This interrupt should not affect normal operation.

**Recommended Action** No action is required.

#### **EOS-5**

Error Message %EOS-5-PAUSE\_FAIL: [chars]

**Explanation** An attempt to pause the forwarding of traffic from an EOS ASIC interface FPGA to another ASIC has timed out. Depending on the status register value of the ASIC interface FPGA, traffic disruption might occur.

Recommended Action If normal traffic processing does not resume, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

## **EOU Messages**

This section contains Extensible Authentication Protocol over UDP (EOU) messages.

#### **EOU-2**

Error Message %EOU-2-PROCESS\_ERR: Router could not create a EAPoUDP process

**Explanation** The system could not create an Extensible Authentication Protocol over UDP process.

Recommended Action Reload the system.

#### **EOU-4**

Error Message %EOU-4-BAD\_PKT: IP=[IP\_address] | Bad Packet=[chars]

**Explanation** The system received an invalid or malformed EAP packet from the specified host.

**Recommended Action** Check the specified host for the EAP operation.

Error Message %EOU-4-MSG\_ERR: Unknown message event reveived

**Explanation** The EOU authentication process received an unknown message event.

**Recommended Action** If this message recurs, reload the system.

Error Message %EOU-4-PROCESS\_STOP: PROCESS=[chars] | ACTION=[chars].

**Explanation** The specified process has stopped.

**Recommended Action** Reload the system.

**Error Message** %EOU-4-SOCKET: EAPOUDP socket binding fails for PORT=[hex]. Check if the interface has valid IP address.

**Explanation** The EOU socket could not bind its port to an valid interface address.

**Recommended Action** This condition is probably caused by a missing IP address on the interface. Configure a valid IP address for the interface.

Error Message %EOU-4-UNKN\_EVENT\_ERR: UNKNOWN Event for HOST=[IP\_address] |
Event=[dec].

**Explanation** An unknown event for the EOU process has occurred.

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

Error Message %EOU-4-UNKN\_PROCESS\_ERR: An unknown operational error occurred.

**Explanation** The EOU process cannot function due to an internal system error.

**Recommended Action** Reload the system.

Error Message %EOU-4-UNKN TIMER ERR: An unknown Timer operational error occurred

**Explanation** The EOU process cannot function due to an internal system error.

**Recommended Action** Reload the system.

Error Message %EOU-4-VALIDATION: Unable to initiate validation for
HOST=[IP\_address] | INTERFACE=[chars].

**Explanation** EOU could not start posture validation for the specified host. This condition is probably caused by a failure to bind the EOU port.

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

Error Message %EOU-4-VERSION\_MISMATCH: HOST=[IP\_address] | Version=[dec]

**Explanation** The specified host detected a mismatch in EOU versions.

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

### **EOU-5**

Error Message %EOU-5-AAA\_DOWN: AAA unreachable. METHODLIST=[chars] |
HOST=[IP\_address] | POLICY=[chars].

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

**Recommended Action** Check connectivity to the AAA servers.

 $\textbf{Error Message} \ \ \text{\%EOU-5-RESPONSE\_FAILS:} \ \, \text{Received an EAP failure response from AAA for host=[IP\_address]}$ 

**Explanation** The system received an EAP failure response from AAA, which indicates the unsuccessful validation of host credentials.

**Recommended Action** No action is required.

#### **EOU-6**

Error Message %EOU-6-AUTHSTATUS: [chars] | [IP\_address]

**Explanation** This message displays the authentication status (Success, Failure) for the specified host.

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

Error Message %EOU-6-AUTHTYPE: IP=[IP\_address] | AuthType=[chars]

**Explanation** This message displays the authentication type for the specified host.

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

Error Message %EOU-6-CTA: IP=[IP\_address] | CiscoTrustAgent=[chars]

**Explanation** This message indicates whether or not Cisco Trust Agent was detected on the specified host.

Recommended Action Install Cisco Trust Agent on the host if it was not detected.

Error Message %EOU-6-IDENTITY\_MATCH: IP=[IP\_address] | PROFILE=EAPOUDP|
POLICYNAME=[chars]

**Explanation** Because the system found the specified host in the EOU identity profile, there will be no EOU association with the host and the local policy.

**Recommended Action** If you do not want the specified host to be exempted from authentication, remove its entry from EOU identity profile.

Error Message %EOU-6-POLICY: IP=[IP\_address] | [chars]=[chars]

**Explanation** The system received policy attributes from AAA for the specified host.

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

Error Message %EOU-6-POSTURE: IP=[IP\_address] | HOST=[chars] | Interface=[chars]

**Explanation** This message displays the posture validation status for the specified host.

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

Error Message %EOU-6-SESSION: IP=[IP\_address] | HOST=[chars] | Interface=[chars]

**Explanation** An entry was created or deleted for the host on the specified interface.

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

Error Message %EOU-6-SQ: IP=[IP\_address] | STATUSQUERY | [chars]

**Explanation** The status query result for the specified host either failed or was invalid.

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

## **EPIF Messages**

Error Message %EPIF\_PORT-0-INTERNAL\_PANIC: [chars]

**Explanation** A Panic Condition.

# **EPLD\_STATUS\_OPEN Messages**

This section contains EPLD programming status file data processing (EPLD\_STATUS\_OPEN) messages.

### **EPLD\_STATUS\_OPEN-4**

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_ALLOC: %Error: Can't allocate [dec] bytes
for epld status data

**Explanation** The system is unable to allocate required memory to access the file.

**Recommended Action** Determine the memory usage of the system, and retry the operation.

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_OPEN: %Error: Can't open [chars]

**Explanation** The system is unable to open the specified file.

**Recommended Action** Ensure that the filename is correct. Enter the **dir** command to verify the filename.

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_READ: %Error: status file [chars] read
failed

**Explanation** An unknown error occurred while the system was reading the status program file to a local buffer.

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

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_REMOVE: %Error: status file [chars] remove
failed

**Explanation** An unknown error occurred while the system was removing the status program file from nonvolatile memory.

Recommended Action Delete the file manually. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_SIZE: %Error: Bad file size [chars]

**Explanation** The file is too small or too large for a programming status file.

**Recommended Action** Enter the **dir** command, and determine the size of the file. Retry the operation.

Error Message %EPLD\_STATUS\_OPEN-4-ERROR\_WRITE: %Error: status file [chars] write
failed

**Explanation** An unknown error occurred while the system was writing the status program file to nonvolatile memory.

Recommended Action Delete and recopy the file. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

## **EPM Messages**

This section contains Policy Enforcement Module (EPM) messages.

#### EPM-4

Error Message %EPM-4-POLICY\_APP\_FAILURE: IP=%i | MAC=%e | AUDITSESID=%s | AUTHTYPE=%s |
POLICY\_TYPE=%s | POLICY\_NAME=%s | RESULT=FAILURE | REASON=%s

**Explanation** The displayed policy for the client could not be applied by the Policy Enforcement Module (EPM) for the reason indicated in the message.

**Recommended Action** Take appropriate action based the failure reason indicated in the message.

#### **EPM-6**

Error Message %EPM-6-AAA: POLICY=%s | EVENT=%s

**Explanation** A download request has been sent and downloaded successfully for the specified downloadable ACL (dACL).

**Recommended Action** No action is required.

Error Message %EPM-6-IPEVENT: IP=%i | MAC=%e | AUDITSESID=%s | AUTHTYPE=%s | EVENT=%s

**Explanation** An IP wait, release, or assignment event has occurred with respect to the specified host.

**Recommended Action** No action is required.

Error Message %EPM-6-POLICY\_APP\_SUCCESS: IP=%i | MAC=%e | AUDITSESID=%s | AUTHTYPE=%s |
POLICY\_TYPE=%s | POLICY\_NAME=%s | RESULT=SUCCESS

**Explanation** The displayed policy for the client has been applied successfully by the EPM.

**Recommended Action** No action is required.

Error Message %EPM-6-POLICY\_REQ: IP=%i | MAC=%e | AUDITSESID=%s | AUTHTYPE=%s | EVENT=%s

**Explanation** A policy application or remove request has been received by the EPM.

**Recommended Action** No action is required.

## ERR\_C6K\_Stack\_MIB Messages

This section contains error messages.

Error Message %ERR\_C6K\_STACK\_MIB-3-ERR\_C6K\_STACK\_MIB\_ICC\_NO\_PROC: [chars]: Failed
to create the vs\_stack\_mib\_sp ICC Process

**Explanation** Failed to create the vs\_stack\_mib\_sp ICC Process.

**Recommended Action** No action is required.

**Explanation** Failed to create the ICC queue for C6K STACK MIB.

Recommended Action No action is required.

## **ERR\_DET Messages**

This section contains error detection messages.

### ERR\_DET-5

Error Message %ERR\_DET-5-ERR\_DET\_LOW\_MEM: Very low memory, dump debuginfo, local %u,
io %u

**Explanation** A low-memory condition was detected. Debugging information will be dumped.

**Recommended Action** No action is required.

**Explanation** No Ethernet Out-of-Band Channel (EOBC) input was received. Debugging information will be dumped.

**Recommended Action** No action is required.

## **ESCON Messages**

This section contains Enterprise Systems Connection (ESCON) messages.

#### **ESCON-3**

Error Message %ESCON-3-ACCESS\_FAIL: LRC access Failed

Explanation Line card redundancy controller (LRC) access has failed.

**Recommended Action** Remove and reinsert the ESCON aggregation card. If the problem persists, power cycle the ESCON aggregation card. If the problem still persists, replace the ESCON aggregation card.

Error Message %ESCON-3-CRC16\_ERR\_THR\_ALM: ESCON CRC-16 Error Threshold [chars]

**Explanation** The threshold of allowable CRC-16 errors has been exceeded.

Recommended Action Check the client receive cable and the SFP optics. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %ESCON-3-CRC32\_ERR\_THR\_ALM: CRC-32 Error Threshold [chars]

**Explanation** The threshold of allowable CRC-32 errors has been exceeded.

Recommended Action Check the client receive cable and SFP optics. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %ESCON-3-ESCON\_RDWRFAIL: Read/write failed [[chars]]

**Explanation** A read or write error occurred while the hardware was being accessed.

**Recommended Action** Remove and reinsert the ESCON aggregation card. If the problem persists, power cycle the ESCON aggregation card. If the problem still persists, replace the ESCON aggregation card.

Error Message %ESCON-3-HEC\_ERR\_THR\_ALM: CDL-HEC Error Threshold [chars]

**Explanation** The threshold of allowable CDL HEC errors has been exceeded.

**Recommended Action** Check the network cable for sharp bends, and ensure the connectors are clean and connected properly.

Error Message %ESCON-3-HW\_LASER\_DOWN\_ALM: Remote Loss of Light [chars]

**Explanation** The optics laser has been disabled.

**Recommended Action** Check the remote client receive cable and the SFP optics.

Error Message %ESCON-3-IDPROM\_ACCESS\_FAIL: Access to IDPROM Failed

**Explanation** The IDPROM could not be accessed.

**Recommended Action** Remove and reinsert the ESCON aggregation card. If the problem persists, power cycle the ESCON aggregation card. If the problem still persists, replace the ESCON aggregation card.

Error Message %ESCON-3-INT\_LPBK\_FAIL: Internal CardLoopback Failed

**Explanation** An internal card loopback has failed.

**Recommended Action** Remove and reinsert the ESCON aggregation card. If the problem persists, power cycle the ESCON aggregation card. If the problem still persists, replace the ESCON aggregation card.

Error Message %ESCON-3-LASER\_TX\_FAULT\_ALM: Optic Laser Transmit Fault [chars]

**Explanation** An optical laser transmission fails on an ESCON aggregation card.

**Recommended Action** Remove and reinsert the ESCON SFP optics. If the problem persists, replace the ESCON SFP optics.

Error Message %ESCON-3-LOCAL\_FL\_LASER\_DOWN\_ALM: Local Failure [chars]

**Explanation** The optics laser has been disabled.

Recommended Action Check the trunk and switch fabric connection.

Error Message %ESCON-3-LOSS\_OF\_LIGHT\_ALM: Transceiver Loss of Light [chars]

**Explanation** The cable for the transceiver has been cut or removed.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-LOSS\_OF\_LOCK\_ALM: Transceiver CDR Loss of Lock [chars]

**Explanation** The CDR cannot lock onto the signal.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-LOSS\_OF\_SYNC\_ALM: Transceiver Loss of Sync [chars]

**Explanation** The transceiver has lost its synchronization.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-LPBK\_THRU\_PSC\_FAIL: Loopback through PSC Failed

**Explanation** An attempt to loopback through the processor and switch card (PSC) has failed.

**Recommended Action** Remove and reinsert the ESCON aggregation card. If the problem persists, power cycle the ESCON aggregation card. If the problem still persists, replace the ESCON aggregation card.

Error Message %ESCON-3-MIB\_HW\_LASER\_DOWN\_ALM: Laser Disabled [chars] [chars] [chars]

**Explanation** The client-side laser has been disabled.

**Recommended Action** Check the remote client receive cable and the SFP optics.

Error Message %ESCON-3-MIB\_LASER\_TX\_FLT\_ALM: Laser Transmit Fault [chars] [chars]

**Explanation** The client laser encountered a fault during transmittal.

**Recommended Action** Remove and reinsert the ESCON SFP optics. If the problem persists, replace the ESCON SFP optics.

Error Message %ESCON-3-MIB\_LOCAL\_FL\_LASER\_DOWN\_ALM: Local Failure, Laser Disabled
[chars] [chars]

**Explanation** The client-side laser has been disabled.

Recommended Action Check the trunk and switch fabric connection.

Error Message %ESCON-3-MIB LOSS OF LIGHT ALM: Loss of Light [chars] [chars]

**Explanation** The client side transceiver detects a loss of light on an ESCON aggregation card.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-MIB\_LOSS\_OF\_LOCK\_ALM: Loss of Lock [chars] [chars] [chars]

**Explanation** The client side transceiver detects a loss of lock on an ESCON aggregation card.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-MIB\_LOSS\_OF\_SYNC\_ALM: Loss of Sync [chars] [chars] [chars]

**Explanation** The client side transceiver detects a loss of synchronization on an ESCON aggregation card.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-SEQ\_ERR\_THR\_ALM: ESCON SEQ Error Threshold [chars]

**Explanation** The threshold of allowable sequence errors has been exceeded.

**Recommended Action** Check the network cable for sharp bends, and ensure that the connectors are clean and connected properly.

Error Message %ESCON-3-SYM\_ERR\_THR\_ALM: 8b/10b Error Threshold [chars]

**Explanation** The threshold of allowable 8-byte or 10-byte errors has been exceeded.

**Recommended Action** Check the client receive cable and the SFP optics.

Error Message %ESCON-3-UNKNOWN\_SFP\_INSERTED: Unknown SFP inserted [chars]

**Explanation** An SFP has been inserted.

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

# **ESF\_CRASHINFO Messages**

This section contains Extended SuperFrame crashinfo data messages.

**Error Message** %ESF\_CRASHINFO-2-CRASHINFO\_BAD\_REGION: Unable to initialize crashinfo data collection Unknown region type specified: [chars]

**Explanation** Initialization of the crashinfo data collection facility failed. An unknown region type was specified.

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_CRASHINFO-2-CRASHINFO\_BAD\_VENDOR\_ID: Unable to initialize
crashinfo data collection - the device vendor ID is invalid: [hex], should be:
[hex]

**Explanation** Initialization of the crashinfo data collection facility failed due to an incorrect device vendor ID.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_CRASHINFO-2-CRASHINFO\_COLLECTION\_FAILED: Unable to collect ESF crashinfo data

**Explanation** ESF crashinfo data collection has failed.

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** %ESF\_CRASHINFO-2-CRASHINFO\_DEV\_IN\_RESET: Unable to initialize crashinfo data collection - the device is still in reset: [chars]

**Explanation** Initialization of the crashinfo data collection facility failed due to the device being in reset state.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_CRASHINFO-2-CRASHINFO\_INIT\_FAILED: Unable to initialize ESF crashinfo data collection: [chars]

**Explanation** Initialization of the ESF crashinfo data collection facility failed.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_CRASHINFO-2-CRASHINFO\_PCI\_CMD\_STAT: Unable to initialize
crashinfo data collection PCI\_CMD\_STAT error indication: [hex]

**Explanation** Initialization of the crashinfo data collection facility failed due to a PCI\_CMD\_STAT error indication.

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** %ESF\_CRASHINFO-2-CRASHINFO\_UNSUPPORTED\_START\_STR: Unable to initialize crashinfo data collection Start string symbol not supported: [chars]

**Explanation** Initialization of the crashinfo data collection facility failed due to unsupported start string.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_CRASHINFO-2-INIT\_FAILED: Unable to create crashinfo file, subsystem not properly initialized

**Explanation** An attempt to produce a crashinfo prior to successful completion of subsystem initialization has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_CRASHINFO-2-OPEN\_FAILED: Unable to open crashinfo file [chars]
([dec])

**Explanation** Unable to open the file that was used to gather crashinfo.

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 %ESF\_CRASHINFO-2-WRITE\_FAILED: Unable to write to crashinfo file
[chars]: [chars]

**Explanation** Unable to open the file that was used to gather crashinfo.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_CRASHINFO-2-WRITING\_CRASHINFO: Writing crashinfo to [chars]

**Explanation** Crashinfo data is written to the specified file.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

## **ESF\_DRIVER Messages**

This section contains SIP-400 ESF driver messages.

Error Message %ESF\_DRIVER-2-CHECKSUM\_FAILURE: Loading of the CPU code on [chars]
failed due to checksum error

**Explanation** When code is loaded onto the CPU of the ESF engine, the code is read back and a checksum is calculated. The checksum that was read before the code was loaded onto the CPU does not match the checksum that was read after the code was loaded. This condition is an indication of a failure of the Rambus RAM for the ESF engine.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-FORWARDING\_PROCESSOR\_READ\_FAILURE: Read of register
address [hex] failed on [chars].

**Explanation** The host processor tried to read a forwarding processor register on the ESF engine. The read failed after several retries because of collisions with other accesses to that register.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_DRIVER-2-FORWARDING\_PROCESSOR\_WRITE\_FAILURE: Write of register address [hex] failed on [chars].

**Explanation** The host processor attempted to write a register on the forwarding processor for the ESF engine. The write failed after several retries because of collisions with other messages that were attempting to access that register.

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center 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 %ESF\_DRIVER-2-PCI\_BUS\_ERROR: A PCI bus error occurred on [chars]:
[chars] (addr=[hex]).

**Explanation** The host processor communicates with the ESF engine by using a PCI interface. While a PCI transaction was being performed, the transaction failed, which caused a bus error on the host processor. The address specified in the message text is the approximate address of the PCI transaction

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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-PROD\_ID\_FAILURE: Retrieving the product id failed on
[chars]

**Explanation** The host processor could not read the product ID register of the ESF engine. This condition occurs if the ESF engine fails to initialize.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-RDRAM\_INIT\_FAILURE: RDRAM failed to init on [chars]:
condition = [chars].

**Explanation** During initialization of the Rambus DRAM, several waiting conditions occur while the code is polling a register to obtain a lock bit. One of the waiting conditions has exceeded the timeout period.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_DRIVER-2-RDRAM\_SETUP\_FAILURE: The initialization of the RDRAM failed on the [chars]

**Explanation** The Rambus DRAM could not be initialized.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-SRAM\_SETUP\_FAILURE: The initialization of the SRAM
failed on the [chars]

**Explanation** The SRAM could not be initialized.

Error Message %ESF\_DRIVER-2-START\_FORWARDING\_PROCESSOR\_FAILURE: The starting of
forwarding processor failed on the [chars]

**Explanation** The forwarding processors of the ESF engine have to be started before processing can begin. The CPU on the ESF engine assists in the starting of the forwarding engines. The CPU reported that an error occurred while the forwarding engines were being started.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-UCODE\_LOAD\_FAILURE: The loading of microcode failed
(rc=[dec]) on [chars]

**Explanation** Before processing can begin, microcode has to be loaded on each forwarding processor of the ESF engine. The CPU on the ESF engine assists in the loading of the microcode. While microcode was being loaded, the CPU reported an error.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_DRIVER-2-UNEXPECTED\_PCI\_DOORBELL\_INT: Received an unexpected PCI
interrupt ([dec]) from [chars] (mb0=[hex] mb1=[hex] mb2=[hex] mb3=[hex]

**Explanation** The CPU on the ESF engine communicates to the host processor through the PCI interface using various bits in an interrupt register. This error indicates that the host processor does not know how to interpret one of those bits.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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** %ESF\_DRIVER-2-UNKNOWN\_VENDOR\_ID: The vendor id ([hex]) of [chars] does not match any known vendor id.

**Explanation** The vendor ID on the ESF engine does not match the vendor ID that is supplied by the manufacturer.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

## **ESF\_IPC** Messages

This section contains IPX2800 IPC messages.

## ESF\_IPC-2

Error Message %ESF\_IPC-2-BAD\_HANDLER\_ID: An invalid handler ID was specified: [hex]

**Explanation** An invalid handler ID was specified. The handler ID is required to specify which thread the IPC message is being sent to.

Error Message %ESF\_IPC-2-INVALID\_ARGUMENT: An invalid argument was specified:
[chars]

**Explanation** An invalid argument was specified to one of the IPC library functions.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_IPC-2-PRINT\_DATA\_INDICATION\_FAILED: An error occurred trying to
process a PRINT DATA request: [hex] ([dec]:[dec]): [chars] ([hex] [hex])

**Explanation** An error occurred in processing the PRINT DATA request from a thread.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_IPC-2-SEND\_MSG\_TIMEOUT: IPC command timeout: [hex] [hex]
[hex].

**Explanation** The thread to which an IPC command was issued did not respond in the required time period.

**Error Message** %ESF\_IPC-2-START\_MSG\_TIMEOUT: A timeout occurred waiting for the NP to register to support processing IPC commands.

**Explanation** Each network processor (NP) must register to handle processing an IPC soon after startup. If it does not register within the required time period, then initialization cannot be completed.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_IPC-2-UNABLE\_TO\_ACCESS\_ESF\_MEMORY: Unable to access NP memory:
[chars]

**Explanation** An error occurred trying to access network processor (NP) memory.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_IPC-2-UNABLE\_TO\_CREATE\_MSG: Unable to create IPC message

**Explanation** Insufficient resources exist to create a message used for processing the requested IPC command.

Error Message %ESF\_IPC-2-UNABLE\_TO\_SEND\_MSG: Unable to send IPC message

**Explanation** Insufficient resources exist to send a message used for processing the requested IPC command.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

## **ESF IPC-3**

```
Error Message %ESF_IPC-3-FATAL_ERROR_MSG: Fatal Error indication from [hex]
([dec]:[dec]): [chars]
```

**Explanation** A thread has generated a fatal error indication.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF_IPC-3-NON_FATAL_ERROR_MSG: Error indication from [hex]
([dec]:[dec]): [chars]
```

**Explanation** A thread has generated a nonfatal error indication.

Error Message %ESF\_IPC-3-NON\_FATAL\_ERROR\_MSG\_ERROR: Error indication from [hex]
([dec]:[dec]): [hex] [hex]

**Explanation** An error occurred trying to process a nonfatal error indication from a thread running on a network processor.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

## **ESF IPC-6**

Error Message %ESF\_IPC-6-PRINT\_DATA\_INDICATION: Print Data indication from [chars]
- [hex] ([dec]:[dec]): [chars]

**Explanation** A network processor thread requested the display of a particular section of memory. This is normally used for debugging.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %ESF\_IPC-6-STATUS\_UPDATE\_MSG: Status update from [hex]
([dec]:[dec].[dec]): [hex]

**Explanation** A thread has generated a status update indication.

# **ETHCNTR Messages**

This section contains the Ethernet controller (ETHCNTR) error messages. These messages are a result of a failure of the switch software when trying to program the hardware. Most of these errors lead to incorrect switch behavior, and should be reported to your Cisco technical support representative.

### **ETHCNTR-2**

Error Message %ETHCNTR-2-MOLSENDTIMEOUT: Molecule send timeout, queue [dec],
molecule [hex] [hex]

**Explanation** An attempt to read or write one or more of the hardware settings failed.

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

#### ETHCNTR-3

**Error Message** %ETHCNTR-3-FLOWCONTROL\_DUPLEX\_ERROR: Flowcontrol will not take effect until duplex is set to auto.

**Explanation** Flow control cannot take effect until the duplex mode has been set to auto.

**Recommended Action** Set the duplex mode to auto.

**Error Message** %ETHCNTR-3-HALF\_DUX\_COLLISION\_EXCEED\_THRESHOLD: Collisions at [chars] exceed threshold. Considered as loop-back.

**Explanation** The collision at a half-duplex port has exceeded the threshold, and the port is considered to be a loopback port.

Error Message %ETHCNTR-3-MOLSENDINT: Molecule send from interrupt handler

**Explanation** An interrupt handler is accessing the hardware in a manner that is not permissible for an interrupt handler.

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

**Error Message** %ETHCNTR-3-NO\_HARDWARE\_RESOURCES: Not enough hardware resources. Shutting down [chars]

**Explanation** The system currently contains more VLANs and routed ports than the hardware can support.

**Recommended Action** Reduce the total number of VLANs and routed ports to fewer than 1,023. To maintain this configuration and connectivity across reboots, save the configuration to NVRAM.

## **ETHER\_CFM Messages**

This section contains Ethernet Connectivity Fault Manager (ETHER CFM) messages.

## ETHER\_CFM-3

Error Message %ETHER\_CFM-3-CROSS\_CONNECTED\_CSI: Service ID of received CC [chars]
does not match local Service ID [chars].

**Explanation** For a specified service within a domain, the service ID in the continuity check (CC) message should match the locally configured service ID.

**Recommended Action** Verify that the service IDs are configured correctly using the **show ethernet cfm domain** command.

**Error Message** %ETHER\_CFM-3-LR\_FROM\_WRONG\_FP: received Loopback Reply with correct Transaction IDentifier, but from a Maintenance Point different than Loopback Message's destination

**Explanation** An unknown destination sent a reply to a loopback message that was intended for another device.

**Recommended Action** Verify that the correct destination MAC address was specified in the CLI while sending the loopback message.

**Error Message** %ETHER\_CFM-3-MEP\_NOT\_CONFIGURED: received CC from unconfigured remote MEP.

**Explanation** While performing a crosscheck, a continuity check (CC) message was received from a remote maintenance endpoint (MEP) that is not configured under the domain submode.

**Recommended Action** Verify whether the remote MEP should be added to the remote MEP list under the domain using the **show ethernet cfm domain** command.

Error Message %ETHER\_CFM-3-RCV\_LOCAL\_MPID: MPID of CC matches local MPID.

**Explanation** The remote maintenance endpoint identifier (MPID) matches a MPID configured locally for the service.

**Recommended Action** Either the local MPID or remote MPID should be changed because the MPID should be unique for each service in a network.

**Error Message** %ETHER\_CFM-3-TM\_EGRESS\_BOUNDRY: egress path found for TM is at a higher level than the traceroute message.

**Explanation** Traceroute found a domain boundary on egress because the egress port level is higher than the traceroute message level.

**Recommended Action** Check that the MIP level on the egress port is at an appropriate level.

### **ETHER CFM-5**

Error Message %ETHER\_CFM-5-IGNORED\_VLAN: Ignored VLAN %u in '%s'

**Explanation** An invalid VLAN was ignored in the configuration.

**Recommended Action** No action is required.

## ETHER\_LMI Messages

This section contains Ethernet Local Management Interface (ETHER\_LMI) messages.

### **ETHER LMI-6**

**Error Message** %ETHER\_LMI-6-MISMATCHED\_VLAN\_CONFIGURED: VLAN %s configured but not in VLAN mapping for UNI %s

**Explanation** VLANs are configured on the user network interface (UNI) but do not exist according to VLAN mapping received from the network by the Ethernet local management interface (LMI).

Recommended Action Verify that the configuration of VLANs on the UNI match those assigned.

Error Message %ETHER\_LMI-6-MISMATCHED\_VLAN\_NOT\_CONFIGURED: VLAN %s not configured
but in VLAN mapping for UNI %s

**Explanation** VLAN mappings received from the network by the Ethernet local management interface (LMI) do not match those that are configured on the user network interface (UNI).

**Recommended Action** Verify that the configuration of VLANs on the UNI match those assigned.

# ETHERNET\_LACP Messages

This section contains Ethernet Link Aggregation Control Protocol (LACP) messages.

Error Message %ETHERNET\_LACP-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.

Error Message %ETHERNET\_LACP-3-ISSU\_SENDFAILED: LACP ISSU: send message failed, rc = [dec]

**Explanation** The sending of a message has failed. This is an informational message only.

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 %ETHERNET\_LACP-4-ISSU\_INCOMPATIBLE: lacp-issu-compat: returned FALSE

**Explanation** The ISSU compatibility matrix check has failed. This is an informational message only.

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 %ETHERNET\_LACP-4-ISSU\_XFORM: [chars]: failed, rc=[chars]

**Explanation** The ISSU transform has failed. This is an informational message only.

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** %ETHERNET\_LACP-4-RF\_CLIENT\_BUNDLE: LACP HA: Unable initiate checkpoint bundle mode.

**Explanation** LACP is unable to initialize checkpoint bundle mode. This is an informational message only.

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

**Error Message** %ETHERNET\_LACP-4-RF\_CLIENT\_INIT: LACP HA: Unable to initiate RF client.

**Explanation** LACP is unable to initialize as a RF client. This is an informational message only.

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.

## ETHERNET\_MLACP Messages

This section contains Ethernet Multichassis Link Aggregation Control Protocol (LACP) messages.

#### ETHERNET\_MLACP-3

**Error Message** %ETHERNET\_MLACP-3-PEER\_ICCP\_VERSION\_INCOMPATIBLE: Peer ICCP version [dec] is incompatible with local ICCP version [dec].

**Explanation** mLACP peer is running with a different version of ICCP. Incompatible ICCP would prevent mLACP from working properly.

**Recommended Action** Reboot peer with identical IOS version would correct the issue. Compatible ICCP version between different IOS images can still be achieved by doing show lacp multichassis group on the both devices to check if ICCP versions are compatible. If ICCP versions are incompatible, repeat IOS image loading and CLI above until a compatible image is loaded.

Error Message %ETHERNET\_MLACP-3-SYS\_CFG\_DUPL\_ID: Remote mLACP peer has duplicate
mLACP node-id [dec]

**Explanation** A remote mLACP peer is configured with the same mLACP node-id as this device.

**Recommended Action** Reconfigure the mLACP node-id to be unique between the two devices with the **mlacp node-id** configuration command. Refer to the mLACP configuration section of the Cisco IOS documentation for more information on configuring mLACP.

Error Message %ETHERNET\_MLACP-3-SYS\_CFG\_INVALID\_ID: Received invalid mLACP node-id
[dec] from peer

**Explanation** A remote mLACP peer is configured with an invalid mLACP node-id.

**Recommended Action** Reconfigure the peer to send a valid mLACP node-id with the **mlacp node-id** configuration command. Refer to the mLACP configuration section of the Cisco IOS documentation for more information on configuring mLACP.

### ETHERNET\_MLACP-4

**Error Message** %ETHERNET\_MLACP-4-CORE\_CONNECTED: mLACP has recovered from a core isolation failure. Attempting to recover [dec] LAGs in redundancy group [int]

**Explanation** mLACP has recovered from core isolation and has attempted to recover the LAGs in the redundancy group.

**Recommended Action** This message may not require any action. However the **show lacp multi-chassis group** and **show lacp multi-chassis port-channel** commands may be used to verify the state of the mLACP port-channels. Reference the mLACP section of the IOS documentation for details on core isolation failures and related configuration commands.

Error Message %ETHERNET\_MLACP-4-CORE\_ISOLATION: mLACP Core isolation failure:
Attempting to failover [dec] LAGs in redundancy group [int]

**Explanation** mLACP has detected isolation from the core and has attempted to failover.

**Recommended Action** Use the **show redundancy interchassis** command to determine which core facing interface has triggered the isolation failure. Correct the failure for the given interface, this will clear the mLACP core isolation failure. Reference the mLACP section of the IOS documentation for more information on core isolation failures and related configuration commands.

**Error Message** %ETHERNET\_MLACP-4-ICRM\_CLIENT\_RECV\_BAD\_LEN: Received an mLACP TLV with bad length [dec], total message length [dec]

**Explanation** The mLACP TLV length is longer than the total message length.

**Recommended Action** Issue the **show version** command on the local and remote devices to get the versions of IOS that are running. Reference the mLACP section of the IOS documentation to verify that mLACP is compatible between the IOS versions on the two devices. If the versions are compatible and the message still appears then please contact your Cisco technical support representative. Provide the representative with the exact message being seen as well as the output of the following commands, **show version**, **show run**, **show lacp multi-chassis group**, and **show lacp multi-chassis port-channel**.

**Error Message** %ETHERNET\_MLACP-4-ICRM\_CLIENT\_RECV\_NO\_TYPELEN: Received an mLACP TLV without a type and/or length field ([dec])

**Explanation** mLACP received an improperly formatted TLV from the peer. As a result the local and peer devices may have mismatched state data.

**Recommended Action** Issue the **show version** command on the local and remote devices to get the versions of IOS that are running. Reference the mLACP section of the IOS documentation to verify that mLACP is compatible between the IOS versions on the two devices. If the versions are compatible and the message still appears then please contact your Cisco technical support representative and provide the representative with the exact error message being seen as well as the versions of IOS from both devices.

Error Message %ETHERNET\_MLACP-4-ICRM\_CLIENT\_RECV\_REJ: Received rejected mLACP TLV
from peer with message ID [dec]

**Explanation** A remote mLACP peer has rejected an mLACP TLV.

**Recommended Action** Issue the **show version** command on the local and remote devices to get the versions of IOS that are running. Reference the mLACP section of the IOS documentation to verify that mLACP is compatible between the IOS versions on the two devices. If the versions are compatible and the message still appears then please contact your Cisco technical support representative and provide the representative with the exact error message being seen as well as the versions of IOS from both devices.

**Error Message** %ETHERNET\_MLACP-4-PEER\_DISCONNECT: An mLACP peer has disconnected from redundancy group [int], attempting to reconnect

**Explanation** mLACP has detected that a peer device from the specified redundancy group has disconnected. mLACP will attempt to reconnect to the device until successful.

**Recommended Action** This message is typically caused by a configuration event on the peer router, and so no action may be necessary. However if this message is unexpected then issue the **show redundancy interchassis** command on both the local and peer mLACP devices to determine which peer member IP has lost communication. Use this information to further debug the network communication issue, and re-enable communication with the peer. Reference the mLACP section of the IOS documentation for more information on peer down failures.

**Error Message** %ETHERNET\_MLACP-4-PEER\_DOWN: mLACP Peer down failure: Attempting to make [dec] local LAGs active in redundancy group [int]

**Explanation** mLACP has detected a peer down failure and has attempted to make the local port-channels become active.

**Recommended Action** The peer down failure should be corrected by re-enabling communication with the peer mLACP device. Use the **show redundancy interchassis** command on both the local and peer mLACP devices to determine which peer member IP has lost communication. Use this information to further debug the network communication issue, and re-enable communication with the peer. Reference the mLACP section of the IOS documentation for more information on peer down failures.

**Error Message** %ETHERNET\_MLACP-4-PEER\_RECONNECT\_FAILED: The attempt to reconnect to the peer in redundancy group [int] has failed

**Explanation** After an mLACP peer device disconnected, an attempt was made to reconnect, however that attempt has failed.

Recommended Action To reinitialize the connection, unconfigure mlacp interchassis group from the port-channel, and then reconfigure it. After doing that, issue show redundancy interchassis to get the peer member IP connection status and the mLACP connection state. If the peer member IP connection status is not CONNECTED then there is a more basic communication issue that needs to be fixed. Otherwise if the peer member IP is CONNECTED but the mLACP state is not CONNECTED, then there could be a software issue. In that case collect the output of show redundancy interchassis, show lacp multi-chassis group, and show lacp multi-chassis port-channel. Then please contact your Cisco technical support representative and provide the collected information.

Error Message %ETHERNET\_MLACP-4-PEER\_UP: mLACP has recovered from a peer down
failure in redundancy group [int]

**Explanation** mLACP is now in communication with the peer device, and has recovered from a previous peer down failure.

**Recommended Action** This message may not require any action. However the **show lacp multi-chassis group** and **show lacp multi-chassis port-channel** commands may be used to verify the state of the mLACP port-channels. Reference the mLACP section of the IOS documentation for details on peer down failures and related configuration commands.

### ETHERNET\_MLACP-6

Error Message %ETHERNET\_MLACP-6-PEER\_CONNECT: mLACP peer is now connected in redundancy group [int]

**Explanation** This message indicates that the local mLACP device is now connected to a peer device in the specified redundancy group.

**Recommended Action** No action is required. To view the peer information the command **show lacp multi-chassis port-channel** or **show lacp multi-chassis group** may be issued.

## ETHERNET\_OAM Messages

This section contains Ethernet Operation, Administration, and Maintenance (ETHERNET\_OAM) messages.

## ETHERNET\_OAM-2

**Error Message** %ETHERNET\_OAM-2-CRIT\_ERR: The Ethernet OAM protocol has encountered the critical error: [chars].

**Explanation** The protocol has encountered a critical error as specified in the message.

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

## ETHERNET\_OAM-3

**Error Message** %ETHERNET\_OAM-3-LOOPBACK\_ERROR: Loopback operation on interface [chars] has encountered an error([chars]).

**Explanation** Because of the specified error, the loopback operation has ended abnormally.

### ETHERNET\_OAM-5

**Error Message** %ETHERNET\_OAM-5-EVENTTLV: [chars] is received from the remote client on interface [chars].

**Explanation** An event TLV is received from the remote OAM client, which detected errors in receiving frames from this local interface.

**Recommended Action** No action is required.

Error Message %ETHERNET\_OAM-5-LINK\_MONITOR: [chars] detected over the last [chars]
on interface [chars].

**Explanation** A monitored error has been detected to have crossed the user-specified threshold.

Recommended Action No action is required.

**Error Message** %ETHERNET\_OAM-5-LINK\_MONITOR\_HT\_CROSS: High threshold was crossed on Port Channel [chars]'s last operational member port [chars]. Interface [chars] is kept online.

**Explanation** A monitored error has been detected to have crossed the user-specified threshold.

**Recommended Action** No action is required.

### ETHERNET\_OAM-6

**Error Message** %ETHERNET\_OAM-6-ENTER\_SESSION: The client on interface [chars] has entered the OAM session.

**Explanation** Ethernet OAM client on the specified interface has detected a remote client and has entered the OAM session.

**Recommended Action** No action is required.

**Error Message** %ETHERNET\_OAM-6-EXIT\_SESSION: The client on interface [chars] has left the OAM session.

**Explanation** Ethernet OAM client on the specified interface has experienced some state change.

 $\label{lem:commended} \textbf{Recommended Action} \ \ No \ action \ is \ required.$ 

**Error Message** %ETHERNET\_OAM-6-LINK\_TIMEOUT: The client on interface [chars] has timed out and exited the OAM session.

**Explanation** The Ethernet OAM client on the specified interface has not received any OAMPDUs in the number of seconds for timeout that were configured by the user. The client has exited the OAM session.

Recommended Action No action is required.

**Error Message** %ETHERNET\_OAM-6-LOOPBACK: Interface [chars] has [chars] the [chars] loopback mode.

**Explanation** The specified interface has entered or exited loopback mode because of protocol control or an external event, such as the interface link going down.

**Recommended Action** No action is required.

Error Message %ETHERNET\_OAM-6-RFI: The client on interface [chars] has received a
remote failure indication from its remote peer(failure reason = [chars])

**Explanation** The remote client indicates a Link Fault, or a Dying Gasp (an unrecoverable local failure), or a Critical Event in the OAMPDU. In the event of Link Fault, the Fnetwork administrator may consider shutting down the link.

**Recommended Action** In the event of a link fault, consider shutting down the link.

Error Message %ETHERNET\_OAM-6-RFI\_CLEAR: The client on interface %s has received a
clear of remote failure indication from its remote peer(failure reason = %s action
= %s)

**Explanation** The remote client received a message to clear a link fault, or a dying gasp (an unrecoverable local failure), or a critical event in the operations, administration, and maintenance Protocol Data Unit (OAMPDU). The error-disable state can only be cleared by entering the **shutdown** command followed by the **no shutdown** command on the interface.

## ETHER\_SERVICE Messages

This section contains Ethernet service messages.

## ETHER\_SERVICE-6

Error Message %ETHER\_SERVICE-6-EVC\_STATUS\_CHANGED: status of %s changed to %s

**Explanation** The Ethernet virtual connection (EVC) status has changed.

**Recommended Action** No action is required.

Error Message %ETHER\_SERVICE-6-EVC\_VLAN\_NOT\_CONFIGURED: VLANs %s not configured at
%s but is in a CEVLAN/EVC map

**Explanation** The specified VLANs are part of the CEVLAN/EVC map for an EVC associated with the specified interface, but the VLANs are not configured on that interface.

**Recommended Action** Verify the configurations of VLANs on the interface.

# **ETSEC Messages**

This section contains messages.

### **ETSEC-1**

Error Message %ETSEC-1-INITFAIL: PQ3/FE([dec]), Init failed, CSR[dec]=[hex]

**Explanation** The software failed to initialize/restart an Ethernet/Fast Ethernet interface.

**Recommended Action** Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %ETSEC-1-INITFAILP: PQ3/FE([dec]), Init failed at [chars]

**Explanation** The FEC could not allocate a I/O buffer pool.

**Recommended Action** Clear the interface. If the message recurs, call your technical support representative for assistance.

Error Message %ETSEC-1-MEMERR: PO3/FE([dec]), Memory error, CSR[dec]=[hex]

**Explanation** The interface could not access system resources for a long time. This problem may occur under very heavy loads.

**Recommended Action** The system should recover. No action is required. If the message recurs, call your technical support representative for assistance.

Error Message %ETSEC-1-SHOWFAIL: PQ3/FE([dec]), Memory error at [chars]

**Recommended Action** Clear the interface. If the message recurs, call your technical support representative for assistance.

### **ETSEC-2**

Error Message %ETSEC-2-EXCEPTION: Fatal Error, Interface [chars] not transmitting

**Explanation** The software detected critical error and recovery failed, resulting in system crash.

**Recommended Action** Collect crashinfo files, syslogs and console dumps.

Error Message %ETSEC-2-NOISL: Interface [chars] does not support ISL

**Explanation** The interface cannot be configured as an ISL trunk.

**Recommended Action** Check the configuration.

### ETSEC-3

Error Message %ETSEC-3-CREATE\_IBC\_FAILED: Creation of etsec ibc idb failed

**Explanation** etsec ibc idb creation has failed

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 <a href="https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl">https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl</a>. 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 <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

Error Message %ETSEC-3-INIT\_IBC\_FAILED: Initialization of etsec ibc failed

**Explanation** etsec ibc initialization has failed

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 %ETSEC-3-INIT\_ICDM\_FAILED: Initialization of icdm driver failed

Explanation icdm driver initialized failed for etsec ibc

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** %ETSEC-3-INIT\_MAC\_DRIVER\_FAILED: Initialization of ethernet mac driver failed

**Explanation** ethernet mac driver initialized failed for etsec ibc

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 %ETSEC-3-MASKED\_RCV\_INTR: etsec\_ibc\_rcv\_interrupt called while
masked: [int]

**Explanation** etsec\_ibc\_rcv\_interrupt called while already masked

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 <a href="http://tools.cisco.com/ServiceRequestTool/create/launch.do">http://tools.cisco.com/ServiceRequestTool/create/launch.do</a>, or contact your Cisco technical support.

**Error Message** %ETSEC-3-NO\_BUFFER\_POOLS: Initialization of private buffer pools failed

**Explanation** Private buffer pools were not created for etsec ibc.

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** %ETSEC-3-NO\_PARTICLE: no particle available to populate the ethernet dma ring

**Explanation** No particle available to populate the ethernet dma ring.

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 %ETSEC-3-OVERFLO: PQ3/FE([dec]), Receive overflow

**Explanation** While receiving a frame, the controller chip's local buffer transmitted insufficient data because data could not be transferred to DRAM fast enough to keep pace with its input rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

**Recommended Action** The system should recover. No action is required.

Error Message %ETSEC-3-OWNERR: PQ3/FE([dec]), Buffer ownership error, pak=[hex]

**Explanation** The software detected an error in descriptor ownership.

**Recommended Action** Try a later version of the software. If the message recurs, call your technical support representative for assistance.

Error Message %ETSEC-3-RECOVER\_TX: Interface [chars] TX workaround invoked

**Explanation** The software detected the interface was not transmittingpackets. The workaround patch has been invoked.

**Recommended Action** The system should recover. No action is required.

Error Message %ETSEC-3-RESTART: Interface [chars] Restarted Due to [chars] Error

**Explanation** The software detected critical error and etsec driver was restarted to restore EoBC traffic flow.

**Recommended Action** The system should recover. No action is required.

**Error Message** %ETSEC-3-RX\_ADD\_BUFFER\_FAILED: particle not added to the ethernet dma ring

**Explanation** Particle not added to the Ethernet dma ring.

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 %ETSEC-3-UNDERFLO: PQ3/FE([dec]), Transmit underflow

**Explanation** While transmitting a frame, the controller chip's local buffer received insufficient data because data could not be transferred to the chip fast enough to keep pace with its output rate. Normally, such a problem is temporary, depending on transient peak loads within the system.

**Recommended Action** The system should recover. No action is required.

### **ETSEC-4**

Error Message %ETSEC-4-BABBLE: PQ3/FE([dec]), Babble error, CSR[dec]=[hex]

**Explanation** The transmitter has been on the channel longer than the time taken to transmit the largest frame.

**Recommended Action** The system should recover. No action is required.

### **ETSEC-5**

Error Message %ETSEC-5-COLL: PQ3/FE([dec]), Excessive collisions, TDR=[dec],
TRC=[dec].

**Explanation** Ethernet/Fast Ethernet is seeing multiple collisions. This may occur under heavy loads.

**Recommended Action** The system should recover. No action is required.

Error Message %ETSEC-5-EXCESSCOLL: PQ3/FE([dec]), Excessive collision

**Explanation** Ethernet/Fast Ethernet is seeing multiple collisions. This may occur under heavy loads.

**Recommended Action** The system should recover. No action is required.

Error Message %ETSEC-5-FIFO\_RECOVER: [chars] ([dec]) detected freeze, last([dec])
new([dec]) tx cntr. tx\_pending ([dec]). applying patch

**Explanation** The interface is used for IPC/SCP communication between RP and SP. In a rare situation when fifo tx engine is stuck and requires a toggle there is no data loss when the recovery patch is executed. Patch is applicable to MPC8548 version 2.0 silicons only.

**Recommended Action** None - software patch will be executed.

Error Message %ETSEC-5-LATECOLL: PQ3/FE([dec]), Late collision

**Explanation** Late collisions occurred on the Ethernet/Fast Ethernet interface.

**Recommended Action** If the interface is Fast Ethernet, verify that both peers are in the same duplex mode. For regular Ethernet, the system should recover. No action is required.

Error Message %ETSEC-5-LOSTCARR: PQ3/FE([dec]), Lost carrier. Transceiver problem?

**Explanation** The cable is not connected to the port.

Recommended Action Connect the cable to the port.

## **EVENT\_TRACE** Messages

This section contains event trace subsystem messages.

## **EVENT\_TRACE-3**

Error Message %EVENT\_TRACE-3-GROUP\_ID: Duplicate registration of group-id [dec]

**Explanation** Software subsystem is trying to register a group ID for an event trace that has already been used by another subsystem.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

# **EXFREE Messages**

This section contains external memory manage messages.

### **EXFREE-2**

Error Message %EXFREE-2-EXMEMFREE: Free a non allocated ptr [hex] size [dec].

**Explanation** The system is trying to free a memory. Not all of it is marked as allocated.

Error Message %EXFREE-2-EXMEMINIT: EXMEM [dec]: [chars]

**Explanation** The requested external memory allocator failed to be initialized. The reasons are not clear.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %EXFREE-2-EXMEMLOCK: [chars] detected error ptr [hex] size [dec].

**Explanation** The system is attempting to lock or unlock a memory location that was either already locked or unlocked.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

 $\textbf{Error Message} \ \texttt{\%EXFREE-2-EXMEMPARAM:} \ \ \textbf{Bad parameter ([dec])} \ \ \textbf{when calling to the allocator utility}$ 

**Explanation** An illegal parameter was used when a call to the allocator utility was made. This condition may indicate data corruption.

Error Message %EXFREE-2-EXMEMRESET: EXMEM [dec]: [chars]

**Explanation** The requested external memory allocator failed to be reset. The reasons are not clear.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

#### **EXFREE-4**

**Error Message** %EXFREE-4-EXMALLOCFAIL: External memory allocation of [int] bytes failed from EXMEM [dec]

**Explanation** The requested memory allocation is not available from the specified memory pool. The current system configuration, network environment, or possibly a software error might have exhausted or fragmented the router's memory.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

# **EXPRESS\_SETUP Messages**

This section contains Express Setup messages.

## **EXPRESS\_SETUP-3**

Error Message %EXPRESS\_SETUP-3-UNABLE\_TO\_RESET\_CONFIG: [chars]

**Explanation** The system is unable to reset the configuration.

**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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying

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

## **EXPRESS\_SETUP-6**

Error Message %EXPRESS\_SETUP-6-CONFIG\_IS\_RESET: [chars]

**Explanation** The configuration is reset and the system will now reboot.

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

Error Message %EXPRESS\_SETUP-6-MODE\_ENTERED:

**Explanation** Express setup mode is now active.

**Recommended Action** No action is required.

Error Message %EXPRESS\_SETUP-6-MODE\_EXITED:

**Explanation** Express setup mode is no longer active.

## **FABRIC Messages**

This section contains Fabric (FABRIC) messages.

### **FABRIC-3**

**Error Message** %FABRIC-3-DISABLE\_FAB: The fabric manager disabled active fabric in slot [dec] due to the error ([dec]) on this channel (FPOE [dec]) connected to slot [dec]

**Explanation** The firmware detected a severe fabric error and reported the error to the fabric manager. The manager has disabled the active fabric.

**Recommended Action** The Fabric Manager will automatically resynchronize the fabric channel to recover from the error. The problem may occur when the fabric card or the line card does not have good contact with backplane. You should insert the fabric and line cards firmly into the chassis.

**Error Message** %FABRIC-3-EM\_RECOVERY\_ISSU\_NEGO\_FAILED: Attempting EM recovery for EM type %d, but ISSU negotiation was unsuccessful/incomplete.

**Explanation** On a switchover, the fabric manager is trying to recover for events that were opened on the peer before the switchover, but not closed. These events are maintained by the event manager (EM). The fabric manager found that ISSU negotiation was either unsuccessful or incomplete. Because the data may not have been synchronized correctly between the active and standby devices, this is an error condition.

**Recommended Action** No action is required.

Error Message %FABRIC-3-ERRORS\_DDRSYNC: Line card DDR channels sync error fpoe/slot
[dec]/[dec].

**Explanation** A transmit FIFO overrun or underrun in the DDR channels has occurred. The error indicates a clock mismatch. If this condition is persistent, the hardware is faulty.

**Recommended Action** The system will attempt to resynchronize the DDR channel and the fabric channel.

**Error Message** %FABRIC-3-LOST\_SYNC: [chars] endpoint of fpoe:[dec] lost Sync. to [chars] fabric, #[dec] times recovered success, trying to recover now!

**Explanation** The endpoint has lost synchronization with the fabric and is trying to recover.

### **FABRIC-4**

Error Message %FABRIC-4-DISABLE\_FAB: Please disable fabric service: active sup [dec]
(error [dec])

**Explanation** All supervisor engine fabric channels have errors.

**Recommended Action** Disable fabric services for the switch. Disable power for external switch fabric modules. Disable fabric service for internal switch fabric modules, but keep the supervisor engines powered on.

**Error Message** %FABRIC-4-LINECARDMODE\_CFG\_MISMATCH: Service module in the slot [dec] cannot pass traffic to the distributed etherchannel configured.

**Explanation** Because of the hardware limitation of the service module in the slot specified, traffic from these modules cannot pass through the distributed EtherChannel as configured.

**Recommended Action** Force the service modules switching mode to bus mode by entering the **fabric switching-mode force busmode** command, or change the channel configuration so that the affected modules do not need to pass traffic through the EtherChannel.

**Error Message** %FABRIC-4-SERVICEMOD\_CHANGE\_BUSMODE: The switching mode of service module in slot [dec] can be changed to its default as the distributed etherchannel config is removed.

**Explanation** The switching mode of the service modules can be reverted to the default by entering the **no fabric switching-mode force busmode** command.

**Recommended Action** Restore the default by entering the **no fabric switching-mode force busmode** command.

Error Message %FABRIC-4-SUP\_SWITCHOVER: Supervisor switchover from slot [dec] (error
[dec])

**Explanation** The active supervisor engine fabric channel has errors.

**Recommended Action** A switchover to the redundant supervisor engine occurs automatically.

### **FABRIC-5**

**Error Message** %FABRIC-5-CANNOT\_CLEAR\_BLOCK: The fabric in slot [dec] cannot support clear-block feature.

**Explanation** A user enabled the clear-block mechanism, but the fabric in the specified slot cannot support the feature.

**Error Message** %FABRIC-5-CANNOT\_SUPPORT\_FP\_INVERSION: The module you have installed in slot [dec] is running an older revision of firmware/software which may cause inconsistent system behavior. Please refer to the release notes for a minimum recommended software release for mentioned module.

**Explanation** The specified module can not support FP bit inversion with the current software release. The fabric clear block will disregard the COS setting for this module.

**Recommended Action** No action is required.

**Error Message** %FABRIC-5-CLEAR\_BLOCK: Clear block option is [chars] for the fabric in slot [dec].

**Explanation** The fabric manager has changed the status of the clear-block mechanism for all fabric channels. The status (on or off) is indicated in the message.

**Recommended Action** No action is required.

Error Message %FABRIC-5-ERRORS\_BUFFER: In fabric slot [dec], memory buffer for fpoe/slot [dec]/[dec] is full.

**Explanation** Either the buffer size is less than the packet size or the uplink buffer cannot respond to flow control from the fabric.

**Recommended Action** Examine the fabric memory configuration.

**Error Message** %FABRIC-5-ERRORS\_TIMEOUT: Time out for input from fpoe/slot [dec]/[dec] to slot [dec].

**Explanation** A timeout in the fabric input buffer occurred because of a problem from the destination slot. The transient error is observed when the module is removed. If the error is persistent, the module local bus might be locked.

**Recommended Action** Reset the module in the destination slot if the error is persistent.

**Error Message** %FABRIC-5-FABRIC\_FAILOVER: The fabric in slot [dec] has failed over due to fabric errors on slot [dec]. Fabric in slot [dec] is now the current active fabric.

**Explanation** The Switch Fabric Module in the specified slot failed over and active supervisor switch to former standby supervisor.

**Error Message** No action is required. \*FABRIC-5-LINECARDMODE\_BUS\_FORCED: The switching mode of module in slot [dec] is forced to bus-mode.

**Explanation** The **fabric switching-mode force busmode** command has been applied.

Error Message %FABRIC-5-NOT\_ALLOWED: Power not allowed to module [dec] : [chars] .

**Explanation** Certain types of linecards is not given power for some reaon. Detailed reason is given in the message body.

Recommended Action No action is required.

#### **FABRIC-6**

Error Message %FABRIC-6-TIMEOUT\_ERR: Fabric in slot [dec] reported timeout error for channel [dec] (Module [dec], fabric connection [dec])

**Explanation** Firmware code on the fabric detected that the input or output buffer was not moving. To recover from this condition, the system will automatically resynchronize the fabric channel.

**Recommended Action** The system automatically recovers from this condition by doing a fabric channel resynchronization. If the system experiences this condition persistently, directly connect to the console of the fabric and the module to determine if any errors are being reported by the firmware. Also, reseat and reset the module.

# FABRIC\_INTF\_ASIC Messages

This section contains switch fabric interface ASIC (FABRIC INTF ASIC) messages.

## FABRIC\_INTF\_ASIC-4

**Error Message** %FABRIC\_INTF\_ASIC-4-DEV\_CONFIG\_FAIL: The Switch Fabric interface ASIC configuration failed

**Explanation** The switch fabric interface ASIC could not be configured.

Recommended Action If the switch fabric is inactive (down), this message can be expected. If the module comes online and traffic processing resumes, ignore this message. 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs. On the Route Processor, capture the show logging and show version commands.

Error Message %FABRIC\_INTF\_ASIC-4-FABRICCRCERRS: [dec] Fabric CRC error events in 100ms period

**Explanation** The switch fabric interface encountered more CRC error events than the supervisor engine CRC error threshold allows.

**Recommended Action** The line card has notified the supervisor engine and the error has been logged. No action is required from the user.

### **FABRIC INTF ASIC-5**

Error Message %FABRIC\_INTF\_ASIC-5-CHAN\_LINK\_SPEED\_OOB: Array access bounds
violated, channel\_num=[int], link\_num=[int], speed=[int]

**Explanation** Cisco IOS code has attempted to access an internal array with an invalid index for SSA channel number or link number or speed.

**Recommended Action** No action is required if there is no system impact. If traffic stops or linecard fails, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

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

**Error Message** %FABRIC\_INTF\_ASIC-5-DEV\_INIT\_FAILURE: The Switch Fabric interface ASIC initialization failed

**Explanation** The switch fabric interface ASIC was not successfully initialized. As a result, this device is not operational and has been disabled.

Error Message %FABRIC\_INTF\_ASIC-5-FABRICDOWN\_CRCERRS: [dec] Fabric CRC error events
in 100ms period

**Explanation** The switch fabric interface encountered more CRC errors than the maximum configured threshold. However, the reason for this error is that the switch fabric is inactive (down). The line card has notified the supervisor engine of this condition and the error has been logged.

Recommended Action This message indicates normal system operation. No action is required.

Error Message %FABRIC\_INTF\_ASIC-5-FABRICDOWN\_SYNCERRS: [dec] Fabric sync error
events in 100ms period

**Explanation** The switch fabric interface encountered more synchronization errors than the maximum configured threshold. However, the reason for this error is that the switch fabric is inactive (down).

**Recommended Action** This message indicates normal system operation. No action is required.

Error Message %FABRIC\_INTF\_ASIC-5-FABRICSYNC\_DONE: Fabric sync on [chars] channel
done.

**Explanation** The switch fabric interface ASIC was resynchronized.

Recommended Action No action is required.

Error Message %FABRIC\_INTF\_ASIC-5-FABRICSYNC\_REQ: Fabric sync requested on [chars]
channel ([dec])

**Explanation** The line card has requested that the supervisor engine resynchronize its fabric interface ASIC.

**Recommended Action** No action is required.

**Error Message** %FABRIC\_INTF\_ASIC-5-NOFABRICPROCESS: The Switch Fabric interface fabric process could not be created

**Explanation** The switch fabric interface does not have a link process running: the system failed to create this process. This module will not support the fabric interface.

**Error Message** %FABRIC\_INTF\_ASIC-5-NULL\_DEV\_OBJECT: The Switch Fabric interface device object pointer is set to NULL

**Explanation** The memory location of the switch fabric interface device object is invalid. The switch fabric interface ASIC operation is disabled and the device interrupt is now masked.

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

**Error Message** %FABRIC\_INTF\_ASIC-5-SMB\_ACCESSERROR: The Module Switch Fabric interface ASIC cannot be accessed

**Explanation** The switch fabric interface ASIC access (read or write) failed. The serial bus that connected to the switch fabric interface ASIC on this module is not functioning correctly.

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

## **FABRIC SP**

**Error Message** %FABRIC-SP-5-CLEAR\_BLOCK: Clear block option is [chars] for the fabric in slot [dec].

**Explanation** The fabric manager has changed the status of the clear-block mechanism for all fabric channels. The status (on or off) is indicated in the message.

**Recommended Action** No action is required.

**Error Message** %FABRIC-SP-5-FABRIC\_MODULE\_ACTIVE: The Switch Fabric Module in slot [dec] became active

**Explanation** The Switch Fabric Module in the specified slot is active as the switching fabric.

## **FIB Messages**

This section contains Forwarding Information Base (FIB) messages.

#### FIB-2

 $\textbf{Error Message} \ \, \text{\%FIB-2-FIBFEATSESINIT: Error initializing CEF repop feature session } \\ queue$ 

**Explanation** Initialization of a CEF feature session queue could not be accomplished because of a low-memory condition.

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

**Error Message** %FIB-2-FIBRETRY\_EXCEEDED: CEF table download to slot [dec] not performed as IPC port did not come up

**Explanation** The FIB could not be fully downloaded. As a result of this condition, hardware switching might not be functional on the module.

**Recommended Action** Reset the module to overcome this condition.

**Error Message** %FIB-2-HW\_IF\_INDEX\_ILLEGAL: Attempt to create CEF interface for [chars] with illegal index: [dec]

**Explanation** An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %FIB-2-IF\_NUMBER\_ILLEGAL: Attempt to create CEF interface for [chars]
with illegal if\_number: [dec]

**Explanation** An internal software error has occurred.

**Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch">http://www.cisco.com/cgi-bin/Support/Bugtool/launch</a> bugtool.pl. If you still require assistance,

open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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.

#### FIB-3

Error Message %FIB-3-FIBSBNOFN: Missing [chars] subblock [chars] function for [chars]

**Explanation** Functions for distributing this subblock are missing from the image.

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

```
Error Message %FIB-3-MAC_ACCT: [chars]: [chars]
```

**Explanation** An internal software error occurred.

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

```
Error Message %FIB-3-PREC_ACCT: [chars]: [chars]
```

**Explanation** An internal software error occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support

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

#### FIB-4

```
Error Message %FIB-3-FIB_STATS_ERROR: Internal Error - type [dec], slot [dec],
total_len [dec], msg_len [dec], seg_len [dec]
```

**Explanation** An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %FIB-4-FIBNULLHWIDB: Missing hwidb for fibhwidb [chars] (ifindex
[dec])

**Explanation** An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %FIB-4-FIBNULLIDB: Missing idb for fibidb [chars] (if\_number [dec]).

**Explanation** An internal software error has occurred.

Research and attempt to resolve the issue using the tools and utilities provided at <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, 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 %FIB-4-FIBRETRY\_WARNING: IPC port for slot [dec] to become available
for CEF table download (retried [dec] times)

**Explanation** The FIB table failed to download for the number of times specified in the message.

Recommended Action If the FIB table is successfully downloaded in a subsequent retry, no action is required. If the operation is not successful, 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 <a href="http://www.cisco.com/tac">http://www.cisco.com/tac</a>. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl</a>. If you still require assistance, open a case with the Technical Assistance Center via the Internet at <a href="http://tools.cisco.com/ServiceRequestTool/create">http://tools.cisco.com/ServiceRequestTool/create</a>, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the show logging and show tech-support commands and your pertinent troubleshooting logs.

Error Message %FIB-4-FIBXDRINV : Invalid format. [chars]

**Explanation** Because the VLAN interface was deleted while still in the administrative up state, the HSRP MAC address remains in the adjacency table. This message is not sent if the VLAN interface is first put into an administrative down state before being deleted.

**Recommended Action** No action is required.

### FIB-6

**Error Message** %FIB-6-FIBLCTUNDELSEQ: Update received on a linecard for a deleted tunnel([chars]) - ignored.

**Explanation** An update was received on a line card for a tunnel that has already been deleted. The update was ignored.

# **FILESYS Messages**

This section contains filesys messages.

### **FILESYS-3**

**Error Message** %FILESYS-3-RUNNING\_SYNC\_FAILED: The active is unable to synchronize the running configuration to standby, so standby will be reloaded

**Explanation** The active supervisor engine cannot access its running configuration to synchronize the configuration to the standby supervisor engine. This can be caused by temporary resource issues such as high CPU.

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

### **FILESYS-4**

**Error Message** %FILESYS-4-CLPDINT: Management interrupts are [chars] for pcmcia device in socket [dec]. [chars]

**Explanation** A faulty PCMCIA flash device might be generating spurious insert or remove interrupts continuously. The PCMCIA controller's interrupt generation will be disabled temporarily, and will be reenabled after a few seconds. If an alternate PCMCIA device is inserted while the interrupts are disabled, the alternate device may not be readable. In this case, you must remove and reinsert the PCMCIA device.

**Recommended Action** Replace the PCMCIA flash device.

### **FILESYS-5**

Error Message %FILESYS-5-CFLASH: Compact flash card [chars] [chars]

**Explanation** A file system's status has changed.

**Recommended Action** Follow any instructions provided with the message.

Error Message %FILESYS-5-IFLASH : Internal Flash [chars] [chars]

**Explanation** A file system's status has changed. This can occur after the switch is converted from Catalyst OS software to Cisco IOS software. When you enter the **dir bootflash:** command, an unformatted flash memory returns a "bad device block info" or "invalid magic number" error message.

**Recommended Action** Format the flash memory using the **format** command and follow any instructions provided with the message. Otherwise, no action is required.

Error Message %FILESYS-5-UNKNDEV : Unknown device [chars] [chars]

**Explanation** A file system's status has changed. The flash device cannot be recognized by the switch. The 16-MB MEM-C6K-FLC16M and 24 MB MEM-C6K-FLC24M linear flash PC cards are preformatted and are ready to use, but the MEM-C6K-ATA-1-64M and 64 MB MEM-C6K-FLC64M flash PC cards are not preformatted. You must format these cards before using them to store files. In addition, the Supervisor Engine 1 and Supervisor Engine 2 do not support the same flash PC card format. To use a flash PC card with a Supervisor Engine 2, you must format the card with a Supervisor Engine 2. To use a flash PC card with a Supervisor Engine 1, you must format the card with a Supervisor Engine 1.

**Recommended Action** Format the flash memory using the **format** command and follow any instructions provided with the message. Otherwise, no action is required.

FILESYS Messages