Message and Recovery Procedures

This chapter lists the switch system messages by facility. Within each facility, the messages are listed by severity levels 0 to 7. The highest severity level is 0, and the lowest severity level is 7. Each message is followed by an explanation and a recommended action.

Note The messages listed in this chapter do not include the date/time stamp designation; the date/time stamp designation is displayed only if the software is configured for system log messaging.

ACL_ASIC Messages

This section contains the access control list ASIC (ACL_ASIC) messages.

ACL_ASIC-4

Error Message `ACL_ASIC-4-INTR_THROTTLE: Throttling "[chars]" Intr.`
`Exceeded permitted [int]/[dec] intrs/msec`

Explanation This message indicates an excessive number of interrupts. The system performs throttling to keep the switch processor safe.

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

ACLMERGE Messages

This section contains the access control list merge (ACLMERGE) messages.

ACLMERGE-3

Error Message `ACLMERGE-3-CUDDERROR: A CUDD Library error was detected in [chars]`

Explanation This message indicates that the CUDD Library detected an error, and that the ACL-merge for this invocation has failed and could result in more traffic being switched by the software. The interface where the merge failed may experience lower performance. [chars] is a function.

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

Error Message `ACLMERGE-3-CUDDWARN: A CUDD Library warning message for interest in this even in [chars]`

Explanation This message represents a debug message. [chars] is a function.

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

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

C6KENV Messages

This section contains the environmental (C6KENV) messages.

C6KENV-0

Error Message C6KENV-0-CLOCKMAJFAILED: too many clocks failed to
continue system operation

Explanation This message indicates that no clocks are operational. At least one
clock must be operational so packets can be forwarded.

Recommended Action Replace the clocks, backplane, or chassis.

Error Message C6KENV-0-VTTMAJFAILED: Too many VTT failures to
continue system operation

Explanation This message indicates that the backplane data bus cannot operate
without proper termination provided by the voltage termination modules
(VTT).

Recommended Action Replace the failed VTT modules.

C6KENV-1

Error Message `C6KENV-1-SHUTDOWN-DISABLED: need to shutdown [chars] now but shutdown action is disabled!`

Explanation This message indicates that the user disabled the shutdown action so the system could not shut down the indicated component. [chars] is the component.

Recommended Action Manually shut down or remove the indicated component immediately.

C6KENV-2

Error Message `C6KENV-2-CLOCKMAJRECOVERED: enough clocks operational to continue system operation`

Explanation This message indicates that the system can continue operating using the recovered clocks.

Recommended Action No action is required.

Error Message `C6KENV-2-CLOCK_SWITCHOVER: changing system switching clock.`

Explanation This message indicates that the system switching clock will be changed to use the other clock. Changing system switching clocks always results in the resetting of the system.

Recommended Action Replace the failed clock as soon as possible.

Error Message `C6KENV-2-MAJORTEMPALARM: [chars] has exceeded`
`allowed operating temperature range`

Explanation This message indicates that the indicated component will power off. For shared components, the system will power off. [chars] is the system component and slot.

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

Error Message `C6KENV-2-RESET_SCHEDULED: system reset scheduled in`
`[dec] seconds`

Explanation This message indicates that a major alarm condition has occurred and will be corrected by resetting the system. The reset causes the system to reload and run with another component. [dec] is the number of seconds.

Recommended Action Replace the component as soon as possible.

Error Message `C6KENV-2-SHUTDOWN: shutdown [chars] is now because of`
`[chars]`

Explanation This message indicates that the indicated component is being shut down. The first [chars] is the component, and the second [chars] is the reason for shutdown.

Recommended Action Replace the component as soon as possible.

Error Message C6KENV-2-SHUTDOWN-CANCELLED: shutdown for [chars] cancelled

Explanation This message indicates that the situation that caused the shutdown to be scheduled was corrected and the shutdown was canceled. [chars] is the component.

Recommended Action No action is required.

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

Explanation This message indicates that the system has detected that the module specified in the error message should be shut down because it has exceeded major sensor thresholds. However, this command has been overridden, and the specified module will not be shut down. The command used to override shutdown is **no environment-monitor shutdown**.

Recommended Action Remove the configuration that bypasses the module shutdown due to exceeded sensor thresholds, and then shut down the module.

Error Message C6KENV-2-SHUTDOWN-SCHEDULED: shutdown for [chars] scheduled in [dec] seconds

Explanation This message indicates that a major alarm condition will be corrected by shutting down the affected component. [chars] is the component, and [dec] is the amount of time in seconds before shutdown.

Recommended Action Replace the component as soon as possible.

Error Message C6KENV-2-VTTMAJRECOVERED: enough VTTs operational to continue system operation

Explanation This message indicates that the failed voltage termination (VTT) modules began operating again.

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

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

C6KENV-4

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

Explanation This message indicates that the specified alarm condition has been cleared. Shutdown has been cancelled.

Recommended Action No action is required.

Error Message C6KENV-4-CLOCKFAILED: clock [dec] failed

Explanation This message indicates that the indicated clock failed. The system will continue to operate using the redundant clock. [dec] is the clock number 1 or 2.

Recommended Action Replace the failed clock.

Error Message C6KENV-4-CLOCKOK: clock [dec] operational

Explanation This message indicates that a previously failed clock has declared itself operational. [dec] is the clock number 1 or 2.

Recommended Action No action is required.

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

>   **Explanation** This message indicates that the system is missing the required
>   number of fan trays to operate properly. Although this is a minor alarm,
>   system components could overheat and be shut down.

>   **Recommended Action** Insert the required number of fan trays as soon as
>   possible.

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

>   **Explanation** This message indicates that the required number of fan trays has
>   been restored.

>   **Recommended Action** No action is required.

Error Message C6KENV-4-FANHIOUTPUT: Version [dec] high-output
fan-tray is in effect

>   **Explanation** The system has detected that the fan tray is a high-output
>   (version 2) fan tray. The system has updated the cooling capacity for the fan
>   tray.

>   **Recommended Action** No action is required.

Error Message C6KENV-4-FANLOOUTPUT: Version [dec] low-output
fan-tray is in effect

>   **Explanation** The system has detected that the fan tray is a low-output
>   (version 1) fan tray. The system has updated the cooling capacity for the fan
>   tray.

>   **Recommended Action** No action is required.

Error Message `C6KENV-4-FANPSINCOMPAT: Fan tray and power supply [dec] are incompatible`

Explanation This message indicates that a power supply upgrade is required to sufficiently operate this fan tray. Although this is a minor alarm, overcurrent protection on the power supply could start without further warning.

Recommended Action Replace the power supply as soon as possible.

Error Message `C6KENV-4-FANTRAYFAILED: fan tray failed`

Explanation This message indicates that one or more fans in the system fan tray have failed. Although this is a minor alarm, system components could overheat and be shut down.

Recommended Action Replace the system tray.

Error Message `C6KENV-4-FANTRAYOK: fan tray OK`

Explanation This message indicates that all fans in the fan tray are operating.

Recommended Action No action is required.

Error Message `C6KENV-4-FANVERCHK: Power-supply [dec] inserted is only compatible with Version [dec] fan-tray. Please make sure fan is low-output fan-tray`

Explanation The system has detected that the fan tray is a low-output (version 1) fan tray. If this condition is correct, no action is required. If the fan tray is actually a high-output (version 2) fan tray, the specified power supply is not able to support the high-output fan tray.

Recommended Action If the fan tray is a high-output (version 2) fan tray, enter the **hw-module fan-tray version 2** command to update the system with the upgrade information. Replace the 1000 Watt or 1300 Watt power supply, as this type of power supply is not compatible in this chassis with the version 2 fan-tray.

Error Message C6KENV-4-MAJORTEMPALARMRECOVER: [chars] has returned
to allowed operating temperature range

Explanation This message indicates that the component has returned to the
allowed temperature range, so the scheduled shutdown is canceled and the
system will continue operating. [chars] is the system component and slot.

Recommended Action No action is required.

Error Message C6KENV-4-MINORTEMPALARM: [chars] has exceeded normal
operating temperature range

Explanation This message may indicate a trend for the component and for
other components in the system. [chars] is the system component and slot.

Recommended Action Inspect the indicated component closely to determine
why it is operating out of the normal operating temperature range and whether
it will eventually exceed the allowed operating temperature range.

Error Message C6KENV-4-MINORTEMPALARMRECOVER: [chars] has returned
to normal operating temperature range

Explanation This message indicates that the operating temperature range is
normal. [chars] is the system component and slot.

Recommended Action No action is required.

Error Message C6KENV-4-MINORTEMPOKALARM: [chars] all temperature
sensor have failed. If the module temperature sensor does not
recover by itself, please power cycle the module when it is
feasible

Explanation This message indicates that all temperature sensors have failed
on the module.

Recommended Action If the temperature sensors do not recover, power cycle
the module when possible.

Error Message C6KENV-4-MINORTEMPOKALARMRECOVER: [chars]. It has
returned to normal operating status.

Explanation This message indicates that the module temperature sensor has
returned to normal operating status.

Recommended Action No action is required.

Error Message C6KENV-4-MINORTEMPSUPOKALARM: All temperature
sensors of Supervisor in slot [dec] have failed. If the
temperature sensor does not recover by itself, please power cycle
the chassis when it is feasible

Explanation This message indicates that all temperature sensors have failed
on the supervisor engine.

Recommended Action If the temperature sensors does not recover, power cycle
the supervisor engine when possible.

Error Message C6KENV-4-MINORTEMPSUPOKALARMRECOVER: Supervisor in
slot [dec] has returned to normal operating status.

Explanation This message indicates that the supervisor engine temperature
sensor has return to normal operating status.

Recommended Action No action is required.

Error Message `C6KENV-4-MINORVTTOKALARM: All the backplane vtt temperature sensor have failed. If the backplane vtt temperature sensor does not recover by itself, please power cycle the chasis when it is feasible`

Explanation This message indicates that all backplane VTT temperature sensors have failed.

Explanation If the backplane VTT temperature sensors do not recover, power cycle the chassis when possible.

Error Message `C6KENV-4-MINORVTTOKALARMRECOVER: Backplane VTT has returned to normal operating status.`

Explanation This message indicates that the backplane VTT has returned to normal operating status.

Recommended Action No action is required.

Error Message `C6KENV-4-PSFANFAIL: the fan in power supply [dec] has failed`

Explanation This message indicates that the fan in the power supply [dec] has failed and that the power supply could overheat and shut down. [dec] is the number of the power supply 1 or 2.

Recommended Action Replace the power supply.

Error Message `C6KENV-4-PSFANOK: the fan in power supply [dec] is OK`

Explanation This message indicates that the fan in the power supply [dec] is operating. [dec] is the number of the power supply 1 or 2.

Recommended Action No action is required.

Error Message C6KENV-4-VTTFAILED: VTT [dec] failed

Explanation This message indicates that the indicated VTT module failed.
[dec] is the VTT number 1, 2, or 3.

Recommended Action Replace the indicated VTT module and/or the chassis as
soon as possible.

Error Message C6KENV-4-VTTOK: VTT [dec] operational

Explanation This message indicates that the indicated VTT module is
operational. [dec] is the VTT number 1, 2, or 3.

Recommended Action No action is required.

C6KERRDETECT

This section contains the error detection (C6ERRDETECT) messages.

C6KERRDETECT-2

Error Message C6KERRDETECT-2-CRCCRITLEVEL: System detected CRC
error rate on port ASIC data bus exceed fatal threshold limit on
module in slot [dec], Error detection count:[dec]

Explanation The system detected that the port ASIC exceeded the fatal
threshold for the CRC error rate.

Recommended Action Copy the message exactly as it appears on the console or
in the system log. Research and attempt to resolve the issue using the tools
and utilities provided at http://www.cisco.com/tac. With some messages,
these tools and utilities will supply clarifying information. Search for
resolved software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you
still require assistance, open a case with the Technical Assistance Center via
the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl,

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

Error Message C6KERRDETECT-2-CRCCRITLEVEL: System detected data bus CRC error rate on port ASIC exceed the fatal threshold limit on module in slot [dec], Error detection count: [dec]

Explanation This message indicates that the system detected that the data bus CRC error rate on the port ASIC exceeded the fatal threshold.

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

Error Message C6KERRDETECT-2-CRCWARNLEVEL: System recovered from port ASIC error rate on data bus CRC errors on module in slot [dec], is now below normal level

Explanation The CRC error rate is now below the warning threshold.

Recommended Action This situation is usually temporary. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

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

Error Message C6KERRDETECT-2-FIFOCRITLEVEL: System detected
unrecoverable resources error on active supervisor pinnacle

Explanation This message indicates that the system detected unrecoverable
resources on the indicated Pinnacle ASIC.

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

Error Message C6KERRDETECT-2-FIFOCRITLEVEL: System detected
unrecoverable resources error on active supervisor port-asic

Explanation This message indicates that the system detected unrecoverable
resources on the specified port ASIC.

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

resolved software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you
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information to your case in nonzipped, plain-text (.txt) format: the output of
the **show logging** and **show tech-support** commands and your pertinent
troubleshooting logs.

Error Message `C6KERRDETECT-2-ERRDETECTFATAL: The supervisor card`
`detected unrecoverable error, reason code: [dec], for [dec]`
`times`

Explanation This message indicates that the system detected an unrecoverable
error. The first [dec] is the code number of the error, and the second [dec] is
the number of times that the system detected the error.

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

Error Message `C6KERRDETECT-2-LPBKFAIL: The in-band loopback test between switch processor and route processor failed, count:[dec]`

Explanation   This message indicates that the system detected an unrecoverable in-band loopback test error. [dec] is the number of times that the system detected the failure.

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

Error Message `C6KERRDETECT-2-LPBKRECOVERED: In-band loopback test between switch processor and route processor recovered, after [dec] failure`

Explanation   The in-band loopback has recovered from a previous failure.

Recommended Action   This error is usually temporary. No action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message C6KERRDETECT-2-SUPCRSH: Standby supervisor crashed due to unrecoverable errors detected, Reason: [chars]

Explanation This message indicates that the system detected an unrecoverable error that caused the redundant supervisor engine to fail. [chars] is the error.

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

Error Message C6KERRDETECT-2-SWBUSSTALL: The switching bus is experiencing stall for [dec] seconds

Explanation The switching bus is stalled, and data traffic is stopped. This condition can indicate that a line card is not properly seated or that line card hardware has failed on the switching bus.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl,

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

Error Message C6KERRDETECT-2-SWBUSSTALL_RECOVERED: The switching bus stall is recovered and data traffic switching continues

Explanation The detected switching bus stall has recovered and data traffic resumes. This condition might indicate that a line card is now properly seated.

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

Error Message C6KERRDETECT-2-SWBUSSTALL_RECOVERING: The switching bus stall is now recoved and powering on all switch bus required cards.

Explanation The detected switching bus stall has recovered. The system is powering on all required switch bus cards. This condition might indicate that a line card is now properly seated.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

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

Error Message `C6KERRDETECT-2-SWBUSSTALL_SWBUS_ISOLATED: The switching bus is now isolated by powering off all switch bus required cards.`

Explanation The detected switching bus stall has continued. In accordance with the configured switching bus recovery action, the active supervisor engine is isolating the switching bus by powering down all cards required by the switch bus. This condition might indicate either that one of the line cards is not seated properly or that there is a problem with the line card hardware.

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

C6KERRDETECT-4

Error Message `C6KERRDETECT-4-CRCWARNLEVEL: System recovered from port ASIC error rate on data bus CRC errors on module in slot [dec], is now below warning level`

Explanation This message indicates that the CRC error rate is now below the warning threshold.

Recommended Action If the CRC error rate exceeds the warning threshold continually, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `C6KERRDETECT-4-LPBKRECOVERED: In-band loopback test between switch processor and route processor recovered, after [dec] failure`

Explanation The message indicates that the in-band loopback has recovered. [dec] is the number of failures.

Recommended Action If this situation recurs, contact your Cisco technical support representative.

Error Message C6KERRDETECT-4-SWBUSSTALL: The switching bus is
stalled for more than [dec] seconds

> **Explanation** This message indicates that the switching bus is stalled and data
> traffic is lost. [dec] is the number of seconds.

> **Recommended Action** A module might not be seated properly. If this situation
> recurs, contact your Cisco technical support representative.

Error Message C6KERRDETECT-4-SWBUSSTALL_RECOVERED: The switching
bus stall is recovered and data traffic switching continues

> **Explanation** This message indicates that the switching bus is no longer stalled,
> and data traffic can continue.

> **Recommended Action** A module might not be seated properly. If the situation
> recurs, contact your Cisco technical support representative.

Error Message C6KERRDETECT-4-SWBUSSTALL_RECOVERING: The switching
bus stall is now recoved and powering on all switch bus required
cards.

> **Explanation** This message indicates that the detected switching bus is no
> longer stalled. Data traffic will continue once the modules are online. This
> condition might indicate that a module is now properly seated.

> **Recommended Action** If this situation recurs, contact your Cisco technical
> support representative.

Error Message C6KERRDETECT-4-SWBUSSTALL_SWBUS_ISOLATED: The
switching bus is now isolated by powering off all switch bus
required cards.

> **Explanation** This message indicates that the active supervisor engine isolated
> the switching bus by powering down all modules that require the switching
> bus. Based on the configured switching bus recovery action, the detected

switching bus stall continued longer than expected. This condition might be because the module is not seated properly or because the module hardware is faulty.

Recommended Action   Reseat the modules. If reseating the modules does not fix the error condition, contact your Cisco technical support representative.

C6KERRDETECT-6

Error Message   C6KERRDETECT-6-LPBKINFO: CPU util(5sec): SP=[dec]% RP=[dec]% Traffic=[dec]%
Interrupt throttle[[dec]], TxRate[[dec]], RxRate[[dec]], Bus stall[[dec]]

Explanation   This message provides information about the use of system resources during an event.

Recommended Action   No action is required.

C6K_PLATFORM Messages

This section contains the general platform (C6K_PLATFORM) messages.

C6K_PLATFORM-0

Error Message   C6K_PLATFORM-0-UNKNOWN_CHASSIS: The chassis type is not known.([hex])

Explanation   This message indicates that the Cisco IOS software installed on the system does not recognize the chassis type specified in the error message.

Recommended Action   Ensure that your Cisco IOS software release train supports the chassis type. Upgrade to the latest Cisco IOS software release in your release train.

C6K_PLATFORM-4

Error Message `C6K_PLATFORM-4-BADFLASH: Unsupported flash type in the bootflash - [chars]. Will NOT be able to save crash info to flash of [chars] on module: [dec]`

Explanation This message indicates that the platform does not support the Flash single in-line memory module (SIMM). The first [chars] is the unsupported Flash type, the second [chars] is the processor type, and [dec] is the module number.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message `C6K_PLATFORM-4-CONFREG_BREAK_ENABLED: The default factory setting for config register is 0x2102.It is advisable to retain 1 in 0x2102 as it prevents returning to ROMMON when break is issued.`

Explanation This message indicates that the switch processor configuration register has been changed from the default factory setting of 0x2102 to another hexadecimal value.

Recommended Action No action is required.

Error Message `C6K_PLATFORM-4-CRASHSAVE: will not be able to save crash info to flash of [chars] on module: [dec]`

Explanation This message indicates that the Flash device is read-only, unformatted, or incompatible. Crash information will not be saved. [chars] is the processor type, and [dec] is the module number.

Recommended Action Try formatting the Flash device.

Error Message `C6K_PLATFORM-4-ENVMON: System shutdown due to temperature alarms is [chars].`

Explanation   This message indicates that the system is configured to shut down a module if the operating temperature exceeds a temperature threshold. This configuration has been bypassed, and a module will still operate in an over-temperature condition. Operating at an over-temperature condition can damage the hardware.

Recommended Action   Do not override the sensor alarms that act on an over-temperature condition. Enter the **environment-monitor shutdown temperature** command to return the system to a normal temperature detection condition.

Error Message `C6K_PLATFORM-4-RTC_OSCILLATOR: The oscillator in the Real Time Clock is [chars]. Calendar [chars] be maintained during the powered down state of the switch.`

Explanation   This message indicates that a command has been entered that will cause the system calendar not to be maintained during a power down of the switch. The system date and time will require manual setting when the system is powered up during the next boot time. This command is useful to conserve the battery power of the Complementary Metal Oxide Semiconductor (CMOS), which is used to keep the real-time clock active while the switch is powered down. This condition is useful only if the switch is powered down for a long period of time.

Recommended Action   If the switch need not be powered down for a long period of time, remove the configuration by entering the **no hw-modulertc-oscillator shutdown** command.

C6K_PLATFORM-5

Error Message `C6K_PLATFORM-5-LESS_SPACE: May not have enough space`
`to save the crash info. on flash of [chars] on module: [dec]`

Explanation This message indicates that the Flash device does not have
enough space. Crash information might not be saved. [chars] is the processor
type (SP, RP, or DFC), and [dec] is the module number.

Recommended Action Remove unnecessary files from the Flash device. Enter
the **squeeze** command for the device.

Error Message `C6K_PLATFORM-5-MISMATCH: '[chars]' device`
`programming algorithm mismatch detected on [chars] (module:`
`[dec]), formatting is recommended.`

Explanation This message indicates that the Flash device programming
algorithm that was written to the device when the Flash was formatted is
different from what the current running software detected. The first [chars] is
the device, the second [chars] is where the mismatch was detected, and [dec]
is the module number.

Recommended Action Try reformatting the Flash device.

C6K_POWER Messages

This section contains the power (C6K_POWER) messages.

C6K_POWER-1

Error Message C6K_POWER-1-PD_ERROR_DETECTED: There's an error detected on port [dec]/[dec]

Explanation This message indicates that the module firmware detected a hardware problem. [dec]/[dec] is the module/port number.

Recommended Action Contact your Cisco technical support representative.

Error Message C6K_POWER-1-PD_HW_FAULTY: There's a hardware problem on port [dec]/[dec]. Power is turned off on the port.

Explanation This message indicates that the module firmware detected a hardware problem. Power is turned off on the specified port. [dec]/[dec] is the module/port number.

Recommended Action Contact your Cisco technical support representative.

C6K_POWER-3

Error Message C6K_POWER-3-NOMEM: Not enough memory available for [chars]

Explanation This message indicates that the power management subsystem could not obtain the required memory.

Recommended Action Contact your Cisco technical support representative.

C6K_POWER-4

Error Message `C6K_POWER-4-PD_NOLINKUP: The device connected to [dec]/[dec] is powered up but its link is not up in [dec] seconds. Therefore, power is withdrawn from the port.`

Explanation This message indicates that the system withdrew the power that was allocated to the specified port because the port link was not up within the specified number of seconds.

Recommended Action Try to connect the device to a different port or connect a different device to the port specified in the message.

C6KPWR Messages

This section contains the power (C6KPWR) messages.

C6KPWR-2

Error Message `C6KPWR-2-INSUFFICIENTPOWER: Powering down all linecards as there is not enough power to operate all critical cards`

Explanation This message indicates that the switch was operating with two power supplies in combined mode and one of them has failed. Available power is insufficient to support all critical service modules. Critical service modules include modules that support VPNs or IP security. Security issues could arise if these modules fail; therefore, all modules have been powered down.

Recommended Action Replace the failed power supply.

C6KPWR-3

Error Message `C6KPWR-3-PSUNKNOWN: Unknown power supply in slot [dec] (idprom read failed).`

Explanation The IDPROM of power supply in the indicated slot cannot be read.

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

C6KPWR-4

Error Message C6KPWR-4-COULDNOTREPOWER: Wanted to re-power FRU (slot [dec]) but could not

Explanation   This message indicates that the system was unable to repower the field replaceable unit (FRU) in the indicated slot. [dec] is the slot number. This message might display for a number of reasons. A unit cannot power up if the power supply does not meet the power requirement for that unit.

Recommended Action   If a module is unable to power up due to overheating, allow sufficient time for the unit to cool down before attempting to power up the unit. If both power supplies are operational but a unit is not being powered up, contact your Cisco technical support representative.

Error Message C6KPWR-4-DISABLED: Power to module in slot [dec] set [chars]

Explanation   This message indicates that the module in the indicated slot was powered off for the indicated reason. [dec] is the slot number, and [chars] indicates the power status.

Recommended Action   Your recovery procedure depends on the reason indicated in the message.

Error Message C6KPWR-4-ENABLED: Power to module in slot [dec] set on

Explanation   This message indicates that the module in the indicated slot was powered up. [dec] is the slot number.

Recommended Action   No action is required.

Error Message C6KPWR-4-INPUTCHANGE: Power supply [dec] input has changed. Power capacity adjusted to [chars]W

Explanation This message indicates that the power supply in the slot specified in the error message has detected a change in its input supply. The power capacity for the power supply has been adjusted accordingly.

Recommended Action Enter the **show power** command to see the current power status. Otherwise, no action is required.

Error Message C6KPWR-4-POWERDENIED: insufficient power, module in slot [dec] power denied.

Explanation This message indicates that there is not enough power to turn on the module. [dec] is the slot number.

Recommended Action Turn off other modules to provide enough power for the specified module.

Error Message C6KPWR-4-PSCOMBINEMODE: Power supplies set to combined mode

Explanation This message indicates that the power supplies are set to combined mode.

Recommended Action No action is required.

Error Message C6KPWR-4-PSFAIL: Power supply [dec] output failed

Explanation This message indicates that the indicated power supply failed. [dec] is the power supply 1 or 2.

Recommended Action Replace the power supply.

Error Message C6KPWR-4-PSINPUTDROP: Power supply [dec] input has
dropped

> **Explanation** This message indicates that the power supply in the slot specified
> in the error message has detected a drop in its input supply. The power
> capacity for the power supply has been adjusted accordingly.

> **Recommended Action** Enter the **show power** command to see the current
> power status. Otherwise, no action is required.

Error Message C6KPWR-4-PSINSERTED: Power supply inserted in slot
[dec]

> **Explanation** This message indicates that a power supply was inserted in the
> indicated slot. [dec] is the slot number.

> **Recommended Action** No action is required.

Error Message C6KPWR-4-PSMISMATCH: power supplies rated outputs do
not match.

> **Explanation** This message indicates that the two power supplies in the system
> have different output ratings.

> **Explanation** For more efficient load sharing, use power supplies with the same
> output rating.

Error Message C6KPWR-4-PSNOREDUNDANCY: Power supplies are not in
full redundancy, power usage exceeds lower capacity supply

> **Explanation** This message indicates that the two power supplies in the system
> have different output ratings. Current power usage exceeds the capacity of the
> lower-rated power supply. If the higher-rated power supply fails, the
> lower-rated power supply will not be able to support all modules that are
> currently powered up.

> **Recommended Action** To ensure that the system power supplies are optimally
> redundant, use power supplies with identical output ratings or reduce system
> power consumption.

Error Message `C6KPWR-2-PSOCPSHUTDOWN: Power usage exceeds power supply [dec] allowable capacity. Shutting down power supply`

Explanation This message indicates that the two power supplies in the system have mismatched output ratings. The total power usage has exceeded the sharing capacity of the specified power supply. The power supply has been shut down.

Recommended Action To ensure that the system power supplies are optimally redundant, use power supplies with identical output ratings or reduce system power consumption.

Error Message `C6KPWR-4-PSOK: Power supply [dec] turned on`

Explanation This message indicates that the indicated power supply is turned on. [dec] is the power supply 1 or 2.

Recommended Action No action is required.

Error Message `C6KPWR-4-PSREDUNDANTBOTHSUPPLY: In power redundancy mode, system is operating on both power supplies`

Explanation This message indicates that when in power redundancy mode, the system operates on both power supplies.

Recommended Action No action is required.

Error Message `C6KPWR-4-PSREDUNDANTMISMATCH: Power supplies rated outputs do not match`

Explanation This message indicates that the rated outputs of the power supplies do not match.

Recommended Action Make sure that the rated outputs for the power supplies match.

Error Message `C6KPWR-4-PSREDUNDANTMODE: Power supplies set to redundant mode`

Explanation This message indicates that the power supplies are set to redundant mode.

Recommended Action No action is required.

Error Message `C6KPWR-4-PSREDUNDANTONESUPPLY: In power redundancy mode, system is operating on one power supply`

Explanation This message indicates that when in power redundancy mode, the system operates on one power supply only.

Recommended Action No action is required.

Error Message `C6KPWR-4-PSREMOVED: Power supply removed from slot [dec]`

Explanation This message indicates that a power supply was removed from the indicated slot. [dec] is the slot number.

Recommended Action No action is required.

Error Message `C6KPWR-4-UNDERPOWERED: Insufficient power to operate all FRUs in system`

Explanation This message indicates that there is insufficient power to operate all modules in the system.

Recommended Action Reconfigure the system or upgrade the power supplies.

Error Message `C6KPWR-4-UNSUPPORTED: Unsupported module in slot [dec], power not allowed: [chars]`

Explanation This message indicates that power was not allocated to a slot containing an unsupported module. [dec] is the slot number, and [chars] provides more information about the error.

Recommended Action Remove the unsupported module. Or resolve the issue described in the message by inserting or replacing the Switch Fabric Module or by moving the module to a different slot.

C6KPWR-SP-4

Error Message `C6KPWR-SP-4-UNSUPPORTED: unsupported module in slot [num], power not allowed: [chars]`

Explanation This message indicates that the module in the specified slot is not supported. [num] is the slot number, and [chars] provides more details about the error.

Recommended Action Remove the unsupported module. Resolve the issue described in the message by inserting or replacing the Switch Fabric Module or by moving the unsupported module to a different slot.

C6MSFC Messages

This section contains the Multilayer Switching Feature Card (C6MSFC) messages.

C6MSFC-3

Error Message `C6MSFC-3-BADCPUTYPE: Invalid CPU Type [dec]`

Explanation This message indicates that the software does not recognize the MSFC on which it is operating. This problem might be caused by an improperly programmed or defective identification programmable read-only memory (IDPROM). [dec] is the invalid CPU type.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message `C6MSCF-3-CHASSIS: Unknown chassis model`

Explanation This message indicates that data stored in CPU IDPROM is defective or incomplete.

Recommended Action Contact your Cisco technical support representative to update your system.

Error Message `C6MSFC-3-CONFIG: Recommended port adapter configuration exceeded`

Explanation This message indicates that the total bandwidth of fast and medium bandwidth port adapters exceeds the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high and medium bandwidth port adapters for the system.

Error Message `C6MSFC-3-INOT0: IO card discover in non-zero slot [dec]`

Explanation This message indicates that an input/output (I/O) card has been detected in the non-zero slot indicated in the error message.

Recommended Action Verify that the card is in the correct slot and that the configuration is correct. Try the operation again.

Error Message `C6MSFC-3-NOCPUVER: Invalid CPU Revision [dec]`

Explanation This message indicates that the CPU ID could not be read from EEPROM. This problem is probably due to a hardware failure. [dec] is the invalid CPU revision.

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

Error Message `C6MSFC-3-NOMAC: Can't allocate MAC address for interface [num] / [num]`

Explanation This message indicates that the MAC address allocation failed because of an incorrect slot and interface combination, which exceeds the maximum available hardware. [num] / [num] are the module and interface numbers.

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

C6MSFC-4

Error Message `C6MSFC-4-COOKIE: Corrupt or missing MAC address cookie\n using random base [enet]`

Explanation This message indicates that the contents of the MAC address EEPROM is invalid. The system is providing a random MAC address. [enet] is the MAC address.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message C6MSFC-4-MACBLKSIZE: Unknown MAC address block size

Explanation This message indicates that the data stored in CPU IDPROM is defective or incomplete.

Recommended Action Contact your Cisco technical support representative to update your system

C6SUP_SP Messages

This section contains the switch processor (C6SUP_SP) messages.

C6SUP_SP-2

Error Message C6SUP_SP-2-NOMEM: No memory available for [chars]

Explanation This message indicates that the system did not have enough memory available. [chars] is the operation for which there was insufficient memory.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

C6SUP_SP-3

Error Message C6SUP_SP-3-CONFIG: Recommended port adapter configuration exceeded

Explanation This message indicates that the total bandwidth of fast and medium bandwidth port adapters exceeded the rated capacity of this system.

Recommended Action Refer to the configuration guidelines for the maximum allowed high and medium bandwidth port adapters for the system.

Error Message C6SUP_SP-3-IONOT0: IO card discovered in non-zero slot [dec]

Explanation This message indicates that an input/output (I/O) card was detected in a non-zero slot. [dec] is the slot number.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message C6SUP_SP-3-NOMAC: Can't allocate MAC address for interface [dec] / [dec]

Explanation This message indicates that the MAC address allocation failed because of an incorrect slot and interface combination that exceeds the maximum available hardware. [dec] / [dec] are the module and interface numbers.

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

Error Message C6SUP_SP-3-NOVLANMAC: Can't allocate MAC address for VLAN interface [dec]

Explanation This message indicates that the MAC address allocation failed because the VLAN number exceeds the number of VLANs provided for by the chassis. [dec] is the VLAN number.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still

require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message C6SUP_SP-3-UNSUPPORTED: [chars] in slot [dec] is not supported on the [chars] chassis

Explanation This message indicates that the software identified and disabled the Forwarding Engine on the input/output (I/O) card. The first [chars] is the software, [dec] is the slot, and the second [chars] is the chassis.

Recommended Action No action is required.

C6SUP_SP-4

Error Message C6SUP_SP-4-COOKIE: Corrupt or missing MAC address cookie\n using random base [enet]

Explanation This message indicates that the contents of the MAC address EEPROM is invalid. The system is providing a random MAC address. [enet] is the MAC address.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message C6SUP_SP-4-HEARTBEAT: Internal inconsistency detected, heartbeats disabled

Explanation This message indicates that the system detected an inconsistency while sending internal heartbeat packets on the switching bus.

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

Error Message C6SUP_SP-4-NOCPUVER: Invalid CPU ID, assuming revision 1

Explanation This message indicates that the CPU ID could not be read from the electrically erasable programmable read-only memory (EEPROM). This problem is probably due to a hardware failure.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message C6SUP_SP-4-PCIVALID: PCI activation failed, bay [dec], 0x%0x

Explanation This message indicates that the system received an invalid Peripheral Component Interconnect (PCI) signal from the port adapter. This problem is probably due to a hardware failure. [dec] is the bay number.

Recommended Action Contact your Cisco technical support representative.

CNS Messages

This section contains the Cisco Networking Services (CNS) messages.

CNS-3

Error Message CNS-3-MEMORY: [chars]

Explanation This message indicates that the CNS subsystem experienced a problem getting the required memory to complete the specified operation.

Recommended Action Check the system memory for other memory allocation errors, and contact technical support for problem resolution. Upgrading the memory in the network device might be required.

Error Message CNS-3-TRANSPORT: [chars]

Explanation This message indicates that the CNS subsystem experienced a problem contacting an external application. The message text might indicate the nature of the error condition.

Recommended Action Check the network configuration and cables to make sure that the remote application is running and that the address is accessible.

Error Message CNS-3-WARNING: [chars]

Explanation This message indicates that the CNS subsystem experienced an unexpected condition while executing a set of commands. The unexpected condition did not cause a failure.

Recommended Action Check the error log for additional information. This is an informational message and does not necessarily indicate that an error happened.

Error Message CNS-3-XML_SEMANTIC: [chars]

Explanation This message indicates that the CNS subsystem experienced an error while processing the XML encapsulation of a configuration command.

Recommended Action The externally supplied XML has errors in it and cannot be processed. See the message text for an indication of what caused the condition. This condition might require that you verify the command and reissue it from the server.

CNS-5

Error Message CNS-5-CONFIG_SUCCESS: SUCCESSFUL_COMPLETION

Explanation The configuration download was applied successfully.

Recommended Action No action is required.

CONST_DIAG Messages

This section contains the Online Diagnostics (CONST_DIAG) messages.

CONST_DIAG-3

Error Message `CONST_DIAG-3-DIAG_FIB_TCAM_TEST: Fib Tcam test: Missed at address [hex], device #[dec], HRR = [hex], lookup value = [hex]-[hex]`

Explanation This message indicates that the FIB TCAM device might not be functional because the test failed to get a hit at the reported address and look-up value.

Recommended Action Rerun the test with the NO RESET option after resetting the module. If the test fails again at the same address, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

CPU_MONITOR Messages

This section contains the CPU monitor (CPU_MONITOR) messages.

CPU_MONITOR-2

Error Message `CPU_MONITOR-2-NOT_RUNNING_DBG: CPU_MONITOR DBG:`
`[chars]`

Explanation This message provides debugging information for the
NOT_RUNNING_DBG condition.

Recommended Action No action is required.

Error Message `CPU_MONITOR-2-NOT_RUNNING_TB: CPU_MONITOR traceback:`
`[hex] [hex] [hex] [hex] [hex] [hex] [hex] [hex]`

Explanation This message provides debugging information for the
NOT_RUNNING_TB condition. It displays the traceback of the interrupted
functions.

Recommended Action No action is required.

CPU_MONITOR-3

Error Message `CPU_MONITOR-3-PEER_EXCEPTION: CPU_MONITOR peer has`
`failed due to exception , resetting [[dec]/[dec]]`

Explanation This message indicates that CPU monitor messages have failed
on the peer processor. The system is no longer operational.

Recommended Action No action is required.

Error Message CPU_MONITOR-3-TIMED_OUT: CPU monitor messages have failed, resetting system

Explanation This message indicates that CPU monitor messages have failed and the system is no longer operational.

Recommended Action No action is required. The system resets itself.

CPU_MONITOR-6

Error Message CPU_MONITOR-6-NOT_HEARD: CPU monitor messages have not been heard for [dec] seconds

Explanation This messages indicates that CPU monitor messages have not been heard for a significant amount of time. A timeout will likely occur, which will reset the system. [dec] is the number of seconds.

Recommended Action No action is required.

CWAN_ATM Messages

This section contains the WAN ATM port (CWAN_ATM) messages.

CWAN_ATM-3

Error Message CWAN_ATM-3-BADMAC: Broadcast MAC on [chars] subnet

Explanation This message indicates that an unexpected packet has been received through the backplane from a subinterface. The [chars] variable will be RFC1483 if the subnet is configured for bridging and RFC1577 if the subnet is *not* configured for bridging.

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

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

Error Message CWAN_ATM-3-MCAST_DUP_VC_ERR: Multiple VCs assigned to same IP Multicast addr [IP add]

Explanation This message indicates that a second multicast, multipoint virtual circuit (mpt-VC) has been assigned to a multicast group that already had a mpt-VC assigned to it. [IP add] is the internet protocol address of the multicast group with the multiple assignations.

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

Error Message CWAN_ATM-3-MCAST_VC_ERR: Multiple IP Multicast addrs assigned to VC [hex]

Explanation This message indicates that a multicast, multipoint virtual circuit (mpt-VC) is already in use and has been assigned to another multicast group. [hex] is the mpt-VC with the multiple assignments.

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

Error Message CWAN_ATM-3-NONDATAVC: Failure = Ethernet data frame received on non-data VC

Explanation This message indicates that a data packet for a control virtual circuit (VC) has been received through the backplane.

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

Error Message CWAN_ATM-3-VC_RM_ERR: Failed to remove VC [hex]: [chars]

Explanation This message indicates that the virtual circuit (VC) removal process failed to complete, so a specific VC was not removed. [hex] is the VC, and [chars] is the description of the failure.

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

CWAN_CHOC_DS0 Messages

This section contains the OSR Channelized OC12/OC3 RP driver (CWAN_CHOC_DS0) messages.

CWAN_CHOC_DS0-3

Error Message CWAN_CHOC_DS0-3-CDBFAIL: Port [dec]/[dec] - fail to create a SONET controller data structure

Explanation This message indicates that the software resource cannot be allocated for the hardware. [dec]/[dec] identifies the port.

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

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

Error Message `CWAN_CHOC_DS0-3-CFG_BAD_PARA: [chars]: invalid config parameter [chars]`

Explanation This message indicates that the specified configuration parameter is invalid.

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

Error Message CWAN_CHOC_DS0-3-IFCONFIG_ERR: config error on port
[dec]/[dec]([chars]), cmd [dec] [chars]

Explanation This message indicates that a configuration command that was
sent from the system to a module failed.

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

Error Message CWAN_CHOC_DS0-3-PORTFAIL: Port [dec]/[dec] - fail to
create a port instance data structure

Explanation This message indicates that the software resource cannot be
allocated for the hardware. [dec]/[dec] identifies the port.

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

Error Message CWAN_CHOC_DS0-3-RMCTRLR_UNKNOWN: Slot [dec] -
Unknown linecard type [dec] removed

Explanation This message indicates that this version of the software does not recognize the hardware.

Recommended Action Check software version. Ensure that the software supports the hardware.

Error Message CWAN_CHOC_DS0-3-T1CFG_CCBERROR: CCB command error
(cmd, [dec], arg [dec]) on T1 [dec]/[dec]/[dec]

Explanation This message indicates that a command sent from the system to a module failed.

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

Error Message CWAN_CHOC_DS0-3-UNKNOWNCTRLR: Slot [dec] - Unknown
linecard type [dec]

Explanation This message indicates that this version of the software does not recognize the hardware.

Recommended Action Check software version. Ensure that the software supports the hardware.

Error Message CWAN_CHOC_DS0-3-UNKNOWN_MIB_TYPE: Unknown MIB type
[int] from slot [int]

Explanation This message indicates that the MSFC received an unknown
message from a module.

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

Error Message CWAN_CHOC_DS0-3-VCCFG_CCBERROR: CCB command error
(cmd, [dec], arg [dec]) on port [dec]/[dec] channel [dec]

Explanation This message indicates that a VC configuration command sent
from the system to a module failed.

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

CWAN_CHOC_DS0-4

Error Message CWAN_CHOC_DS0-4-ALLOCFAIL: Interface [dec]/[dec]
allocation failed: [chars]

Explanation This message indicates that required resources are unavailable.

Recommended Action Upgrade the system memory or reconfigure memory
usage.

Error Message CWAN_CHOC_DS0-4-CORRUPT: [chars] information seems
to be corrupted, bad value =[int]

Explanation This debug warning message indicates that the wrong parameters
were detected. The unexpected value is discarded.

Recommended Action No action is required.

Error Message CWAN_CHOC_DS0-4-IFCONFIG: [chars] config error
([dec], lc delay:[dec] ms): [chars]

Explanation This message indicates that the route processor received a
configuration error from a module.

Recommended Action Reconfigure the module or enter the **shut** and **no shut**
commands on the channel. If this message recurs, copy the message exactly as
it appears on the console or in the system log. Research and attempt to resolve
the issue using the tools and utilities provided at http://www.cisco.com/tac.
With some messages, these tools and utilities will supply clarifying
information. Search for resolved software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still
require assistance, open a case with the Technical Assistance Center via the
Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or
contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following
information to your case in nonzipped, plain-text (.txt) format: the output of
the **show logging** and **show tech-support** commands and your pertinent
troubleshooting logs.

Error Message CWAN_CHOC_DS0-4-LCLOCK_FAIL: Interface [chars]
failed to acquire semaphore for LC access: [chars]

Explanation This message indicates that a module failed to gain access to
another module within 2 seconds. This failure might be due to the system
being too busy or to an IPC failure. As a result of this failure, there might be
a mismatch between the RP and the module.

Recommended Action Reload the module.

Error Message CWAN_CHOC_DS0-4-PROV_FAIL: Interface [chars]
provisioning ch([dec]) failed: [chars]

Explanation This message indicates that the system has a provisioning conflict
or a resource shortage.

Recommended Action In controller SONET mode, enter the **no channelized**
command followed by the **channelized** command. Enter these command
again. If the problem persists, enter the **show controller sonnet** *slot/port*
command and the **show controller** {**pos** | **serial**} *slot/port*:*chan* command.
Contact your Cisco technical support representative, and provide the
representative with the gathered information.

Error Message CWAN_CHOC_DS0-4-UNPROV_FAIL: Interface [chars]
unprovisioning failed: [chars]

Explanation This message indicates that the module failed to respond to the
unprovisioning command.

Recommended Action Copy the message exactly as it appears on the console or
in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/tac. With some messages, these
tools and utilities will supply clarifying information. Search for resolved
software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still
require assistance, open a case with the Technical Assistance Center via the
Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or
contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_CHOC_DS0-4-UNSUP: Slot [dec]: Unknown [chars] ([dec])

Explanation This message indicates that this version of the software does not recognize the specified value.

Recommended Action Check the module version. The message is generally harmless, but we recommend contacting your Cisco technical support representative.

Error Message CWAN_CHOC_DS0-4-WRONG_LL: [chars] received wrong loveletter : type=[int], length=[int]

Recommended Action This debug warning message indicates that the wrong parameters were detected. The unexpected message from the module is discarded.

Recommended Action No action is required.

CWAN_CHOC_DS0-5

Error Message CWAN_CHOC_DS0-5-LOOPSTATUS: [chars], [chars]

Explanation This message indicates a configurable loopback status.

Recommended Action No action is required.

CWAN_CHOC_DSX Messages

This section contains the WAN CHOC DSX LC common error (CWAN_CHOC_DSX) messages.

CWAN_CHOC_DSX-3

Error Message CWAN_CHOC_DSX-3-ENQUEUE_FAIL: [chars]

Explanation This message indicates that the RP attempted to send a configuration command to a module, but there was a failure in putting the command in the queue.

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

Error Message CWAN_CHOC_DSX-3-NODESTROYSUBBLOCK: The [chars] subblock named [chars] was not removed

Explanation This message indicates that a software error has occurred. This message displays when interface descriptor block subblocks cannot be removed.

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

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

Error Message CWAN_CHOC_DSX-3-NULLDS3MIBTABLE: Null DS3 MIB table (snmp_if_index [int])

Explanation   This message indicates that an error occurred while the system was trying to access the DS3 MIB table.

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

Error Message CWAN_CHOC_DSX-3-PROCESS_FAIL: process creation failed for [chars]

Explanation   This message indicates that the creation of a process failed.

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

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

Error Message CWAN_CHOC_DSX-3-SEND_DRIVER_READY: send driver ready msg failed for [dec]

Explanation This message indicates that an IPC message failure occurred.

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

Error Message CWAN_CHOC_DSX-3-T1CFG_ERROR: T1 [int]/[int]/[int] config command error (cmd [int], arg [int], retval [int])

Explanation This message indicates that a command sent from the system to a module failed.

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

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

Error Message CWAN_CHOC_DSX-3-T3CFG_ERROR: T3 [int]/[int] config command error (cmd [int], arg [int], retval [int])

Explanation This message indicates that a command sent from the system to a module failed.

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

Error Message CWAN_CHOC_DSX-3-UNKNOWN_CTRLR: Slot [dec] - Unknown linecard type [dec]

Explanation This message indicates that this version of the software cannot recognize the hardware.

Recommended Action Check software version. Ensure that the software supports the hardware.

Error Message CWAN_CHOC_DSX-3-VCCFG_ERROR: VC [int]/[int]:[int]
config command error (cmd [int], arg [int], retval [int])

Explanation This message indicates that a command sent from the system to a module failed.

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

CWAN_CHOC_DSX-5

Error Message CWAN_CHOC_DSX-5-DEF_SUBRATE: [chars] [chars]

Explanation This message indicates that a remote subrate configuration changed.

Recommended Action Inform the network operator that the subrate configuration changed by remote end.

Error Message CWAN_CHOC_DSX-5-UNKNOWN_EVENT: [chars]

Explanation This message indicates that the process received an unexpected event.

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

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

CWAN_CT3 Messages

This section contains the OSR CT3 RP driver (CWAN_CT3) messages.

CWAN_CT3-3

Error Message `CWAN_CT3-3-CDBFAIL: Port [dec]/[dec] - fail to create a [chars]`

Explanation This message indicates that a software resource cannot be allocated for the hardware.

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

Error Message `CWAN_CT3-3-PORTFAIL: Port [dec]/[dec] - fail to create a port instance data structure`

Explanation This message indicates that a software resource cannot be allocated for the hardware.

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

Error Message `CWAN_CT3-3-SUBRIDBFAIL: Failed to create subrate vcidb on [chars]`

Explanation This message indicates that a software resource cannot be allocated for the hardware.

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

Error Message CWAN_CT3-3-SUBR_RESET_CHAN_FAILED: Failed to reset
subrate channel for [chars], vc [dec]

Explanation This message indicates that the software encountered an error
when resetting DS3 subrate channel.

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

Error Message CWAN_CT3-3-SUBRVCMISMATCH: Delete subrate VC number
mismatch: is [int], should be [int]

Explanation This message indicates that the software encountered an internal
inconsistency issue.

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

Error Message `CWAN_CT3-3-UNKNOWN_LOVELETTER: Unknown love letter`
`type [int] from slot [int]`

Explanation This message indicates that the MSFC received an unknown
message from a module.

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

Error Message `CWAN_CT3-3-UNKNOWN_MIB_TYPE: Unknown MIB type [int]`
`from slot [int]`

Explanation This message indicates that the MSFC received an unknown
message from a module.

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

CWAN_POS Messages

This message contains the POS OSM RP driver error (CWAN_POS) messages.

CWAN_POS-4

Error Message `CWAN_POS-4-ALLOCFAIL: Interface [dec]/[dec] allocation failed: [chars]`

> **Explanation** This message indicates that required resources are unavailable.

> **Recommended Action** Upgrade the system memory or reconfigure memory usage.

CWAN_RP Messages

This section contains the WAN route processor module (CWAN_RP) messages.

CWAN_RP-1

Error Message `CWAN_RP-1-OVERRIDE_MAC_INVALID: [chars] has invalid override-mac-address.`

> **Explanation** This message indicates that the user issued an override MAC address that does not match the MAC address of the MSFC. This condition can occur if the configuration was moved to new hardware or the MAC address command was used on another interface. While the system automatically corrects this condition, the configuration needs to be adjusted.

> **Recommended Action** Modify the override MAC address command in the configuration.

Error Message `CWAN_RP-1-TOO_MANY_VRF: Slot [int] can not support all the VRFs configured!`

Explanation This message indicates that a maximum of 511 VRFs are supported in a system that contains an OSM with baseboard version 1.x.

Recommended Action Do not configure more than 511 VRFs if an OSM with baseboard version 1.x is present.

CWAN_RP-3

Error Message `CWAN_RP-3-BAD_IFCOMTYPE: Bad ifcom message type=[int]`

Explanation This message indicates that a WAN module forwarded a message that the route processor software was not prepared to handle. [int] is the type of message.

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

Error Message `CWAN_RP-3-BOOTFAIL: The WAN module in slot [int]/[int] failed to boot`

Explanation This message indicates that the WAN module failed to boot and will be reset. [int]/[int] is the slot number and CPU number.

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

Error Message `CWAN_RP-3-CHANGE_POSEIDON_NEGOTIATION: Unable to change negotiation. Failed to send message to slot [dec] port [dec]!`

Explanation This message indicates that the MSFC2 failed to send a message to change negotiation to an OSM-4GE-WAN-GBIC. The first [dec] is the slot number, and the second [dec] is the port number.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_RP-3-ERROR: [chars]

Explanation This message indicates one of several software errors. [chars] is the error message.

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

Error Message CWAN_RP-3-FOREVER: cmd [int] to [chars] (slot [int]/[int]) took [int] usecs, done [hex]

Explanation This message indicates that an interface configuration command from the route processor to a WAN module took longer than expected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_RP-3-GBIC_INSERTED: GBIC media type [dec] inserted in [chars]

Explanation This message indicates that a GBIC was inserted into the interface.

Recommended Action No action is required.

Error Message CWAN_RP-3-GBIC_REMOVED: GBIC removed from [chars]

Explanation This message indicates that a GBIC was removed from the interface.

Recommended Action No action is required.

Error Message CWAN_RP-3-HV_ALLOCFAIL: The RP failed to allocate a VLAN for a WAN interface, status=[int]

Explanation This message indicates that the switch processor returned a failure message for the VLAN allocation request.

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

Error Message CWAN_RP-3-IFCFG_FOREVER: to [chars] (slot
[int]/[int]) took [int] usecs, ret_val [int]

Explanation This message indicates that an interface configuration command
from the route processor to a WAN module took longer than expected.

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

Error Message CWAN_RP-3-IFCONFIG_ERR: Interface config failed on
port [dec]/[dec], cmd [dec], retval [dec]

Explanation This message indicates that a configuration command sent from
the system to a module failed.

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

Error Message CWAN_RP-3-IPCALLOCFAIL: Failed to allocate IPC
buffer [chars]

Explanation This message indicates that the route processor failed to allocate
a buffer for communication with a WAN module. [chars] is the reason an
attempt was made to allocate an IPC buffer.

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

Error Message CWAN_RP-3-IPCPORTFAIL: Failed to open IPC port
'[chars]' [chars]

Explanation This message indicates that the route processor failed to open a
port for communication with a WAN module. The first [chars] is the port name
and the second [chars] is one of a variety of messages, such as "for CCB
command" or "for if_config command."

Recommended Action Copy the message exactly as it appears on the console or
in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/tac. With some messages, these
tools and utilities will supply clarifying information. Search for resolved
software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still
require assistance, open a case with the Technical Assistance Center via the
Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or
contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_RP-3-IPCSENDFAIL: Failed to send IPC message [chars]

Explanation This message indicates that the route processor failed to send a message to the WAN module. [chars] is one of a variety of messages, such as "for CCB command" or "for if_config command."

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

Error Message CWAN_RP-3-KEEPFAIL: The WAN module in slot [int]/[int] is not responding to keepalives

Explanation This message indicates that the WAN module either was reset or will be reset because it failed. [int]/[int] is the slot number and CPU number.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message `CWAN_RP-3-LC_CRASHINFO:`
`crashinfo_[num]-[num]-[num]_[num] copied onto RP bootflash`

Explanation This message indicates that the WAN module crashed. The crash information filename was copied onto the route processor bootflash. You can view the file by using the **more** command.

crashinfo_[num]-[num]-[num]_[num] is the crash information filename. The first [num] and the second [num] are the date and time of the crash; the third [num] is the slot number; and the fourth [num] is the CPU number.

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

Error Message CWAN_RP-3-LC_CRASHINFO_BLOCKED: Duplicate crashinfo
upload from slot [int]/[int] blocked

Explanation This message indicates that the WAN module has crashed, but the
crash information was not saved because the WAN module has already crashed
recently. [int]/[int] is the slot number and CPU number.

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

Error Message CWAN_RP-3-LC_CRASHINFO_CORRUPT: Verification of
crashinfo from slot [int]/[int] failed

Explanation This message indicates that the WAN module crashed and that
verification of the crash information failed. The crash information was not
saved to the route processor bootflash. [int]/[int] is the slot number and CPU
number.

Recommended Action Copy the message exactly as it appears on the console or
in the system log. Research and attempt to resolve the issue using the tools and
utilities provided at http://www.cisco.com/tac. With some messages, these
tools and utilities will supply clarifying information. Search for resolved
software issues using the Bug Toolkit at
http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still
require assistance, open a case with the Technical Assistance Center via the
Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or
contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of
the **show logging** and **show tech-support** commands and your pertinent
troubleshooting logs.

Error Message CWAN_RP-3-LC_CRASHINFO_ERR: Unexpected error while
receiving crashinfo from slot [int]/[int]

Explanation This message indicates that the WAN module crashed and that an
unexpected error occurred when the crash information was copied onto the
route processor bootflash. [int]/[int] is the slot number and CPU number.

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

Error Message CWAN_RP-3-LC_CRASHINFO_IFSERR: Error [chars]
[chars]: [chars] ([int])

Explanation This message indicates that the WAN module crashed and that an
error occurred when the system tried to access the bootflash of the route
processor to save the crash information. The first [chars] indicates the
operation that failed; the second [chars] is the filename; and the third [chars]
is the error message. [int] is the error code.

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

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

Error Message   CWAN_RP-3-LC_CRASHINFO_NOSPACE: Not enough space on RP bootflash for crashinfo from slot [int]/[int] ([int] bytes needed, [int] available)

Explanation   This message indicates that the WAN module crashed and that there is not enough space on the route processor bootflash to store the crash information. The first [int]/[int] is the slot number and CPU number; the second [int] is the number bytes needed; and the third [int] is the number of bytes available.

Recommended Action   Make space available on the route processor bootflash by using the **delete** command and the **squeeze** command.

Error Message   CWAN_RP-3-LCLOG_BADSEV: Invalid message severity from slot [int]/[int]: [int]

Explanation   This message indicates that the WAN module passed down a log message with an invalid severity that the route processor could not handle. [int]/[int] is the slot number and CPU number, and [int] is the severity level.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_RP-3-OIRTWICE: Slot [int] OIR insertion/removal not paired up: [chars]

Explanation   This message indicates that an internal OIR-related error occurred for the specified WAN module. [int] is the slot number, and [chars] is either "insert twice" or "remove twice."

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

Error Message CWAN_RP-3-RESET_FAIL: The WAN module in slot [int]

Explanation   This message indicates that the WAN module did not boot successfully after multiple attempts. [int] is the slot number.

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

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

Error Message CWAN_RP-3-SCPALLOCFAIL: Failed to allocate SCP packet [chars]

Explanation This message indicates that the route processor failed to allocate a packet for communication with other slots in the chassis. [chars] is more information about the packet.

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

Error Message CWAN_RP-3-SLOTCACHE_SYNTAX: Error ([chars])!

Explanation This message indicates that the route processor failed to parse the slot configuration string. [chars] is a message about the error.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

CWAN_RP-4

Error Message CWAN_RP-4-EMPTY_CWANBAYS: Flexwan in slot [dec] is empty. Please remove the flexwan or insert it with atleast one PA

Explanation The FlexWAN module in the specified slot does not contain any port adapters.

Recommended Action Remove the FlexWAN module or insert at least one port adapter.

Error Message CWAN_RP-4-IPCFAILED: The RP failed to send an RPC message via IPC to a WAN module

Explanation This message indicates that IPC failed to send an RPC message to the WAN module. This message appears on the RP console when WAN code on the RP is unable to send an RPC message to the WAN module. This error might cause the CWAN card to fail.

Recommended Action Check to see if CPU utilization is high or if the system is out of memory. Enter the **show processes cpu** command and the **show controller cwan** *slot cpu* **proc cpu** command to determine if CPU utilization is high. Enter the **show memory** command to determine memory allocations. If this message recurs, contact your Cisco technical support representative.

Error Message CWAN_RP-4-LCLOG_TOOLONG: Message too long from slot
[int]/[int]: [int] bytes

Explanation This message indicates that the WAN module passed down a log
message that is too long for the route processor to handle. [int]/[int] is the slot
number and CPU number, and [int] is the number of bytes.

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

Error Message CWAN_RP-4-SEMAHOG: Process [dec] ([chars]) hogging
[chars]! calling proc [dec] ([chars])

Explanation This message indicates that the route processor waited too long
for a reply to a command sent to a WAN module. The first [dec] and the second
[dec] are process numbers. The first [chars] and the third [chars] are process
names, and the second [chars] is the name of the semaphore.

Recommended Action No action is necessary. This message is provided for
information only.

Error Message `CWAN_RP-4-SEMAWAIT: CWAN oir ios running waiting for semaphore ([chars]) acquired by pid [dec]`

Explanation This message indicates that the WAN module OIR process has timed out. Possible reasons for this condition are that the RP CPU utilization is too high or a module is experiencing errors.

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

Error Message `CWAN_RP-4-TOO_MANY_EOMPLS_VCS: [chars] can not support more EoMPLS imposition VCs!`

Explanation This message indicates that a Packet over SONET (PoS) port can only support up to 1000 EoMPLS label imposition virtual circuits.

Recommended Action Add more PoS ports.

CWAN_RP-6

Error Message CWAN_RP-6-CARDRECONCILE: Module type changed on slot [int]/[int]

Explanation This message indicates that the WAN module has booted and that it is a different type from the WAN module that was previously in the slot. [int]/[int] is the slot number and CPU number.

Recommended Action No action is necessary. This message is provided for information only.

Error Message CWAN_RP-6-CARDRELOAD: Module reloaded on slot [int]/[int]

Explanation This message indicates that the WAN module has rebooted. [int]/[int] is the slot number and CPU number.

Recommended Action No action is necessary. This message is provided for information only.

Error Message CWAN_RP-6-IMAGE_UPGRADE: Bootflash image upgrade [chars] for slot [int]/[int] [chars]

Explanation This message indicates that the bootflash image on the WAN module has been or is being automatically upgraded. The first [chars] is the status of the upgrade process ("in progress," "failed," or "complete"), and the second [chars], if present, is the status of the schedule for resetting the module. [int]/[int] is the slot number and CPU number.

Recommended Action If the upgrade was successful, no action is necessary. If the upgrade failed, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWAN_RP-6-LC_PRESENT: [chars] in slot [int]

Explanation This message indicates that, in a system running Catalyst operating system software, the RP, which just booted, has detected that the specified WAN module is already running. [chars] is the module type, and [int] is the slot number.

Recommended Action No action is necessary. This message is provided for information only.

Error Message CWAN_RP-6-NO_EOMPLS_SUPPORT: [chars] can not support EoMPLS imposition VCs!

Explanation This message indicates that the specified port cannot support EoMPLS label imposition virtual circuits.

Recommended Action Ensure that the port was not designed to support EoMPLS label imposition.

Error Message CWAN_RP-6-QUIESCE_FAIL: Quiesce failed for slot [int]/[int]

Explanation This message indicates that the route processor failed to contact the WAN module during failover. The WAN module will be reset. [int]/[int] is the slot number and CPU number.

Recommended Action No action is necessary. This message is provided for information only.

CWAN_RP-7

Error Message `CWAN_RP-7-SLOTCACHE_CARDTYPE: parsed slot [dec], fci_type [dec]`

Explanation This message indicates that the route processor parsed information from the slot configuration string.

Recommended Action No action is necessary. This message is provided for information only.

Error Message `CWAN_RP-7-SLOTCACHE_PATYPE: Bay [chars] has type [dec] ports ([hex])`

Explanation This message indicates that the route processor parsed information from the slot configuration string.

Recommended Action No action is necessary. This message is provided for information only.

CWPA Messages

This section contains WAN port adapter module (CWPA) messages.

CWPA-3

Error Message `CWPA-3-PROCCREATEFAIL: Failed to create [chars] process`

Explanation This message indicates that the module failed to create a process that is necessary for the proper functioning of the module.

Explanation Copy the error message as it appears on the console or in the system log, and report it to your technical support representative. If the message involves the statistics export process, then you might not see the

input/output rate and bytes getting incremented in the **show interface** command output for the FlexWAN and FlexWAN 2 non-channelized interfaces. However, you can get the statistics from the **show interface acc** command output or the **show interface stats** command output.

CWTLC Messages

This section contains WAN Optical Services Module (CWTLC) messages.

CWTLC-0

Error Message   CWTLC-0-DMA_ENGINE_ASIC_FATAL_ERR: DMA Engine Asic [[dec]] fatal error: [chars]

Explanation   The WAN Optical Services Module DMA engine ASIC received a fatal error.

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

Error Message CWTLC-0-FATAL_EXCEPTION: [chars]

Explanation This message indicates that the OSM encountered a fatal exception.

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

CWTLC-2

Error Message CWTLC-2-FATAL_ATM: [chars]

Explanation This message indicates that the OSM encountered a fatal line management interrupt. This error is not recoverable and will cause the system to fail.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message   CWTLC-2-PCITIMEOUT: Fatal Local I-O Bus [dec] Timeout Addr = [hex]

Explanation   This message indicates that the OSM encountered a PCI timeout.

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

Error Message   CWTLC-2-PLIM_RX: [chars]

Explanation   This message indicates that the OSM encountered an FPGA error that caused a sequence error.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message   CWTLC-2-SLAVEPCI: [chars]

Explanation   This message indicates that the OSM encountered a PCI error.

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

Error Message   CWTLC-2-TESTCRASH: [chars]

Explanation   This message indicates that the user entered a command that deliberately crashed the module.

Recommended Action   No action is required.

CWTLC-3

Error Message `CWTLC-3-ATMTXFIFO: [chars]`

Explanation This message indicates that the OSM encountered an error with the FPGA that has caused the FIFO queue to exceed the maximum limit. This condition will cause the system to crash.

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

Error Message `CWTLC-3-CONST_SWITCHING_BUS_INTERFACE_ASIC_ERR: Constellation Switching Bus Interface Asic [[dec]] error: [chars]`

Explanation The CWTLC switching bus interface ASIC received an error.

Recommended Action No action is required if traffic recovers. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the

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

Error Message CWTLC-3-CONST_SWITCHING_BUS_INTERFACE_ASIC_HWERR: Constellation Switching Bus Inteface Asic [[dec]] HW error: [chars]

Explanation The CWTLC switching bus interface ASIC received a hardware error and will be reset.

Recommended Action No action is required if traffic recovers. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWTLC-3-DMA_ENGINE_ASIC_ERR: DMA Engine Asic [[dec]] error: [chars]

Explanation The CWTLC DMA engine ASIC received an error.

Recommended Action No action is required if traffic recovers. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWTLC-3-EXCEPTION_ERR: [chars]

Explanation This message indicates that the OSM encountered an error exception.

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

Error Message CWTLC-3-FABRIC_INTERFACE_ASIC_ERR: Fatal Error on Fabric Interface ASIC, Resetting ASIC.

Explanation The CWTLC fabric interface ASIC received a fatal error.

Recommended Action No action is required if traffic recovers. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWTLC-3-FR_INTLEVEL: unexpected interrupt level invocation of frame-relay handler:[chars] if_number([dec]) dlci([dec])

Explanation This message indicates that some feature code mistakenly invoked the module frame-relay handler, which is designed to run at process level. This condition may lead to data corruption and a module failure.

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

Error Message CWTLC-3-LTL_ERR: Inconsistent port selection [hex] assigment for PXF([dec]) Vlan([dec]) on PXF([int])

Explanation This message indicates that the port selection information stored in the database is not valid.

Recommended Action Shut down the interface VLAN and unshut the interface VLAN.

Error Message `CWTLC-3-MCAST_REPL_ENGINE_FATAL_ERR: Multicast Replication Engine Fatal Error. Resetting ASIC.`

Explanation The CWTLC multicast replication engine ASIC received a fatal error.

Recommended Action No action is required if traffic recovers. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `CWTLC-3-NOFABRICPROCESS: No fabric process created`

Explanation The CWTLC crossbar switch fabric interface does not have a link process running because the system failed to create this process. This module will not support the fabric interface.

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

Error Message CWTLC-3-NOMEM: [chars]

Explanation This message indicates that the OSM could not obtain statistics due to depleted memory.

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

Error Message CWTLC-3-OLDIOFPGA: Upgrade your I/O FPGA

Explanation This message indicates that the OSM has an older release of the I/O FPGA software.

Recommended Action Contact your Cisco technical support representative to upgrade the I/O FPGA software.

Error Message CWTLC-3-PLIM_TX: [chars]

Explanation This message indicates that the OSM encountered an FPGA error that caused a sequence error. The module will attempt to recover from the error.

Recommended Action If the system recovers, no action is required. If system does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message   CWTLC-3-READNULLHWIDB: Read a null HWIDB for port [int]

Explanation   This message indicates that the module (OSM ATM, OSM POS, or OSM GIGE) read a null hardware IDB for the specified port from an internal hardware IDB table after the table was set up.

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

Error Message `CWTLC-3-SECPAIRINT: Unexpected VA/Toaster interrupt from second pair`

Explanation This message indicates that the OSM experienced an unexpected interrupt.

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

Error Message `CWTLC-3-TITANFATAL: Titan Fatal Error. Resetting ASIC.`

Explanation This message indicates that the CWTLC Titan ASIC received a fatal error.

Recommended Action No action is required if traffic recovers. If traffic does not recover, contact your Cisco technical support representative.

Error Message `CWTLC-3-TMC_STATID_INCONSISTENCY: PXF([dec]):Inconsistent stats id([hex]) [int] packets dropped.`

Explanation This message indicates that the WAN module received inconsistent statistics from the PXF. The PXF reported that a packet was dropped, but the PXF did not report the correct packet count.

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

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

Error Message   `CWTLC-3-UNSUPPORTED_LABEL_RANGE: The maximum label`
`range configured for this system exceeds`
`the [int] limit supported by the OSM module.`

Explanation   This message indicates that the MPLS label range configured for
this system is not supported. The maximum label range limit is specified in
the message.

Recommended Action   Change the maximum MPLS label range by entering the
mpls label range command.

Error Message   `CWTLC-3-VTMS: [chars]`

Explanation   This message indicates that the OSM could not schedule the
wheel entry. The reason for the error is specified in the error message text.

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

CWTLC-4

Error Message   CWTLC-4-ASIC_RESET: Reset asics - [chars]

Explanation   This message indicates that the ASICs on the OSM are resetting.
System traffic should recover and continue normally after the module resets.

Recommended Action   No action is required.

Error Message   CWTLC-4-CONST_SWITCHING_BUS_INTERFACE_ASIC_CONFIG_E
RR: Constellation Switching Bus Interface Asic [[dec]]
configuration failed after [dec] retries.

Explanation   Configuration of the CWTLC switching bus inteface ASIC failed
after the specified number of attempts.

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

Error Message CWTLC-4-EARLPATCH: EARL reset patch invoked.

Explanation This message indicates that the ASICs on the OSM have been reset so that they can recover from the bus sequence error. This condition usually occurs under heavy traffic with HA-related switchover or a module OIR operation. System traffic should recover and continue normally.

Recommended Action If traffic recovers, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message CWTLC-4-EARLSEQERR: Constellation bus Sequence Error. Resetting port ASICS.

Explanation This message indicates that the SP has detected a sequence error on the backplane bus of the OSM. A reset sequence from the EARL has been called to recover from this error. System traffic should recover and continue normally.

Recommended Action If traffic recovers, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the

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

Error Message CWTLC-4-FABRICCRCERRORS: [dec] Fabric crc error events in 100ms period

Explanation The CWTLC fabric interface ASIC encountered more CRC errors than the supervisor engine CRC error threshold allows. The line card has notified the supervisor engine, and the fabric interface will be resynchronized.

Recommended Action No action is required.

Error Message CWTLC-4-FABRICSYNCERRS: [dec] Fabric sync error events in 100ms period

Explanation The CWTLC crossbar switch fabric interface encountered more synchronization error events than the supervisor engine synchronization error threshold allows. The line card has notified the supervisor engine, and the fabric interface will be resynchronized.

Recommended Action No action is required.

Recommended Action

Error Message CWTLC-4-PINNACLE_OLDIOFPGA: Link negotiation maybe be affected, upgrade I/O FPGA

Explanation This message indicates that the system detected an older release of the I/O FPGA software. The I/O FPGA software needs to be upgraded to the latest release.

Recommended Action Upgrade the I/O FPGA software to the newest release. If you require assistance, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl,
or contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following
information to your case in nonzipped, plain-text (.txt) format: the output of
the **show logging** and **show tech-support** commands and your pertinent
troubleshooting logs.

CWTLC-5

Error Message CWTLC-5-BUS_SEQ_ERR: Constellation bus Sequence
Error. Resetting port ASICS.

Explanation This message indicates that the SP detected a sequence error on
the backplane bus of the OSM. The system called a reset sequence from the
EARL to recover from this error. System traffic should recover and continue
normally.

Recommended Action If traffic recovers, no action is required. If traffic does
not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl,
or contact your Cisco technical support representative and provide the
representative with the information you have gathered. Attach the following
information to your case in nonzipped, plain-text (.txt) format: the output of
the **show logging** and **show tech-support** commands and your pertinent
troubleshooting logs.

Error Message `CWTLC-5-DATAPATH_RECOVERY_PATCH: EARL reset patch invoked.`

Explanation   This message indicates that the ASICs on the OSM were reset so that the module could recover from a bus sequence error. This condition usually occurs under heavy traffic with HA-related switchover or a module OIR operation. System traffic should recover and continue normally.

Recommended Action   If traffic recovers, no action is required. If traffic does not recover, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `CWTLC-5-FABRIC_INTERFACE_ASIC_MODECHANGE: Fabric Interface Asic switching bus Mode changed to [chars]`

Explanation   The supervisor engine has changed the CWTLC fabric interface ASIC switching bus mode.

Recommended Action   No action is required.

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 specified slot is not successfully configured either because it is not compatible with the VIP or because the Cisco IOS software has no pertinent drivers.

Recommended Action Refer to the documentation for the PA to get a list of compatible VIPs. If the VIP that contains the PA is supported, ensure that the Cisco IOS software version supports the PA.

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

Explanation The PA in the slot is not supported either because it is not compatible with the VIP or because the Cisco IOS software has no pertinent drivers.

Recommended Action Refer to the documentation for the PA to get a list of compatible VIPs. If the VIP that contains the PA is supported, ensure that the Cisco IOS software version supports the PA.

DIAG Messages

This section contains the online diagnostics (DIAG) messages.

DIAG-3

Error Message `DIAG-3-CARD_ABSENT: [chars] is not detected`

Explanation This message indicates that the online diagnostics does not find any module in the specified slot.

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

Error Message DIAG-3-CARD_REMOVED: [chars] is removed

Explanation This message indicates that the online diagnostics detects the removal of the specified module. [chars] is the module.

Recommended Action No action is required.

Error Message DIAG-3-CREATE_DIAG_INFO_ERROR: Cannot create diag_info for [chars]

Explanation This message indicates that an error occurred in creating diag_info.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message DIAG-3-CREATE_PROCESS_FAIL: Create Process [chars] failed

Explanation This message indicates that a kernel error occurred while the module created a specific process. [chars] is the process.

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

Error Message DIAG-3-DIAG_INFO_NULL: online_diag_info is NULL

Explanation This message indicates there was an error in the online diagnostic sub-system.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message DIAG-3-DIAG_RUNNING: Module [dec]: Online Diagnostic is currently running

Explanation This message indicates that an online diagnostic is running on the specified module. The system cannot run another diagnostic until the current diagnostic is finished. [dec] is the module with the currently running diagnostic.

Recommended Action No action is required.

Error Message DIAG-3-DIAG_STOPPED: Module [dec]: Online Diagnostic is stopped

Explanation This message indicates that the online diagnostic has stopped. [dec] is the number of the module.

Recommended Action No action is required.

Error Message DIAG-3-ENQUEUE_FAIL: Module [dec]: process_enqueue failed

Explanation This message indicates that a kernel error was detected during process_enqueue. [dec] is the module number.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message   `DIAG-3-GET_ARGU_FAIL: Get argument failed.`

Explanation   This message indicates that a kernel error was detected.

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

Error Message   `DIAG-3-INVALID_MOD: Invalid Module [dec] in [chars]`

Explanation   This message indicates that an invalid module number is detected in the current operation. [dec] is the invalid module number, and [chars] is the name of the operation.

Recommended Action   Make sure that the module number is correct. If the module number is correct, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message DIAG-3-INVALID_PORT: Invalid Port No: [chars]

Explanation This message indicates that the online diagnostic received an invalid port number. [chars] is the port number.

Recommended Action Make sure that the specified port number is valid.

Error Message DIAG-3-INVALID_TEST: Invalid TestIDs: [chars]

Explanation This message indicates that the online diagnostic received an invalid test ID to run on the module. [chars] is the test.

Recommended Action Make sure that the test ID is correct. Use the **show diag content mod** command to retrieve the valid test list for the module.

Error Message DIAG-3-MAJOR: [chars]: Online Diagnostics detected a Major Error. Please use 'show diagnostic [chars]' to see test results.

Explanation This message indicates that the online diagnostics detects a major error. [chars] is the error.

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

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

Error Message `DIAG-3-MAJOR_HW: Module [dec]: Online Diagnostics detected a Major Error. Please use 'show diagnostic module [dec]' to see test results`

Explanation This message indicates that the online diagnostics detects a major error on the module. [dec] is the module number.

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

Error Message `DIAG-3-MINOR: [chars]: Online Diagnostics detected a Minor Error. Please use 'show diagnostic [chars]' to see test results.`

Explanation This message indicates that the online diagnostics detects a minor error on the module. [chars] is the error.

Recommended Action Reinsert the module. If the problem persists, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the

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

Error Message `DIAG-3-MINOR_HW: Module [dec]: Online Diagnostics`
`detected a Minor Error. Please use 'show diagnostic module [dec]'`
`to see test results`

Explanation This message indicates that the online diagnostics detects a minor
error on the module. [dec] is the module number.

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

Error Message `DIAG-3-MOD_ABSENT: Module [dec] is not detected`

Explanation This message indicates that the online diagnostics do not find a module in the specified slot. [dec] is the module number.

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

Error Message `DIAG-3-MOD_REMOVED: Module [dec] is removed`

Explanation This message indicates that the online diagnostic detected the removal of the specified module. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-NO_DIAG_RUNNING: Module [dec]: Online Diagnostic is not running`

Explanation This message indicates that the online diagnostic is not running on the module. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-NO_SCHED: Module [dec]: No Scheduled Online Diagnostic exists`

Explanation This message indicates that a scheduled online diagnostic does not exist for the specified module. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-NO_MEM: Module [dec]: Malloc error`

Explanation This message indicates that a memory allocation error occurred in the online diagnostic sub-system. [dec] is the module number.

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

Error Message `DIAG-3-NO_TEST: Module [dec]: No test to run`

Explanation This message indicates that the online diagnostic does not find any test to run on the specified module. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-SCHED_CANCEL: Module [dec]: Scheduled Online Diagnostic is canceled`

Explanation This message indicates that the user has cancelled an online diagnostic. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-SCHED_EXIST: Module [dec]: Scheduled Online Diagnostic exists`

Explanation This message indicates that an online diagnostic has already been scheduled. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-SCHED_STOPPED: Module [dec]: Scheduled Online Diagnostic is stopped`

Explanation This message indicates that the user has stopped a scheduled online diagnostic. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-3-SET_ARGU_FAIL: Set argument failed.`

Explanation This message indicates that a kernel error was detected.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `DIAG-3-SKIP_ONDEMAND_STANDBY_SUP_TEST: Module [dec]: [chars] cannot be executed`

Explanation This message indicates that the online diagnostic is skipping the specified standby supervisor engine tests because the tests cannot be executed from the standby supervisor engine. [dec] is the module number, and [chars] is the tests.

Recommended Action No action is required.

Error Message `DIAG-3-SUP_FAILURE: [chars] supervisor has online diagnostic failure [hex]: [chars]`

Explanation This message indicates that the supervisor engine has an online diagnostics failure.

Recommended Action The supervisor engine online diagnostics failure could be minor, major, or critical. Depending on the severity of the failure, the bootup process displays a warning message or sends the system to ROMMON state.

Error Message `DIAG-3-TEST_FAIL: Module [dec]: [chars]{ID=[dec]} Failed`

Explanation This message indicates that the online diagnostic test failed to run on the specified module. The first [dec] is the module number, and the second [dec] is the test identification number. [chars] is the test name.

Recommended Action Rerun the test. If the test fails again, 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `DIAG-3-TEST_NOT_SUPPORT: Module [dec]: [chars]{ID=[dec]} Test is not supported`

Explanation This message indicates that the online diagnostic test is not supported on the specified module due to the chassis configuration. The first [dec] is the module number, and the second [dec] is the test identification number. [chars] is the test name.

Recommended Action Turn on the diag message flag and rerun the test to obtain more information about why the test is not supported. 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `DIAG-3-UNKNOWN_OPCODE: Module [dec]: Unknown Upcode [dec] is received`

Explanation This message indicates that the online diagnostic received an unknown operations code. The first [dec] is the module number, and the second [dec] is the operations code.

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

DIAG-6

Error Message `DIAG-6-BYPASS: Module [dec]: Online Diagnostics is Bypassed`

Explanation This message indicates that online diagnostics will not be performed because you want them bypassed. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-6-DIAG_OK: Module [dec]: Passed Online Diagnostics`

Explanation This message indicates that online diagnostics did not detect any errors on the module. [dec] is the module number.

Recommended Action No action is required.

Error Message DIAG-6-RUN_COMPLETE: Module [dec]: Running Complete
Online Diagnostics...

Explanation This message indicates that complete online diagnostics will run
on the specified module. [dec] is the module number. Because online
diagnostics are performed one module at a time, the specified module might
have to wait for other modules to finish their online diagnostics.

Recommended Action No action is required.

Error Message DIAG-6-RUN_MINIMUM: Module [dec]: Running Minimum
Online Diagnostics...

Explanation This message indicates that minimum online diagnostics will run
on the specified module. [dec] is the module number. Because online
diagnostics are performed one module at a time, the specified module might
have to wait for other modules to finish their online diagnostics.

Recommended Action No action is required.

Error Message DIAG-6-SCHED_COMPLETE: Module [dec]: Scheduled
Online Diagnostic is Completed

Explanation This message indicates that the scheduled online diagnostics are
complete. [dec] is the module number.

Recommended Action No action is required.

Error Message DIAG-6-SCHED_RUNNING: Module [dec]: Performing
Scheduled Online Diagnostic...

Explanation This message indicates that the scheduled online diagnostics are
running on the specified module. [dec] is the module number.

Recommended Action No action is required.

Error Message `DIAG-6-TEST_OK: Module [dec]: [chars]{ID=[dec]} is Completed Successfully`

Explanation This message indicates that the specified module completed an online diagnostic test and no errors were found. The first [dec] is the module number, and the second [dec] is the test identification number. [chars] is the test name.

Recommended Action No action is required.

Error Message `DIAG-6-TEST_RUNNING: Module [dec]: Running [chars]{ID=[dec]}...`

Explanation This message indicates that an online diagnostic test is running on the module. The first [dec] is the module number, and the second [dec] is the test identification number. [chars] is the test name.

Recommended Action No action is required,

DOT1X Messages

This section contains the IEEE 802.1X (DOT1X) messages.

DOT1X-4

Error Message `DOT1X-4-MEM_UNAVAIL: Memory was not available to perform the 802.1X action.`

Explanation This message indicates that an insufficient amount of system memory is available to perform 802.1X authentication.

Recommended Action Reduce other system activity to free memory. If conditions require more memory, upgrade to a larger memory configuration.

Error Message `DOT1X-4-MSG_ERR: Unknown message event reveived.`

Explanation This message indicates that the 802.1X process received an unknown message event.

Recommended Action Restart the 802.1X process by entering the **dot1x system-auth-control** command. If this message recurs, reload the device.

Error Message `DOT1X-4-PROC_START_ERR: Dot1x unable to start.`

Explanation This message indicates that the system failed to create the 802.1X process.

Recommended Action Restart the 802.1X process by entering the **dot1x system-auth-control** command. If this message recurs, reload the device.

Error Message `DOT1X-4-UNKN_ERR: An unknown operational error occurred.`

Explanation This message indicates that the 802.1X process cannot operate because of an internal system error.

Recommended Action Restart the 802.1X process by entering the **dot1x system-auth-control** command. If this message recurs, contact your Cisco technical support representative.

DOT1X-5

Error Message `DOT1X-5-ERR_CHANNELLING: Dot1x can not be enabled on Channelling ports.`

Explanation This message indicates that 802.1X could not be enabled on the channelling port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a channelling port, which is not allowed.

Recommended Action Disable channelling on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_DYNAMIC: Dot1x can not be enabled on Dynamic ports.`

Explanation This message indicates that 802.1X could not be enabled on the dynamic-mode port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a dynamic-mode port, which is not allowed.

Recommended Action Disable dynamic mode on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_DYNAMIC_VLAN: Dot1x can not be enabled on Dynamic VLAN ports.`

Explanation This message indicates that 802.1X could not be enabled on the dynamic VLAN port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a dynamic VLAN port, which is not allowed.

Recommended Action Disable dynamic VLAN configuration on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_MULTI_ACCESS: Dot1x can not be enabled on voice vlan configured ports.`

   Explanation This message indicates that 802.1X could not be enabled on a voice VLAN-configured port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a voice VLAN-configured port, which is not allowed.

   Recommended Action Disable voice VLAN on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_PROTO_TUNNELLING: Dot1x can not be enabled on protocol tunnelling enabled ports.`

   Explanation This message indicates that 802.1X could not be enabled on the protocol tunneling-enabled port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a protocol tunnelling enabled port, which is not allowed.

   Recommended Action Disable protocol tunneling on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_PSECURE: Dot1x can not be enabled on Port Secuirity enabled ports.`

   Explanation This message indicates that 802.1X could not be enabled on the port security-enabled port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a port security-enabled port, which is not allowed.

   Recommended Action Disable port security on the interface. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_RSPAN_VLAN: Dot1x can not be enabled on ports configured in Remote SPAN vlan.`

Explanation This message indicates that 802.1X could not be enabled on the Remote SPAN VLAN port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a port which is in remote SPAN VLAN, which is not allowed.

Recommended Action Disable Remote SPAN on the VLAN. Attempt to set the 802.1X operation again.

Error Message `DOT1X-5-ERR_SPANDST: Dot1x can not be enabled on SPAN destion ports.`

Explanation This message indicates that 802.1X could not be enabled on the SPAN destination port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a SPAN destination port, which is not allowed.

Recommended Action Disable SPAN destination on the interface. Attempt the 802.1X operation again.

Error Message `DOT1X-5-ERR_STATIC_MAC: Dot1x can not be enabled on a port configured with Static MAC addresses.`

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

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

Error Message `DOT1X-5-ERR_TRUNK: Dot1x can not be enabled on Trunk port.`

Explanation This message indicates that 802.1X could not be enabled on the trunk port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a trunk port, which is not allowed.

Recommended Action Disable trunking on the interface. Attempt the 802.1X operation again.

Error Message `DOT1X-5-ERR_TUNNEL: Dot1x be enabled on 802.1q tunnelling enabled ports.`

Explanation This message indicates that 802.1X could not be enabled on the 802.1Q tunnel-enabled port. This condition was caused by attempting to set 802.1X port control to auto or force-unauthorized (Force_unauth) mode on a 802.1Q tunnel-enabled port, which is not allowed.

Recommended Action Disable 802.1Q tunneling on the interface. Attempt the 802.1X operation again.

Error Message `DOT1X-5-ERR_VLAN_NOT_ASSIGNABLE: RADIUS attempted to assign a VLAN to Dot1x port [chars] whose VLAN cannot be assigned.`

Explanation This message indicates that the RADIUS server attempted to assign a VLAN to a supplicant on a port whose VLAN cannot be change (for example, on a routed port).

Recommended Action Do one of the following actions:

  – Update the RADIUS configuration so that the server does not assign a VLAN to this user.

  – Move the user to a swichport.

Error Message `DOT1X-5-ERR_VLAN_NOT_FOUND: RADIUS attempted to assign non-existent VLAN name [chars] to Dot1x port.`

Explanation This message indicates that the RADIUS server attempted to assign a VLAN to a supplicant on a port, but the VLAN name was not found in the VTP database. [chars] is the VLAN name.

Recommended Action Ensure that the VLAN exists in the VTP database before the supplicant attempts to authenticate.

Error Message `DOT1X-5-ERR_VLAN_RSPAN_CONFIGURED: VLAN [dec] is configured as a Remote SPAN VLAN, which has Dot1x enabled interface(s) configured. Please disable Dot1x on all ports in this VLAN or do not enable RSPAN on this VLAN.`

Explanation This message indicates that Remote SPAN should not be enabled on a VLAN in which ports are 802.1X enabled. [dec] is the VLAN.

Recommended Action Do one of the following actions:

– Disable Remote SPAN in the VLAN.

– Disable 802.1X on all the ports in the VLAN.

Error Message `DOT1X-5-ERR_VVID: Dot1x can not be enabled on ports with a voice VLAN configured`

Explanation This message indicates that 802.1X cannot coexist with voice VLANs on the same port.

Recommended Action Do not enable 802.1X on ports with voice VLANs.

Error Message `DOT1X-5-INVALID_INPUT: Dot1x Interface parameter is Invalid on interface [chars].`

Explanation This message indicates that the 802.1X interface parameter is out of the specified range or is invalid. [chars] is the interface.

Recommended Action Refer to the CLI help documentation to determine the valid 802.1X parameters.

Error Message `DOT1X-5-INVALID_MAC: Invalid MAC address(zero,broadcast or multicast mac address [chars] is trying to authenticate.`

Explanation This message indicates that a zero, a broadcast, or a multicast MAC address was attempting authentication using 802.1X. Authentication is only allowed for a valid non-zero, a valid non-broadcast, or a valid non-multicast source MAC address. [chars] is the address.

Recommended Action Connect an 802.1X-supported host to the 802.1X-enabled port.

Error Message `DOT1X-5-NOT_DOT1X_CAPABLE: Dot1x disabled on interface [chars] because its not an Ethernet interface.`

Explanation This message indicates that 802.1X authentication can only be enabled on Ethernet interfaces. [chars] is the interface.

Recommended Action Enable 802.1X authentication on Ethernet interfaces only.

Error Message `DOT1X-5-SECURITY_VIOLATION: Secuirity violation on interface [chars], New MAC address [enet] is seen on the interface in Single host mode.`

Explanation This message indicates that the port on the specified interface is configured in single-host mode. Any new host that is detected on the interface is treated as a security violation. The port has been error disabled. [chars] is the interface, and [enet] is the MAC address.

Recommended Action Ensure that the port is configured to use only one host. Enter the **shutdown** followed by **no shutdown** command to restart the port.

DOT1X_MOD

This section contains the IEEE 802.1X module (DOT1X_MOD) messages.

DOT1X_MOD-3

Error Message `DOT1X_MOD-3-NULLPTR: [chars]: Did not expect NULL pointers at [dec].`

Explanation This message indicates that the derived pointers are null. This condition could be the result of bad derivation values. Because this condition could be related to the hardware, reset the switch. If this condition recurs, the problem is related to the software.

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

DOT1XREGISTORS

This section contains the IEEE 802.1X registers (DOT1XREGISTORS) messages.

DOT1XREGISTORS-3

Error Message `DOT1XREGISTORS-3-ERRORREAD: [chars]: Failed to read [chars] register.`

Explanation This message indicates that a 802.1X register was not read. If this condition happens with all features on the switch, a hardware failure has occurred.

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

Error Message `DOT1XREGISTORS-3-ERRORWRITE: [chars]: Failed to write [chars] register.`

Explanation This message indicates that a 802.1X register was not written. If this condition happens with all features on the switch, a hardware failure has occurred.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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 the Dynamic Trunk Protocol (DTP) messages.

DTP-1

Error Message `DTP-1-ILGLCFG: Illegal config (on, isl--on,dot1q) on Port [module]/[number]`

Explanation   This message indicates that one end of the trunk is configured as ON, ISL and the other end is configured ON, 802.1Q. [module] is the module number, and [number] is the port number.

Recommended Action   This configuration is illegal. You must change the encapsulation type so that both ends of the trunk match.

DTP-4

Error Message `DTP-4-MEM_UNAVAIL: Memory not available to perform the trunk negotiation action`

Explanation   This message indicates that the system is unable to negotiate trunks because of a lack of memory.

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

Error Message `DTP-4-UNKN_ERR: An unknown operational error occurred`

Explanation This message indicates that the system is unable to negotiate trunks because an internal operation generated an unexpected error.

Recommended Action Reload the device.

DTP-5

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

Explanation This message indicates that 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.

Error Message `DTP-5-NONTRUNKPORTON: Port [dec]/[chars] has become non-trunk`

Explanation This message indicates that the interface [dec] / [chars] is nontrunked. [dec] / [chars] is the module number/interface range.

Recommended Action This message is provided for information only.

Error Message `DTP-5-TRUNKPORTCHG: Port [dec]/[chars] has changed from [chars] trunk to [chars] trunk`

Explanation This message indicates that the encapsulation type of the trunk has changed. [dec] is the module number, the first [chars] is the interface number, the second [chars] is the original encapsulation type, and the third [chars] is the new encapsulation type.

Recommended Action This message is provided for information only.

Error Message `DTP-5-TRUNKPORTON: Port [dec]/[chars] has become trunk`

Explanation   This message indicates that the interface [dec] / [chars] is trunked. [dec] / [chars] is the module number/interface range.

Recommended Action   This message is provided for information only.

EARL Messages

This section contains the Enhanced Address Recognition Logic (EARL) messages.

EARL-0

Error Message `EARL-0-FATAL_ERR: [chars]`

Explanation   This message indicates that the EARL is in panic mode. The system is printing registers and other information to help determine the cause of 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 http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case 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-0-TASK_SPAWN_FAIL: Failed to spawn task [chars]`

Explanation The system crashed because it was not able to spawn Layer 2 tasks. The system crash happened when the system was booted. [chars] is the task.

Recommended Action After this error message displays, the system performs a crashdump. Contact your Cisco technical support representative, and provide the representative with the crashdump information. If this interruption occurs on the supervisor engine, you must reboot the switch. If the switch has a redundant supervisor engine, the standby supervisor engine takes over automatically.

EARL-2

Error Message `EARL-2-PATCH_INVOCATION_LIMIT: [dec] Recovery patch invocations in the last 60 secs have been attempted. Max limit reached`

Explanation This message indicates that EARL recovery has been attempted for the maximum number of times that is allowed in the last 60 seconds. The module has been reset instead of attempting recovery again.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case 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_TIMEOUT: Switching bus timeout detected. System not switch packets for [dec] sec`

Explanation This message indicates that the EARL did not switch any packets on the EARL bus. The system is applying a recovery patch. [dec] is the number of seconds.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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_INTERFACE_ASIC_SEQ_ERR: Recovering from sequence error detected on fabric interface ASIC.`

Explanation A sequence error was detected by the Fabric Interface ASIC. The system is applying a recovery patch.

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

information to your case 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-MEDUSA_SEQ_ERR: Sequence error detected by Medusa ASIC. Applying recovery patch

Explanation This message indicates that a sequence error was detected by the Medusa ASIC. The error could be fatal. The system is applying a recovery patch.

Recommended Action If the error message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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-NF_USAGE: Current Netflow Table Utilization is [dec]%

Explanation This message indicates that NetFlow table utilization exceeds a preset threshold percentage.

Recommended Action No action is required.

EARL-5

Error Message `EARL-5-EXCESSIVE_INTR: INBAND [dec]/[dec] EOBC [dec]/[dec] DMA/TIMER [dec]/[dec] EARL [dec]/[dec]`

Explanation This message indicates that the system has experienced critical interruptions that indicate that EARL might not be functioning anymore.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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_BUS_INTERFACE_ASIC

This section contains messages for the Enhanced Address Recognition Logic bus interface ASIC (EARL_BUS_INTERFACE_ASIC).

EARL_BUS_INTERFACE_ASIC-4

Error Message `EARL_BUS_INTERFACE_ASIC-4-ERR_INTRPT: Interrupt [chars] occurring in EARL bus connection ASIC.`

Explanation An error interrupt is occurring on the switching bus interface ASIC.

Recommended Action Enter the **show earl status** command on the consoles of the switch supervisor and any DFC-enabled modules. Contact your Cisco technical support representative, and provide the representative with the gathered information.

EARL_L2_ASIC

This section contains Enhanced Address Recognition Logic Layer 2 ASIC (EARL_L2_ASIC) messages.

EARL_L2_ASIC-0

Error Message `EARL_L2_ASIC-0-FATAL_INTR: EARL L2 ASIC: fatal interrupt: int status [hex], int mask [hex]`

Explanation This message indicates critical EARL Layer 2 ASIC interrupts. EARL might not be functioning anymore.

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

these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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: EARL L2 ASIC: parity intr #[dec]: address [hex], Data: [hex], [hex], [hex], [hex]`

Explanation This message indicates that the system detected a parity error while accessing the forwarding table.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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-INTR_THROTTLE: Throttling "[chars]" Intr. Exceeded permitted [int]/[dec] intrs/msec`

Explanation This message indicates an excessive number of interrupts. The system will perform throttling to keep the SP safe.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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 Layer 3 ASIC (EARL_L3_ASIC) messages.

EARL_L3_ASIC-3

Error Message `EARL_L3_ASIC-3-INTR_FATAL: EARL L3 ASIC: fatal interrupt [chars]`

Explanation This message indicates that the Enhanced Address Recognition Logic L3 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 If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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-4

Error Message `EARL_L3_ASIC-4-INTR_THROTTLE: Throttling "[chars]" Intr. Exceeded permitted [int]/[dec] intrs/msec`

Explanation This message indicates an excessive number of interrupts. The system performs throttling to keep the switch processor safe.

Recommended Action If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at

http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case 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_WARN: EARL L3 ASIC: Non-fatal interrupt [chars]

Explanation This message indicates that the EARL Layer 3 ASIC detected an unexpected non-fatal 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 http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case 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_WARN_MINOR: EARL L3 ASIC: Non-fatal interrupt [chars]

Explanation This message indicates that the EARL Layer 3 ASIC detected an unexpected non-fatal condition, which might result in the appearance of illegal or malformed packets. However, the system is operating fine, and this condition has no impact on system performance.

Recommended Action Check the traffic in the network for sources of malformed packets.

Error Message `EARL_L3_ASIC-4-L3_PAR_ERR: EARL L3 ASIC: L3 Parity error. Error data [hex]. Error address [hex]`

Explanation This message indicates that the Enhanced Address Recognition Logic Layer 3 ASIC detected an Layer 3 parity error. However, the software will handle this condition to ensure that it does not affect system performance.

Recommended Action No action is required.

EC Messages

This section contains the EtherChannel (EC) messages.

EC-4

Error Message `EC-4-NOMEM: Not enough memory available for [chars]`

Explanation This message indicates that the Port Aggregation Protocol (PAgP) Shim/EC could not obtain the memory it needed. [chars] is the EtherChannel.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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-5

Error Message `EC-5-CANNOT_BUNDLE_QOS: Removed [chars] from port channel because a QoS policy cannot be supported across multiple DFC cards.`

> **Explanation** This message indicates that the specified port specified cannot join the port channel because the QoS policy attached to the port channel cannot support multiple DFCs.

> **Recommended Action** Move the port to another port channel or remove the QoS policy from the port channel.

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

> **Explanation** This message indicates that 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.

> **Explanation** No action is required.

Error Message `EC-5-DONTBNDL: [chars] suspended: incompatible partner port with [chars]`

> **Explanation** This message indicates that the configuration of the partner port is different from the configuration of other ports in the bundle. A port can only join the bundle when the global configuration of the port and the configuration of the partner port are the same as other ports in the bundle.

> **Recommended Action** Ensure that the configuration of the partner ports is the same for all ports in the bundle.

Error Message `EC-5-PORTDOWN: Shutting down [chars] as its port-channel is admin-down`

Explanation This message indicates that the administrative state of the port is controlled by the administrative state of its aggregate port. If the administrative state of the aggregate port is down, the administrative state of the port is also forced down.

Recommended Action Enter the **no shutdown** command on the aggregate port to activate (unshut) the aggregation port.

EC-6

Error Message `EC-6-BUNDLE: Interface [chars] joined port-channel [dec]`

Explanation This message indicates that the indicated interface joined the specified EtherChannel. [chars] is the Layer 3 interface, and [dec] is the EtherChannel.

Recommended Action No action is required.

Error Message `EC-6-CANNOT_BUNDLE1: Port-channel [chars]is admin-down, port [chars] will remain stand-alone.`

Explanation This message indicates that the EtherChannel is administratively down. The first [chars] is the EtherChannel, and the second [chars] is the Layer 3 interface.

Recommended Action Restart the EtherChannel.

Error Message `EC-6-CANNOT_BUNDLE2: Port-channel [chars] is not`
`compatible with port [chars], port will remain stand-alone.`

Explanation This message indicates that the interface has different interface
attributes than those of the EtherChannel, so the interface can join the bundle
and change the interface attributes to match the EtherChannel attributes. The
first [chars] is the EtherChannel, and the second [chars] is the Layer 3
interface.

Recommended Action Change the interface attributes to match the
EtherChannel attributes.

Error Message `EC-6-CANNOT_UNSUITABLE: [chars] will not join any`
`port-channel. Unsuitable attribute configured`

Explanation This message indicates that one of the interfaces cannot join the
EtherChannel because it is configured for PortFast, VLAN Membership
Policy Server (VMPS), or Dest_SPAN. All of these configurations are
unsuitable for EtherChannels. [chars] is the interface name.

Recommended Action Remove the unsuitable configuration.

Error Message `EC-6-L3DONTBNDL1: [chars] suspended: PAgP enabled`
`locally, not enabled on the remote interface`

Explanation This message indicates that PAgP is enabled on a Layer 3
interface, but the partner does not have PAgP enabled. In this mode, the
interface is put in a suspended state. [chars] is the Layer 3 interface.

Recommended Action Enable PAgP on the remote side.

Error Message `EC-6-L3DONTBNDL2: [chars] suspended: GC of partner port is different than some of the other ports`

Explanation This message indicates that an interface cannot join a bundle unless the local group capability and the partner group capability are the same as the capability of the interfaces in the bundle. In this case, the partner interface global configuration is different from some of the other interfaces in the bundle. [chars] is the Layer 3 interface.

Recommended Action Make sure that the partner group capability for all the interfaces in the group is the same.

Error Message `EC-6-L3PORTDOWN: Shutting down [chars] as its port-channel is admin-down`

Explanation This message indicates that the Layer 3 interface administrative state is ruled by the administrative state of its EtherChannel. If the EtherChannel administrative state is down, the Layer 3 interface administrative state is forced down. [chars] is the Layer 3 interface.

Recommended Action No action is required.

Error Message `EC-6-NOPAGP: Invalid EC mode, PAgP not enabled`

Explanation This message indicates that PAgP is not included in the image, and the EC mode cannot be set to desirable/auto.

Recommended Action Get an image with PAgP included, or set the mode to ON.

Error Message `EC-6-NOTINSYNC: [chars] suspended: Not in sync with other interfaces in the group`

Explanation   This message indicates that all Layer 2 interfaces in a group in the ON mode should be compatible, noncompatible Layer 2 interfaces will be suspended, all Layer 3 interfaces in the group should be compatible, and noncompatible Layer 3 interfaces will be suspended. [chars] is the Layer 3 interface.

Recommended Action   Make the interface attributes compatible: either shut or no shut.

Error Message `EC-6-L3STAYDOWN: [chars] will remain down as its port-channel [chars] is admin-down`

Explanation   This message indicates that on Layer 3 interfaces and aggregation interfaces, the administrative state of the aggregation interface overrides the administrative state of the Layer 3 interface. If the aggregation interface is administratively down, all interfaces in the aggregation interface are down. The first [chars] is the Layer 3 interface, and the second [chars] is the port-channel.

Recommended Action   Enter the **no shutdown** command on the aggregation interface.

Error Message `EC-6-UNBUNDLE: Interface [chars] left the port-channel [dec]`

Explanation   This message indicates that the indicated interface left the specified EtherChannel. [chars] is the Layer 3 interface, and [dec] is the EtherChannel.

Recommended Action   No action is required.

EHSA Messages

This section contains the Enhanced High System Availability (EHSA) messages.

EHSA-3

Error Message `EHSA-3-CONFIG_SYS: [char]`

Explanation This message indicates that an EHSA configuration sync error occurred. The error will be displayed. [chars] is a text explanation.

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

Error Message `EHSA-3-FSM: [char]`

Explanation This message indicates that an EHSA Finite State Machine (FSM) error occurred. The error will be displayed. [char] is a text explanation.

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

Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message   EHSA-3-GENERAL: [char]

Explanation   This message indicates that an EHSA error occurred. The error will be displayed. [char] is a text explanation.

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

Error Message   EHSA-3-IPC: [chars]

Explanation   This message indicates that an Interprocess Communication (IPC) error occurred. The error will be displayed. [chars] is a text explanation.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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 the environmental monitor (ENVM) messages.

ENVM-0

Error Message ENVM-0-SHUT: Environmental Monitor initiated shutdown

Explanation This message indicates that the environmental monitor has initiated a system shutdown.

Recommended Action Review previous environmental monitor warning messages to determine the cause of the shutdown. Enter the **show environment last** command after the router has rebooted.

Error Message ENVM-0-STATUS_NOT_READY: Environmental Monitor temperature sensor not ready

Explanation This message indicates that the temperature sensor is not ready.

Recommended Action The Mistral ASIC temperature hardware might have to be replaced. 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://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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-2

Error Message `ENVM-2-ENVCRIT: [chars] measured at [chars]`

Explanation   One of the measured environmental test points has exceeded an extreme threshold. This condition could cause the system to fail to operate properly. The first [chars] is the environmental test point, and the second [chars] is the measurement.

Recommended Action   Correct the specified condition, or the system may shut down automatically as a preventive measure. Enter the **show environment all** and **show environment table** commands to help determine if the condition is due to a temperature or a voltage condition. If the message is a critical temperature warning, ensure that the router fans are operating and that the air conditioning in the room is functioning.

ENVM-3

Error Message `ENVM-3-CPUCARD: Unknown CPU type [dec]`

Explanation   This message indicates that a CPU card in the system was not recognized by the software. [dec] is the CPU type.

Recommended Action   Ensure that the image that you are loading supports the NPE in the chassis. Enter the **show version** command.

ENVM-4

Error Message `ENVM-4-RPSFAIL: [chars] may have a failed channel`

Explanation This message indicates that one of the power supplies in a dual (redundant) power supply might have failed. [chars] is the power supply that might have failed.

Recommended Action Check the input to the power supply, or replace the faulty power supply as soon as possible to avoid an unplanned outage.

ENVM-6

Error Message `ENVM-6-PSOK: [chars] now appears to be working correctly.`

Explanation This message indicates that the power supply that was previously reporting as failed now appears to be operating properly. [chars] is the power supply.

Recommended Action Check the external connections to the power supply and check for any further failure messages.

EOBC Messages

This section contains the 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 standby supervisor engine to take over. The switch has been shut down.

Recommended Action Immediately replace the supervisor engine in the specified slot.

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 This message indicates that 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 with 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 This message indicates that 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 specified slot.

EOBC-3

Error Message `EOBC-3-NOEOBCBUF: No EOBC buffer available. Dropping the packet.`

Explanation This message indicates that the EOBC receive buffer pool has been exhausted. No more input packets can be handled until some buffers are returned to the pool.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to 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 Messages

This section contains the switching mode (FABRIC-SP) messages.

FABRIC-SP-4

Error Message FABRIC-SP-4-CONFIGURATION_FAILED: the module in slot
[dec] failed to be completely configured

Explanation To operate in fabric-enabled mode, the Switch Fabric Module
must be configured for traffic-forwarding. The module resets and the
configuration is attempted again. [dec] is the slot number.

Recommended Action If the module consistently fails, contact your Cisco
technical support representative.

Error Message FABRIC-SP-4-FABRIC_MODULE_ACTIVE: the switching
fabric module in slot [dec] became active

Explanation This message indicates that the Switch Fabric Module in the
indicated slot is active. [dec] is the slot number.

Recommended Action No action is required.

Error Message FABRIC-SP-4-FABRIC_MODULE_BACKUP: the switching
fabric module in slot [dec] became backup

Explanation This message indicates that the Switch Fabric Module in the
indicated slot functions as backup. [dec] is the slot number.

Recommended Action No action is required.

Error Message `FABRIC-SP-4-FACRIC_MODULE_OFFLINE: last crossbar-mode module in system at slot [dec]`

Explanation This message indicates that the last Switch Fabric Module located in the indicated slot in the system is offline. [dec] is the slot number. This message appears when the last fabric-enabled module is removed or powered down.

Recommended Action If an error forces the module to go offline, contact your Cisco technical support representative.

Error Message `FABRIC-SP-4-SYNC_FAILED: the module in slot [dec] could not synchronize with the crossbar fabric`

Explanation Three unsuccessful attempts were made to synchronize the module in the indicated slot with the switch fabric. [dec] is the slot number.

Recommended Action Determine if a mechanical problem, such as an incompletely inserted Switch Fabric Module, is causing a synchronization problem. Correct the problem, and retry the module online operation.

FM Messages

This section contains the feature manager (FM) messages.

FM-2

Error Message `FM-2-ACL-FAILURE: Interface [chars] traffic will not comply with ACLs in [chars] direction(s)`

Explanation This message indicates that the configured ACLs are too large for all of them to all fit in the hardware ternary content addressable memory (TCAM). ACLs will not be applied on traffic for this interface due to TCAM resource contention. The first [chars] is the interface, and the second [chars] is the direction.

Recommended Action Enter the **tcam priority** command to prioritize interfaces for switching. Try and share the same ACLs across multiple interfaces in order to reduce TCAM resource contention.

Error Message `FM-2-ACLS_EXCEEDED: Interface [chars] number of ACLs in [chars] direction(s) exceeded the maximum(255) for merge`

Explanation The ACL merge function failed because the number of ACLs to be merged exceeded the maximum number of ACLs (255). The ACL merge function can only handle up to 255 ACLs applied on an interface. The first [chars] is the interface name, and the second [chars] is the direction (ingress or egress).

Recommended Action Reduce the number of VACL sequences or features applied on the interface.

Error Message `FM-2-BAD-MESSAGE: Error in internal message - bad result [dec]`

Explanation This message indicates that a software error may have affected programming of ACLs into the TCAM. [dec] is the invalid result.

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

Error Message `FM-2-BAD-TLV: Error in internal messaging - bad tlv [dec]`

Explanation This message indicates that a software error may have affected programming of ACLs into the TCAM. [dec] is the invalid type, length, value (TLV).

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

Error Message `FM-2-SEQUENCE: Error in internal messaging - lost message (i/f [chars], dir [chars], type [dec])`

Explanation   This message indicates that a software error may have affected the programming of ACLs into the TCAM. The first [chars] is the interface name, the second [chars] is the ingress or egress direction, and the [dec] is the request type.

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

Error Message `FM-2-TCAM-BAD-LOU: Bad TCAM LOU operation in ACL`

Explanation   This message indicates that a software error caused a failure when programming ACLs into the TCAM.

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

Error Message `FM-2-TCAM-ERROR: TCAM programming error [dec]`

Explanation This message indicates that a software error caused a failure when programming ACLs into the TCAM. [dec] is the error code.

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

Error Message `FM-2-TCAM-MEMORY: NMP processor memory low`

Explanation This message indicates that inadequate memory caused a failure when programming ACLs into the TCAM.

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

Error Message `FM-2-TCAM_REDIRECT_EXCEEDED: Interface [chars]:`
`Hardware TCAM redirect index table capacity exceeded`

Explanation This message indicates that the hardware TCAM does not have the capacity to handle the number of redirect indices used for the ACLs that are globally configured. A failure first occurred on the specified interface. Current feature configuration on this interface using redirect indices will not be fully functional.

Recommended Action The hardware TCAM can globally handle an allocation of a maximum of 255 redirect indices. Try to remove from the configuration part of the features that require redirect index resources (for example, VACL redirect sequences from the VLAN access map; **mls ip directed-broadcast drop-on-receive protocol-type** *proto_type Port1 ... PortN* from the VLAN interfaces; SLB). Then reconfigure the features on the failed interfaces. Also, use the appropriate **show** command on the SP/NMP side to determine the current use of redirect indices.

Error Message `FM-2-VACL-FAILURE: Interface [chars] traffic will`
`not comply with VACLs in [chars] direction(s)`

Explanation This message indicates that the configured ACLs are too large to fit in the hardware TCAM. VLAN access control lists (VACLs) will not be applied on traffic for this interface due to TCAM resource contention. The first [chars] is the interface, and the second [chars] is the direction.

Recommended Action Enter the **tcam priority** command to prioritize interfaces for switching. To reduce TCAM resource contention, share the same ACLs across multiple interfaces.

Error Message `FM-2-VACL_IPX: Vlan access map [chars] configured on [chars] is removed`

Explanation This message indicates that the VLAN access map on the VLAN is removed because the hardware is not able to support the configured IPX VACLs. The first [chars] is the VLAN access map name, and the second [chars] is the interface name.

Recommended Action The hardware supports IPX VACLs with the following fields: ipx protocol type, source network, destination network, and destination host. Reconfigure the IPX VACLs, and apply them again.

Error Message `FM-2-VACL_LOU: Vlan access map [chars] configured on [chars] is removed`

Explanation This message indicates that the VLAN access map is removed because the number of logical operations used with the IP VACLs exceeds the hardware capacity. The first [chars] is the VLAN access map name, and the second [chars] is the interface name.

Recommended Action Reduce the use of logical operations in the configured IP VACLs.

Error Message `FM-2-VACL_NOMEMORY: Vlan access map [chars] configured on [chars] is removed`

Explanation The VLAN access map on the VLAN is removed because of insufficient memory. The first [chars] is the VLAN access map name, and the second [chars] is the interface name.

Recommended Action Reduce the number of the VLAN access map sequences or the size of the ACLs.

FM-4

Error Message `FM-4-ACES_EXCEEDED: Interface [chars] traffic will be software switched in [chars] direction(s)`

Explanation This message indicates that the number of ACEs exceeded the maximum number that could be supported by the system. The system applied a bridge result for the ACL instead.

Recommended Action The configured ACLs are too large to all fit in the hardware TCAM. Enter the **mls tcam priority** command to prioritize interfaces for hardware switching. Try to share the same ACLs across multiple interfaces to reduce TCAM resource contention.

Error Message `FM-4-ACL-CONFLICT: Interface [chars] configured ACLs conflict in [chars] direction(s)`

Explanation This message indicates that the configured routed ACLs for this interface conflict with the VACLs on this interface. The traffic on this interface may not comply with either the routed ACLs or VACLs under this condition. The first [chars] is the interface, and the second [chars] is the direction.

Recommended Action Redefine either the VACLs or the routed ACLs, or remove one or the other to avoid the conflict.

Error Message `FM-4-BAD_STAT_MESSAGE: Error in netflow stats messaging - no_entries [dec]`

Explanation This message indicates that a software error might have affected the statistics for the reflexive ACL.

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

Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message FM-4-INSP_VACL: VACL & INSPECTION conflict on i/f [chars]

Explanation This message indicates that the VACL and the inspection function on the same interface are not supported. If the VACL is configured, the inspection function is inactive. [chars] is the interface.

Recommended Action Remove either the inspection/inspection ACL or the VACL on the interface. To activate the inspection function, remove the VACL and reconfigure the inspection. To apply the VACL, remove the inspection function and reconfigure the VACL.

Error Message FM-4-RACL-REDUCED: Interface [chars] routed traffic will be software switched in [chars] direction(s)

Explanation This message indicates that the configured ACLs are too large to fit all in the hardware TCAM. TCAM resource contention prevents ACLs from being applied in the TCAM for this interface. Traffic on this interface is sent to software so that the ACLs can be applied. The first [chars] is the interface, and the second [chars] is the direction.

Recommended Action Enter the **tcam priority** command to prioritize interfaces for hardware switching. To reduce TCAM resource contention, share the same ACLs across multiple interfaces.

Error Message `FM-4-TCAM_API_FAILURE: Interface [chars] traffic will be software switched in [chars] direction(s)`

Explanation This message indicates that a TCAM API failure prevents ACLs from being applied in the TCAM for this interface. The system applied a bridge result for the ACL instead.

Recommended Action The configured ACLs are too large to all fit in the hardware TCAM. Enter the **mls tcam priority** command to prioritize interfaces for hardware switching. Try to share the same ACLs across multiple interfaces in order to reduce TCAM resource contention.

Error Message `FM-4-TCAM-CAPMAP: Interface [chars] hardware TCAM LOU usage capability exceeded`

Explanation This message indicates that the hardware TCAM can only handle up to nine logical operations per interface and up to 64 logical operations. The hardware TCAM cannot handle the number of logical operations used with the configured ACLs on this specific interface. [chars] is the interface.

Recommended Action Reduce the use of logical operations in the ACLs.

Error Message `FM-4-TCAM-ENTRY: Hardware TCAM entry capacity exceeded`

Explanation This message indicates that the configured ACLs are too large for all of them to fit in the hardware TCAM. The hardware TCAM cannot handle all of the configured ACLs.

Recommended Action Enter the **tcam priority** command to prioritize interfaces for switching. To reduce TCAM resource contention, share the same ACLs across multiple interfaces.

Error Message `FM-4-TCAM-LABEL: Hardware TCAM label capacity exceeded`

Explanation This message indicates that the hardware TCAM can only handle 500 interfaces configured with ACLs. The hardware TCAM cannot handle the number of interfaces configured with ACLs.

Recommended Action Enter the **tcam priority** command to prioritize interfaces for hardware switching. Remove ACLs from some of the interfaces.

Error Message `FM-4-TCAM-LOU: Hardware TCAM LOU capacity exceeded`

Explanation This message indicates that the hardware TCAM can only handle up to nine logical operations per interface and up to 64 logical operations. The hardware TCAM cannot handle the number of logical operations used with the configured ACLs.

Recommended Action Reduce the use of logical operations in the ACLs.

Error Message `FM-4-VACL_PVLAN: Vacl config is NOT supported on secondary Vlan: [chars] and will be removed`

Explanation This message indicates that the current implementation of Feature Manager does not support the configuration of VACLs on secondary VLANs. The VACL configuration is removed from the VLAN interface when it becomes a secondary private VLAN. Both the hardware and the software will be updated accordingly.

Recommended Action Change the VLAN to be a primary VLAN or a regular (non-private) VLAN, and then reapply the VLAN filter.

Error Message `FM-4-VLOU_EXCEEDED: Part of the traffic for the ACL:`
`[chars] will be forwarded to CPU`

Explanation   To prevent the possibility that the hardware TCAM does not have the capacity to handle the number of logical operations used with the configured ACLs, the software has bridged part of the traffic to the CPU.

Recommended Action   The hardware TCAM can handle up to nine logical operations for each interface and up to 64 logical operations in total. Try to enable the logical operations expansion by entering the **mls ip acl port expand** command from the configuration prompt. If the problem is still there, it is because the software cannot expand the entry using the TCP flag. If possible, put the entries that use the TCP flag before other entries in the ACL, or you could accept having some entries bridged to the CPU.

GBIC Messages

This section contains the Gigabit Interface Converter (GBIC) messages.

GBIC-4

Error Message `GBIC-4-CHECK_SUM_FAILED: GBIC EEPROM data check sum`
`failed for GBIC interface [chars]`

Explanation   This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to read vendor-data information to verify its correctness. [chars] is the interface.

Recommended Action   Remove and reinsert the GBIC. If this situation recurs, the GBIC may be defective.

Error Message `GBIC-4-NOREAD_VNAME: Unable to read vendor name for GBIC interface [chars]`

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to read the name of the GBIC vendor. [chars] is the interface.

Recommended Action Remove and reinsert the GBIC. If this situation recurs, the GBIC may be defective.

Error Message `GBIC-4-NOREAD_VSDATA: Unable to read vendor-specific data for GBIC interface [chars]`

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to read identifying vendor-specific information to verify its authenticity. [chars] is the interface.

Recommended Action Remove and reinsert the GBIC. If this situation recurs, the GBIC may be defective.

Error Message `GBIC-4-NOREAD_VSERNUM: Unable to read serial number for GBIC interface [chars]`

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to read the GBIC serial number. [chars] is the interface.

Recommended Action Remove and reinsert the GBIC. If this situation recurs, the GBIC may be defective.

Error Message `GBIC-4-UNRECOGNIZED_EXTTYPE: GBIC interface [chars] has unrecognized extended type`

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system does not recognize its reported extended type code.

Recommended Action Check the list of supported GBICs for this version of the system software. An upgrade may be required for newer GBICs. Even if unrecognized, the GBIC may still operate properly but with limited functionality.

Error Message `GBIC-4-XCVR_INTERR: Internal error occurred in setup for GBIC interface [chars]`

Explanation This message indicates that the system could not allocate resources or had some other problem in the setup of the specified GBIC interface. [chars] is the interface.

Recommended Action Reload the system. If this problem recurs, contact your Cisco technical support representative.

GBIC-6

Error Message `GBIC-6-SERDES_MODULE_UNKNOWN: Unrecognizable GBIC found in [chars] (module mask [hex])`

Explanation This message indicates that the GBIC presented data that did not correctly identify the GBIC type to the system. This GBIC will be handled as a generic GBIC.

Recommended Action If the GBIC fails to become operational, reinsert the GBIC. If the GBIC continues to fail after reinsertion, the GBIC might be defective or incompatible with the switch.

Error Message `GBIC-6-SERDES_SERIAL_INV_DATA: Unrecognizable GBIC found in [chars] (serial data [hex])`

Explanation This message indicates that the GBIC presented data that did not correctly identify the GBIC type to the system. This GBIC will be handled as a generic GBIC.

Recommended Action If the GBIC fails to become operational, reinsert the GBIC. If it continues to fail after reinsertion, the GBIC might be defective or incompatible with the switch.

GBIC_SECURITY Messages

This section contains the Gigabit Interface Converter security (GBIC_SECURITY) messages.

GBIC_SECURITY-4

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

Explanation This message indicates that the system could not allocate resources or had some other problem in the setup of the specified GBIC interface. [chars] is the interface.

Recommended Action Reload the system. If this problem recurs, contact your Cisco technical support representative.

GBIC_SECURITY_CRYPT Messages

This section contains the Gigabit Interface Converter cryptographic security (GBIC_SECURITY_CRYPT) messages.

GBIC_SECURITY_CRYPT-4

Error Message GBIC_SECURITY_CRYPT-4-ID_MISMATCH: Identification check failed for GBIC in port [dec]

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to verify its identity. [dec] is the port number.

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

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

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the system was unable to match its manufacturer with one on the known list of Cisco GBIC vendors. [dec] is the port number.

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

Error Message GBIC_SECURITY_CRYPT-4-VN_DATA_CRC_ERROR: GBIC in port [dec] has bad crc

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but the GBIC does not have valid CRC in the EEPROM data. [dec] is the port number.

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

GBIC_SECURITY_UNIQUE Messages

This section contains the Gigabit Interface Converter unique security (GBIC_SECURITY_UNIQUE) messages.

GBIC_SECURITY_UNIQUE-3

Error Message GBIC_SECURITY_UNIQUE-3-DUPLICATE_GBIC: GBIC interface [dec]/[dec] is a duplicate of GBIC interface [dec]/[dec]

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but its vendor ID and serial number match those of another interface on the system. The [dec]/[dec] variables are the interfaces of the matching GBICs.

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

GBIC_SECURITY_UNIQUE-4

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

Explanation This message indicates that the GBIC was identified as a Cisco GBIC, but its serial number matches that of another interface on the system. [dec]/[dec] is the GBIC interface.

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

ICC Messages

This section contains the InterCard Communication (ICC) messages.

ICC-5

Error Message `ICC-5-WATERMARK: [dec] pkts for class [chars] are waiting to be processed.`

Explanation This message indicates that a particular ICC port is processing many packets. [dec] is the number of packets received by the class, and [chars] is the name of the class.

Recommended Action No action is required.

IDBMAN Messages

This section contains the interface description block manager (IDBMAN) messages.

IDBMAN-3

Error Message IDBMAN-3-AGGPORTMISMATCH: [chars]: [chars]([dec] / [dec]) does match internal slot/port state [chars]([dec] / [dec])

> **Explanation** This message indicates that an internal error caused the software to use an invalid aggregate port.

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

Error Message IDBMAN-3-DELETEDAGGPORT: [chars]([dec] / [dec]) Group [dec] has been deleted, but is being reused.

> **Explanation** This message indicates that an internal error caused a deleted interface to be reused for a new aggregate port.

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

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message IDBMAN-3-INVALIDAGGPORTBANDWIDTH: [chars]([dec] / [dec]) has an invalid bandwidth value of [dec]

Explanation This message indicates that an internal error caused an invalid bandwidth to be used for an aggregate port.

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

Error Message IDBMAN-3-INVALIDPORT: [chars]: trying to use invalid port number [dec] (Max [dec])

Explanation This message indicates that an internal error caused the software to use an invalid port number.

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

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

Error Message IDBMAN-3-INVALIDVLAN: [chars]: trying to use invalid Vlan [dec]

Explanation This message indicates that an internal error caused the software to use an invalid VLAN.

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

Error Message IDBMAN-3-NOTANAGGPORT: [chars]([dec] / [dec]) is not an aggregate port

Explanation This message indicates that an internal error caused an interface that is not an aggregate port to be used for aggregate port operations.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or

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

Error Message IDBMAN-3-PORTNOTINAGGPORT: [chars]([dec] / [dec]) is not present in Aggport [chars]([dec] / [dec])

Explanation This message indicates an internal error that caused an invalid port to be part of an aggregate port.

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

Error Message IDBMAN-3-VLANINUSE: [chars]: Vlan [dec] is in use by [chars]

Explanation Each Layer 3 interface has a VLAN associated with it. This message indicates that the VLAN associated with the specified interface is being used by another Layer 3 interface.

Recommended Action No action is required.

Error Message `IDBMAN-3-VLANNOTSET: [chars]: Vlan [dec] not set since it already has Vlan [dec]`

> **Explanation** This message indicates that an internal error caused an interface not to have its VLAN set to the requested value.

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

IDBMAN-4

Error Message `IDBMAN-4-ACTIVEPORTSINAGGPORT: [chars]( [dec] / [dec] ) has [dec] active ports, but is being removed`

> **Explanation** This message indicates that an internal error caused an aggregate port with active ports to be removed.

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

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message IDBMAN-4-SVI_LIMIT: Switch virtual interface count exceeded the recommended limit of [dec]

Explanation This message indicates that the recommended number of switch virtual interfaces (SVIs) has been exceeded. [dec] is the recommended limit.

Recommended Action Try to keep the number of SVIs below the recommended limit. Also, you can enter the **show tech-support** command to gather data that might help identify the exact nature of the error. If you cannot determine the nature of the error from the error message text or from the **show tech-support** command output, contact your Cisco technical support representative, and provide the representative with the gathered information.

IDBMAN-6

Error Message IDBMAN-6-VLANMAPPED: Vlan [dec] is mapped to [chars]

Explanation This informational message indicates that the specified VLAN is mapped to the specified interface.

Recommended Action No action is required.

IPC Messages

This section contains the InterProcessor Communication (IPC) messages.

IPC-5

Error Message `IPC-5-MSG_NULL: [chars]`

Explanation This message indicates that the IPC message is null. [chars] is the message.

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

Error Message `IPC-5-RPCFULL: port: [hex], index: [dec], type: [hex]`

Explanation This message indicates that an RPC request for an application could not be added to the RPC request table because pending requests have filled the RPC request table.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still

require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message   `IPC-5-WATERMARK: [dec] messages pending in [hex] for the port [chars] [hex].[hex]`

Explanation   This message indicates that a particular IPC port is overused. An application is not draining packets quickly, which suggests that the CPU is very busy. [dec] is the number of messages pending in the IPC to be processed by the application. [chars] is the IPC port name. The first [hex] is the IPC port number, the second [hex] is the IPC seat number, and the third [hex] is the IPC index.

Recommended Action   No action is required.

IPNAT Messages

This section contains the IP Network Address Translation (IPNAT) messages.

IPNAT-4

Error Message `IPNAT-4-ADDR_ALLOC_FAILURE: Address allocation failed for [IP_address], pool [chars] might be exhausted`

Explanation This message indicates that an address could not be allocated from the IPNAT pool. This condition can cause a translation failure and might result in packets being dropped. The counter for missed packets will be incremented.

Recommended Action Check to see if the NAT pool has been exhausted. To reuse any existing addresses in the NAT pool for new packet flows, clear the current NAT entries using the **clear ip nat translation** command.

IP_VRF Messages

This section contains IP VPN routing/forwarding instance common error (IP_VRF) messages.

IP_VRF-4

Error Message `IP_VRF-4-VRF_DELETE_WAIT: The VRF [chars] is getting deleted after a wait`

Explanation This message indicates that there are still routes in the deleted VRF routing table. To ensure reusablity of the same VRF, the system forcibly clears the VRF routing table, which causes the VRF to get deleted.

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

the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

L2_APPL Messages

This section contains the Layer 2 application (L2_APPL) messages.

L2_APPL-0

Error Message `L2_APPL-0-TASK_SPAWN_FAIL: Failed to spawn task "[chars]"`

   Explanation   This message indicates that the system failed to initialize 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 http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

L2_APPL-4

Error Message `L2_APPL-4-MAC_MOVE: Host [enet] is flapping between port [chars] and port [chars]`

Explanation This message indicates that the specified host is alternating back and forth between the specified ports.

Recommended Action Check the network for possible loops.

Error Message `L2_APPL-4-UNKMESG: Unknown received message [dec]`

Explanation This message indicates that an internal error has occurred. A mismatch between Cisco IOS image versions might cause this message to display.

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

L3_ASIC Messages

This section contains the Layer 3 ASIC (L3_ASIC) messages.

L3_ASIC-1

Error Message `L3_ASIC-1-ERR_NF_PARITY: Netflow table parity error can't be fixed by software.`

Explanation   There are too many NetFlow parity errors to be fixed by the software.

Recommended Action   Reload the system. If you continue to see this messages after reloading, contact your Cisco technical support representative to obtain a replacement for the supervisor engine.

L3_MGR Messages

This section contains the Layer 3 manager system log (L3_MGR) messages.

L3_MGR-3

Error Message `L3_MGR-3-FLUSH: L3 MGR flush error: [chars]`

Explanation   This message indicates that the Layer 3 manager has encountered a flush error. [chars] is the error description.

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

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `L3_MGR-3-ICC_ASYNC: L3 MGR async request failed: [chars]`

Explanation This message indicates that the Layer 3 manager received a NULL packet. [chars] is the error description.

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

Error Message `L3_MGR-3-L2_FLUSH_ENTRY: L3 MGR install L2 flush entry: [chars]`

Explanation This message indicates that the Layer 3 manager is receiving faulty status information. [chars] is the error description.

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

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

Error Message `L3_MGR-3-NULL_SVI: L3 MGR svi allocation error: [chars]`

Explanation This message indicates that the Layer 3 Manager cannot allocate a switched virtual interface (SVI). [chars] is the error description.

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

Error Message `L3_MGR-3-NULL_VLAN: L3 MGR vlan allocation error: [chars]`

Explanation This message indicates that the Layer 3 manager cannot allocate a VLAN. [chars] is the error description.

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

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

Error Message `L3_MGR-3-REQ_SEND: L3 MGR SEND error: [chars]`

Explanation This message indicates that the Layer 3 manager has problems sending out the request. [chars] is the error description.

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

Error Message `L3_MGR-3-RSP_RCVD: L3 MGR RCVD error: [chars]`

Explanation This message indicates that the Layer 3 manager has received an error packet. [chars] is the error description.

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

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

Error Message `L3_MGR-3-SW_SHORTCUT: L3 MGR install sw shortcut: [chars]`

Explanation   This message indicates that the Layer 3 manager is receiving faulty status information. [chars] is the error description.

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

L3_MGR-4

Error Message `L3_MGR-4-L3M_FMASK_CHANGED: [chars] flowmask changed from [chars] to [chars]`

Explanation   This message indicates that a NetFlow flowmask changed.

Recommended Action   To return the NetFlow flowmask to the previous configuration, deconfigure the feature, QoS policing, uRPF, or the **mls flow** command.

LYRA Messages

This section contains the Layer 2 forwarding engine (LYRA) messages.

LYRA-0

Error Message `LYRA-0-FATAL_INTR: LYRA: fatal interrupt: int status 0x[hex], int mask 0x[hex]`

Explanation This message indicates that the Enhanced Address Recognition Logic (EARL) may not be functioning because of a fatal interruption. EARL can no longer forward any packets. The first [hex] is the interface status, and the second [hex] is the interface mask.

Recommended Action After this error message displays, the system performs a crashdump. Contact your Cisco technical support representative, and provide the representative with the crashdump information. If this interruption occurs on the supervisor engine, you must reboot the switch. If the switch has a redundant supervisor engine, the standby supervisor engine takes over automatically.

LYRA-1

Error Message `LYRA-1-SCP_Q_CREATE_FAIL: Failed to create LYRA SCP queue.`

Explanation This message indicates that the system failed to create an internal queue.

Recommended Action Reboot your system. If you receive this message continually, enter the **show tech-support** command to gather system and configuration information, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message `LYRA-1-TASK_CREATE_FAIL: Failed to create LYRA Fatal interrupt patch task`

Explanation This message indicates that spawning a task failed.

Recommended Action Reboot your system. If you receive this message continually, enter the **show tech-support** command to gather system and configuration information, contact your Cisco technical support representative, and provide the representative with the gathered information.

LYRA-2

Error Message `LYRA-2-L2L3_SEQ_ERR: L2 Seq 0x[hex], L3 Seq 0x[hex], L2L3 Mismatch seq 0x[hex]`

Explanation This message indicates that a LYRA ASIC Layer 2-Layer 3 sequence error occurred and the system recovered. The first [hex] is the Layer 2 sequence, the second [hex] is the Layer 3 sequence, and the third [hex] is the Layer 2/Layer 3 mismatched sequence.

Recommended Action No action is required unless throughput is reduced. If throughput is reduced, reboot the system.

Error Message `LYRA-2-PARITY_ERR: LYRA: parity intr [dec]: address 0x[hex], Data: 0x[hex], 0x[hex], 0x[hex], 0x[hex]`

Explanation This message indicates that the system detected a parity error while accessing the forwarding table. [dec] identifies the parity interruption, [hex] is the address where the error occurred, and the four [hex] variables provide data about the error.

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

Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `LYRA-2-RESET_LC: Resetting the linecard [dec]`

Explanation This message indicates that the system failed to receive a Switch-Module Configuration Protocol (SCP) response. The system is resetting the indicated module. [dec] is the module number.

Recommended Action No action is required.

Error Message `LYRA-2-SEQ_ERR: Lyra [chars] Seq [hex], Cntrl1 [hex],`
`Cntrl2 [hex]`

Explanation This message indicates that a LYRA ASIC sequence error occurred, but the system self-recovered. [chars] is the type of sequence error, the first [hex] is the sequence, the second [hex] identifies control register 1, and the third [hex] identifies control register 2.

Recommended Action No action is required. If you see this message continually, contact your Cisco technical support representative, and provide the representative with the sequence error information.

LYRA-4

Error Message `LYRA-4-INV_MSG: Received [chars] message from slot [dec]`

Explanation This message indicates that the system received a message from an invalid module. [chars] is the message that was received, and [dec] is the slot number.

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

Error Message `LYRA-4-INV_REG: LYRA: Attempt to [chars] invalid register`

Explanation This message indicates that an internal error has occurred. The system attempted to read or write to an invalid LYRA ASIC 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 http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the

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

Error Message LYRA-4-MEDUSA_SEQ_ERR: Sequence error detected by Medusa. Applying recovery patch.

Explanation This message indicates that the Medusa ASIC detected a sequence error. The system is applying a recovery patch. You might receive this message during online insertion and removal or during high traffic periods.

Recommended Action No action is required. If you see this message continually, contact your Cisco technical support representative, and provide the representative with the sequence error information.

MCAST Messages

This section contains the Layer 2 multicast log (MCAST) messages.

MCAST-4

Error Message MCAST-4-MET_THRESHOLD_EXCEEDED: Multicast Expansion table has exceeded [dec]% of its capacity and is reaching its maximum

Explanation This message indicates that the number of entries in the Multicast Expansion Table exceeds 98 percent of the possible number of entries in the table.

Recommended Action No action is required. If the Multicast Expansion Table reaches its maximum capacity, the software will forward multicast routes and outgoing interfaces that do not have space in the hardware.

MCAST-6

Error Message `MCAST-6-GC_LIMIT_EXCEEDED: IGMP snooping was trying to allocate more Layer 2 entries than what allowed ([dec])`

Explanation The allocation of Layer 2 entries has been limited in order to conserve system resources.

Recommended Action To set the limit of Layer 2 entries, enter the **ip igmp snooping l2-entry-limit** command. Increasing the value of the *max-entries* variable could cause a reload by increasing the use of system resources.

Error Message `MCAST-6-IGMP-CGMP: IGMP snooping now is running in IGMP CGMP mode on VLAN [dec]`

Explanation This message indicates that Internet Group Management Protocol (IGMP) snooping detected a switch or a router that uses the Cisco Group Management Protocol (CGMP) and that IGMP now runs in CGMP mode on the affected VLAN. [dec] is the VLAN number.

Recommended Action No action is required.

Error Message `MCAST-6-IGMP-ONLY-MODE: IGMP snooping is now running in IGMP only mode on vlan [dec]`

Explanation This message indicates that IGMP snooping is now running on a network where there are no devices that use CGMP. [dec] is the VLAN number.

Recommended Action No action is required.

Error Message `MCAST-6-L2_HASH_BUCKET_COLLISION: Failure installing (G,C)->index: ([enet],[dec])->[hex] Protocol :[dec] Error:[dec]`

Explanation This message indicates that a Layer 2 entry could not be installed in the hardware because there is not enough space in the hash bucket. Multicast packets will be flooded on the incoming VLAN because the Layer 2 entry installation failed.

Recommended Action No action is required.

MISTRAL Messages

This section contains the Mistral ASIC (MISTRAL) messages.

Note In later 12.1 E releases, the SYSTEM_CONTROLLER facility name replaces the MISTRAL facility name. For example, MISTRAL-3-ERROR becomes SYSTEM_CONTROLLER-3-ERROR. Both messages indicate the same system condition.

Note An "SP" between the facility and the severity level (for example, MISTRAL-SP-3-ERROR) indicates that the condition is coming from the Mistral ASIC on the supervisor engine. If nothing appears between the facility and the severity level (for example, MISTRAL-3-ERROR), the condition is coming from the Mistral ASIC on the MSFC.

MISTRAL-3

Error Message `MISTRAL-3-COR_MEM_ERR : Correctable DRAM memory error. Count [dec], log [hex]`

Explanation A correctable error has occurred in the DRAM system.

Recommended Action If additional DRAM errors do not occur, no action is required. If this message recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `MISTRAL-3-DUMP : Mistral Global Registers Dump`

Explanation This message provides information regarding the internal state of the Mistral ASIC.

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

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

Error Message `MISTRAL-3-ERROR : Error condition detected: [chars]`

Explanation The most common errors from the Mistral ASIC on the MSFC are TM_DATA_PARITY_ERROR, SYSDRAM_PARITY_ERROR, SYSAD_PARITY_ERROR, and TM_NPP_PARITY_ERROR. Possible causes of these parity errors are random static discharge or other external factors.

Recommended Action If the error message is only seen once (or rarely), the recommendation is to monitor the switch syslog to confirm the error message was an isolated incident. If these error messages are reoccurring, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, 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 `MISTRAL-3-FATAL : An unrecoverable error has been detected. The system is being reset.`

Explanation The Mistral ASIC has detected an unrecoverable error condition.

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

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

Error Message `MISTRAL-3-INFO1 : [chars]=[hex]`

Explanation This message provides information regarding the internal state of the Mistral ASIC.

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

Error Message `MISTRAL-3-INFO2 : [chars]=[hex]([hex])`

Explanation This message provides information regarding the internal state of the Mistral ASIC.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact

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

Error Message `MISTRAL-3-INVALID_SEND : Invalid send operation (packet on [chars])`

Explanation   An internal error caused an illegal call to a device driver.

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

Error Message `MISTRAL-3-INV_TX_PACKET : [chars]: packet neither on IBL nor on OBL`

Explanation   The packet to be transmitted is neither on the Input Buffer Logic, including the memory for the incoming packet cache, nor on the Output Buffer Logic, including the output buffer memory.

Recommended Action   Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you

still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message MISTRAL-3-MORE_COR_ERR : [chars] [dec] correctable DRAM memory errors in previous hour

Explanation Multiple correctable errors have occurred in the system DRAM.

Recommended Action Reboot the system at the next convenient time. If the error persists after the system reboot, 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 through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message MISTRAL-3-NOBUF : Dropping the packet.

Explanation The Mistral ASIC receive buffer pool has been exhausted. No further input packets can be processed until some buffers are returned to the pool.

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

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

Error Message MISTRAL-3-RESET : Resetting Mistral due to [chars]

Explanation The Mistral ASIC is being reset because of internal errors.

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

Error Message `MISTRAL-SP-3-ERROR: Error condition detected:`
`[chars]`

Explanation The most common errors from the Mistral ASIC on the supervisor engine are TM_DATA_PARITY_ERROR and TM_NPP_PARITY_ERROR. Possible causes of these parity errors are random static discharge or other external factors.

Recommended Action If the error message is only seen once (or rarely), the recommendation is to monitor the switch syslog to confirm the error message was an isolated incident. If these error messages are reoccurring, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, 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.

MISTRAL-6

Error Message `MISTRAL-6-BAD_IDB : Bad idb for vector [chars]:`
`[chars] vlan [dec] total [dec]`

Explanation An invalid IDB has been returned from a "get" operation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to

your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

MLS_STAT Messages

This section contains Enhanced Address Recognition Logic (EARL) multilayer switching (MLS) statistics log (MLS_STAT) messages.

MLS_STAT-4

Error Message `MLS_STAT-4-IP_LEN_ERR: MAC/IP length inconsistencies`

Explanation   The system has received one or more packets that have an IP length that does not match the physical length.

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

Error Message `MLS_STAT-4-IP_TOO_SHRT: Too short IP packets received`

Explanation   The system has received one or more IP packets that are too short.

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

Error Message `MLS_STAT-4-IP_CSUM_ERR: IP checksum errors`

Explanation The system has received one or more packets with IP checksum errors.

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

Error Message `MLS_STAT-4-IPX_LEN_ERR: MAC/IPX length inconsistencies`

Explanation The system has received one or more packets that have an IPX length that does not match the physical length.

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

Error Message `MLS_STAT-4-IPX_TOO_SHRT: Too short IPX packets received`

Explanation The system has received one or more IPX packets that are too short.

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

MLSCEF Messages

This section contains the Multilayer Switching Cisco Express Forwarding (MLSCEF) messages.

MLSCEF-2

Error Message `MLSCEF-2-FREEZE: hardware switching disabled on card`

Explanation This message indicates that a corrupted MLSCEF process has been frozen for examination.

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

MLSCEF-7

Error Message `MLSCEF-7-END_FIB_EXCEPTION: FIB TCAM exception cleared, all CEF entries will be hardware switched`

Explanation This message indicates that the FIB TCAM free blocks are available again.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `MLSCEF-7-FIB_EXCEPTION: FIB TCAM exception, Some entries will be software switched`

Explanation This message indicates that the FIB TCAM free blocks do not exist.

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

Error Message `MLSCEF-7-FIB_MASK_MISMATCH: Attempt to delete an entry not matching block mask - class = [dec], [dec]/[dec], mask [dec]/[dec]`

Explanation This message indicates that the passed mask does not match the stored block mask.

Recommended Action This is a debugging message only. No action is required.

Error Message `MLSCEF-SP-7-SHADOW_INCONSISTENCY: FIB TCAM Mismatch for value: Index: [num]`

Explanation This message indicates that the system encountered an inconsistency with the shadow copy of the FIB TCAM. The mismatch was found for the value entry at the specified TCAM index. [num] is the index.

Recommended Action This message is for debugging purposes.

Error Message `MLSCEF-SP-7-WRITE_INCONSISTENCY: FIB TCAM Mismatch for value: Index: [num]`

Explanation This message indicates that a TCAM write error occurred for the value entry at the specified index. [num] is the index.

Recommended Action This message is for debugging purposes.

MLSM Messages

This section contains the Multilayer Switching Multicast (MLSM) messages.

MLSM-6

Error Message `MLSM-6-CONFIG_MISMATCH: Multicast hardware switching config mis-match between RP and NMP.It is likely to be disabled on the NMP`

Explanation This message indicates that MLS multicast hardware switching is enabled on the route processor but is probably disabled on the supervisor engine.

Recommended Action Correct the configuration by enabling IGMP snooping and MLSM on the supervisor engine.

Error Message `MLSM-6-CONFIG_MISMATCH_RECOVERED: Multicast hardware switching mismatch recovered from earlier config mis-match`

Explanation This message indicates that the MLSM configuration mismatch between the route processor and the supervisor engine has been corrected. The MLS multicast hardware switching is probably enabled on the supervisor engine.

Recommended Action Note the difference between the time when the error occurred and the time of the error message. This time span indicates when no hardware-switched entries existed on the switch.

Error Message `MLSM-6-ICC_ERROR: MMLS stopped because of an internal communication error between RP and SP`

Explanation This message indicates that an internal communication error has occurred between the supervisor engine and the Multilayer Switch Feature Card (MSFC). When communication between the supervisor engine and the MSFC cannot be maintained, MLSM is disabled internally.

Recommended Action Restart MLSM to recover from this situation.

Error Message `MLSM-6-IPC_ERROR: MMLS: IPC failure detected between RP and SP`

Explanation The system identified an IPC failure between the RP and SP. This condition can occur when the EOBC channel or NMP is too busy so that the MSFC does not receive a response, even after few retries by the IPC layer.

Recommended Action This condition can occur when the system is operating under a heavy load and communication between the RP and the SP side cannot be maintained. MLSM will keep trying to recover from this situation by sending a message to the SP. The restart message to the SP has an exponential time window of 160 seconds.

Error Message `MLSM-6-MIN_MTU_SUPPORTED: MMLS flows being re-started as the MTU of all the interfaces (oifs) is not equal. Packets greater than the minimum MTU of all oifs will be software switched`

Explanation This message indicates that packets will be switched by the software if you have set different MTU sizes on the Packet-over-SONET (POS) interfaces.

Recommended Action This message is informative only. If there are too many packets going to the CPU, the MTU on the interfaces should be changed appropriately to take advantage of hardware replication.

Error Message `MLSM-6-MIN_MTU_UNSUPPORTED: Outgoing interfaces with MTU less than the RPF interface will be multicast replicated to in software`

Explanation This message occurs when the MTU sizes specified for the outgoing interfaces are smaller than the MTU size specified for the incoming interface. In this configuration, multicast traffic will be forwarded by the software.

Recommended Action This message is informative only. If there are too many packets going to the CPU, the MTU on the interfaces should be changed appropriately to take advantage of hardware replication.

Error Message `MLSM-6-SM_INSTALL_FAILURE: interface/mask entry installation failed on subnet/prefix incoming-vlan`

Explanation This message occurs when an interface/mask entry indicates a source that is directly connected to the router, and an entry for this interface could not be installed in the Hardware Cisco Express Forwarding (HW-CEF) table. The error occurs when the system is running out of available Cisco Express Forwarding (CEF) entries. In this situation, traffic may be dropped for a directly connected source on this interface.

Recommended Action Modify the network configuration so that hardware resource limitations are not overrun and ensure that interface and mask entry is installed.

Error Message `MLSM-6-LC_SCP_FAILURE: NMP encountered internal communication failure for (source , group , incoming-vlan) flow will be software switched`

Explanation This message occurs when a supervisor engine fails to update the CEF table on one or more DFC modules. The result is an inconsistency in the CEF tables among the DFC modules. When this inconsistency occurs, the affected Layer 3 switching entry is deleted, the inconsistent state is purged, and the traffic flow is forwarded by the software.

Recommended Action No action is required.

MLSM-7

Error Message `MLSM-7-SC_TCAM_FULL_ERROR: TCAM space not available to install the ([IP_address],[IP_address]) entry in the Hardware`

Explanation This message indicates that a (s,g) or (*,g) entry could not be installed in the hardware-CEF table. The system is running out of available CEF entries.

Recommended Action Modify the network config so that the hardware resource limitation is not reached, and ensure that the (s,g) or (*,g) entry is installed.

MROUTE Messages

This section contains the multicast route (MROUTE) messages.

MROUTE-4

Error Message `MROUTE-4-MTU_MISMATCH: WARNING`

Explanation This message indicates that with IP multicast enabled, the hardware will not switch interfaces that transmit traffic from larger to smaller MTU interfaces because of fragmentation. A degradation in performance will occur for traffic taking this path.

Recommended Action Set identical MTU values on all interfaces.

MSFC2 Messages

This section contains the Multilayer Switch Feature Card 2 (MSFC2) messages.

MSFC2-3

Error Message `MSFC2-3-INBAND_BAD_PAK: Possibly un-encapsulated packet passed to Inband: int [chars], type [int], stat [hex], flags [hex], size [dec], offset [dec], total [int]`

Explanation This message indicates that the system controller received an unencapsulated packet or a poorly encapsulated packet.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center via the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following

information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message MSFC2-3-INBAND_INVALID_IBL_FILL: Attempting to issue IBL Fill when IBL is void of packet

Explanation This message indicates that an invalid Input Buffer Logic fill command was attempted.

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

Error Message MSFC2-3-MISTRAL_INVALID_IBL_FILL: Attempting to issue IBL Fill when IBL is void of packet

Explanation This message indicates that an invalid Input Buffer Logic fill command was attempted.

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

Error Message MSFC2-3-MISTRAL_INVALID_OBL_PAGE_REQUEST: Invalid request for free 'Output Buffer Logic' pages = [dec]

Explanation This message indicates an invalid Output Buffer Logic (OBL) page request. The maximum number of OBL pages has been set to its maximum value of 40. Processing will continue through the normal switching path.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you

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

Error Message `MSFC2-3-NO_GIG_SYNC: Inband Gig interface not syncronized, status [hex]`

Explanation This message indicates a malfunction in the hardware for transmitting and receiving packets to and from the router.

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

Error Message `MSFC2-3-NO_OBL_TO_INBAND: System controller OBL to INBAND semaphore not obtained`

Explanation This message indicates that the Output Buffer Logic (OBL) to Inband semaphore could not be properly obtained.

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

Error Message `MSFC2-3-NO_SYSTEM_CONTROLLER_INIT_STATUS: System controller init status of 0xf not obtained, status [hex]`

Explanation This message indicates that the initialization status of the system controller could not be properly obtained.

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

Error Message `MSFC2-3-SYSTEM_CONTROLLER_BUSY: System controller could not finish [chars] operation in time`

Explanation This message indicates that the system controller failed to complete the specified operation.

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

NAM Messages

This section contains the Network Analysis Module (NAM) messages.

NAM-3

Error Message `NAM-3-No_RESP: Module [dec] is not responding`

Explanation This message indicates that the system could not establish a TCP connection with the module. [dec] is the number of the module.

Recommended Action If the NAM is booted in the maintenance partition, the appearance of this message is normal and no action is necessary. If the NAM is not booted in the maintenance partition and this message appears, copy the output of the **show module** and **show tcp brief** commands. Use the **session** command to access the module. Copy the output of the **show tech-support** command. Contact your Cisco technical support representative, and provide the representative with the gathered information.

NBAR Messages

This section contains Network Based Application Recognition (NBAR) messages.

NBAR-1

Error Message NBAR-1-MAXMEMORYUSED: Reached maximum ammount of
memory allocated for stile

> **Explanation** This message indicates that the limited amount of memory for
> NBAR classification has been used up because of high traffic conditions.

> **Recommended Action** Increase the amount of memory.

Error Message NBAR-1-NODESIZEMISMATCH: Nodes size mismatch between
parsing and sending:[chars]

> **Explanation** This message indicates a failure during the distribution of NBAR
> graph nodes from the route processor to the modules. The failure is related to
> node size changes between the parsing and the sending phase.

> **Recommended Action** Disable NBAR protocols.

OIR Messages

This section contains the online insertion and removal (OIR) messages.

OIR-3

Error Message `OIR-3-LC_FAILURE: Module [dec] has Major online`
`diagnostic failure, [chars]`

Explanation This message indicates that the specified module has experienced a major online diagnostic failure. [dec] is the module number, and [chars] is the failure.

Recommended Action Reinsert the module. If the problem persists, copy the error message exactly as it appears. Copy the system configuration along with any other relevant information. Contact your technical support representative for assistance.

Error Message `OIR-3-NOTSUPPORTED: [char] card in slot [dec] is not`
`supported and is being disabled`

Explanation This message indicates that the OIR facility has detected a module that is not supported. [char] is the module, and [dec] is the slot number.

Recommended Action Remove the module from the indicated slot.

Error Message `OIR-3-UNKNOWN: Unknown card in slot [dec], card is`
`being disabled`

Explanation This message indicates that the OIR facility detected a module but could not determine the type. [dec] is the slot number.

Recommended Action Reset the module in the indicated slot.

Error Message `OIR-3-UNSUPPORTED: Card in slot [dec] is unsupported.`
`[chars]`

Explanation This message indicates that the OIR detected a module that is not supported. [dec] is the slot number, and [chars] is the reason for this condition.

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

OIR-6

Error Message `OIR-6-CONSOLE: Changing console ownership to [char]`
`processor\n\n\n`

Explanation This message indicates that the OIR facility has switched the console to the specified processor. [char] is the route or switch processor.

Recommended Action No action is required.

Error Message `OIR-6-INSCARD: Card inserted in slot [dec],`
`interfaces administratively shut down`

Explanation This message indicates that the OIR facility detected a newly inserted processor. The inserted interface is shutdown until you configure it, or if an interface of that type was previously configured, it is restored to its previous state. [dec] is the slot number.

Recommended Action No action is required.

Error Message `OIR-6-INSFAN: Fan [dec] inserted`

Explanation The message indicates that the OIR facility detected a newly inserted fan tray.

Recommended Action No action is required.

Error Message `OIR-6-INSPS: Power supply inserted in slot [dec]`

Explanation This message indicates that the OIR facility detected the insertion of a power supply in the specified slot. When powered up, the total power will be adjusted.

Recommended Action No action is required.

Error Message `OIR-6-PROVISION: Module [dec] does not meet the provisioning requirements, power denied`

Explanation This message indicates that the provisioning configuration does not allow the type of module that was inserted. [dec] is the module number.

Recommended Action No action is required.

Error Message `OIR-6-PWRFAILURE: Module [dec] is being disabled due to power convertor failure`

Explanation This message indicates that the DC-DC power convertor failed on the specified module. You need to replace hardware. [dec] is the specified module.

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

Error Message `OIR-6-REMCARD: Card removed from slot [dec], interfaces disabled`

Explanation This message indicates that the OIR facility detected the removal of a processor from the indicated slot. The interfaces on that processor are administratively shutdown and marked as removed, and the routing table is flushed of any routes through the removed interfaces. [dec] is the slot number.

Recommended Action No action is required.

Error Message `OIR-6-REMFAN: Fan [dec] removed`

Explanation This message indicates that the OIR facility detected the removal of a fan tray.

Recommended Action No action is required.

ONLINE Messages

This section contains the SCP (Switch-module Configuration Protocol) download processor (ONLINE) messages.

ONLINE-6

Error Message `ONLINE-SP-6-DNLDFAIL: Module [dec], Proc [dec], Runtime image download failed because of [chars]`

Explanation This message indicates that the system was unable to download the runtime image to the indicated module and processor. The first [dec] is the module number, and the second [dec] is the processor number. [chars] is the reason that the system was unable to download to runtime image.

Recommended Action No action is required. The system recovers without user intervention.

Error Message `ONLINE-SP-6-INITFAIL: Module [dec]: Failed to [chars]`

Explanation This message indicates that the system failed to bring the indicated module online. [dec] is the module number, and [chars] is the reason that the module did not come online.

Recommended Action No action is required. The system recovers without user intervention.

Error Message `ONLINE-SP-6-TIMER: Module [dec], Proc [dec]. Failed to bring online because of timer event`

Explanation This message indicates that the system was unable to download the runtime image to the indicated module and processor because the download or the ASIC initialization did not complete in the allocated time. The first [dec] is the module number, and the second [dec] is the processor number.

Recommended Action No action is required. The system recovers without user intervention.

PF Messages

This section contains the protocol filtering (PF) messages.

PF-4

Error Message `PF-4-MEM_UNAVAIL: Memory was not available to perform the protocol filtering action`

Explanation This message indicates that protocol filtering is unable to operate because of a lack of memory.

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

Error Message `PF-4-PROC_START_ERR: Protocol filtering unable to start`

Explanation This message indicates that the protocol filtering process was unable to be created for unknown reasons.

Recommended Action Start protocol filtering again in the event that the condition was transient. If protocol filtering still fails, reset the system.

Error Message `PF-4-UNKN_ERR: An unknown operational error occurred`

Explanation This message indicates that protocol filtering is unable to operate because an internal operation generated an unexpected error.

Recommended Action Reload the device.

PFREDUN Messages

This section contains Policy Feature Card Redundancy (PFREDUN) messages.

PFREDUN-1

Error Message `PFREDUN-1-VTP_CONFIG_DISLOCATE: VTP config file must be in default location for standby supervisor to come online`

Explanation This message indicates that the standby supervisor engine failed to come online because the VTP configuration file is not in the default location.

Recommended Action Reset the standby supervisor engine, and then configure the VTP configuration file so that it is in the default location.

PFREDUN-3

Error Message `PFREDUN-3-SUP: [chars]`

Explanation This message indicates that the supervisor engine failed to boot because it detected that the system might contain an invalid combination of supervisor engines.

Recommended Action Check all modules in the system, and look for an invalid combination of supervisor engines.

PFREDUN-4

Error Message PFREDUN-4-AUTOBOOT: [chars]

Explanation This message indicates that the RP experienced a hardware or other failure. When the redundant system initializes, the redundant supervisor engine will wait for the RP to initialize. Because the RP cannot initialize due to the failure, it is possible that the supervisor engine can never initialize. The default waiting time for the RP to initialize is three minutes. The waiting time has now expired, and the autoboot feature for the supervisor engine has been disabled.

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

PFREDUN-7

Error Message PFREDUN-7-KPA_WARN: RF KPA messages have not been heard for [dec] seconds

Explanation This message indicates that RF keepalive messages have not been sent from the peer. This message is printed after every third KPA timer expiry.

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

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

PM Messages

This section contains the port manager (PM) messages.

PM-2

Error Message `PM-2-LOW_SP_MEM: Switch process available memory is less than [dec] bytes`

Explanation This message indicates that available memory in the switch processor dropped to a low level. Too many Layer 2 VLANs might be configured on the system. [dec] is the number of bytes.

Recommended Action Remove features from the system to reduce memory usage.

Error Message `PM-2-NOMEM: Not enough memory available for [char]`

Explanation This message indicates that the port manager subsystem could not obtain the memory it needed for the specified operation. [char] is the port manager operation.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that may provide information about the error. If you cannot determine the

type of error from the error message text or from the **show tech-support** output, contact your Cisco technical support representative, and provide the representative with the gathered information.

PM-3

Error Message PM-3-INTERNALERROR: Port Manager Internal Software Error ([chars]: [chars]: [dec]: [chars])

Explanation This message indicates that the Cisco IOS port manager encountered an internal software error.

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

PM-4

Error Message PM-4-BAD_APP_ID: an invalid application id [dec] was detected

Explanation This message indicates that the port manager detected an invalid request. [dec] is the application ID.

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

Error Message `PM-4-BAD_APP_REQ: an invalid [char] request by the '[char]' application was detected`

Explanation This message indicates that the port manager detected an invalid request. The first [char] is the invalid request, and the second [char] is the application making the request.

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

Error Message `PM-4-BAD_CARD_COOKIE: an invalid card cookie was detected`

Explanation This message indicates that the port manager detected an invalid request.

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

Error Message `PM-4-BAD_CARD_SLOT: an invalid card slot [dec] was detected`

Explanation This message indicates that the port manager detected an invalid request. [dec] is the slot number.

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

Error Message `PM-4-BAD_COOKIE: [char] was detected`

Explanation This message indicates that the port manager detected an invalid request. [char] is the invalid request.

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

Error Message `PM-4-BAD_PORT_COOKIE: an invalid port cookie was detected`

Explanation This message indicates that the port manager detected an invalid request.

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

Error Message `PM-4-BAD_PORT_NUMBER: an invalid port number [dec] was detected`

Explanation This message indicates that the port manager detected an invalid request. [dec] is the interface number.

Recommended Action Contact your Cisco technical support representative.

Error Message `PM-4-BAD_VLAN_COOKIE: an invalid vlan cookie was detected`

Explanation This message indicates that the port manager detected an invalid request.

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

Error Message `PM-4-BAD_VLAN_ID: an invalid vlan id [dec] was detected`

Explanation This message indicates that the port manager detected an invalid request. [dec] is the VLAN ID.

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

Error Message `PM-4-EXT_VLAN_INUSE: VLAN [dec] currently in use by [chars]`

Explanation This message indicates that the port manager failed to allocate the requested VLAN for external use because the VLAN is occupied by another feature. [dec] is the requested VLAN number.

Recommended Action Reconfigure the feature to use another internal VLAN, or request an available VLAN.

Error Message `PM-4-EXT_VLAN_NOTAVAIL: VLAN [dec] not available in Port Manager`

Explanation This message indicates that the port manager failed to allocate the requested VLAN. The requested VLAN might be used as an internal VLAN by another feature. [dec] is the requested VLAN number.

Recommended Action Try a different VLAN on the device.

Error Message `PM-4-INACTIVE: putting [chars] in inactive state because [chars]`

Explanation This message indicates that the port manager has been blocked from creating a virtual port for the switch port and VLAN. The specified port is in an inactive state. The reason for this condition is specified in the error message.

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

Error Message `PM-4-INT_FAILUP: [chars] failed to come up. No internal VLAN available`

Explanation This message indicates that the specified interface failed because the port manager failed to allocate internal VLANs. [chars] is the interface.

Recommended Action Remove extended-range VLANs to free resources.

Error Message `PM-4-INT_VLAN_NOTAVAIL: Failed to allocate internal VLAN in Port Manager`

Explanation This message indicates that the port manager failed to find any available internal VLANs.

Recommended Action Delete some extended-range VLANs, or remove features that require internal VLAN allocation.

Error Message `PM-4-LIMITS: Virtual port count for [chars] exceeded the recommended limit of [dec]`

Explanation This message indicates that the permitted number of virtual ports was exceeded. Use the **show spanning-tree summary totals** command to get the total number of virtual ports on the system. [chars] is the module number, and [dec] is the recommended limit of virtual ports.

Recommended Action Distribute the trunks across multiple modules so that you will not exceed the virtual port limitation. You can also clear unnecessary VLANs off of certain trunks.

Error Message `PM-4-PVLAN_TYPE_CFG_ERR: Failed to set VLAN [dec] to a [chars] VLAN`

Explanation This message indicates that the system failed to set the specified VLAN to a private VLAN type.

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

Error Message `PM-4-TOO_MANY_APP: application '[char]' exceeded registration limit`

Explanation This message indicates that the port manager detected an invalid request. [char] is the application.

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

Error Message `PM-4-VMPS_CFG: Dynamic access VLAN [dec] same as voice vlan on [chars].`

   Explanation   This message indicates that an access VLAN on a VMPS server is set to the same VLAN as the voice VLAN on the port.

   Recommended Action   Access VLAN assignment on a VMPS server should be different from voice VLAN.

PM_SCP Messages

This section contains the port manager Switch-Module Configuration Protocol (PM_SCP) messages.

PM_SCP-1

Error Message `PM_SCP-1-LCP_FW_ERR: System resetting module [dec] to recover from error: [chars]`

   Explanation   This message indicates that the firmware of the specified module detected an error. [dec] is the module number, and [chars] is the error.

   Recommended Action   The system is automatically resetting the module to recover from the error.

PM_SCP-2

Error Message `PM_SCP-2-LCP_FW_ERR_INFORM: Module [dec] is experiencing the following error: [chars]`

Explanation The line care firmware detected an error condition. The supervisor engine is being informed of the condition.

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

PM_SCP-3

Error Message `PM_SCP-3-GBIC_BAD: GBIC integrity check on port [dec]/[dec] failed: bad key`

Explanation This message indicates that the GBIC has an incorrectly programmed EEPROM. [dec]/[dec] is the module and port.

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

Error Message `PM_SCP-3-GBIC_DUP: GBICs in ports [dec]/[dec] and [dec]/[dec] have duplicate serial numbers`

> **Explanation** This message indicates that the GBIC was identified as a Cisco GBIC, but its vendor ID and serial number match those of another GBIC on the system.

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

Error Message `PM_SCP-3-LCP_FW_ABLC: Late collision message from module [dec], port:0[dec]`

> **Explanation** The line card firmware has detected abnormal collisions in port traffic.

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

PM_SCP-4

Error Message `PM_SCP-SP-4-LCP_TEMP_ALARM: [chars]: Module [dec]`
`temperature has exceeded the normal operating range.`

Explanation This message indicates that the specified module has exceeded the
alarm threshold. [chars] is the temperature alarm level, and [dec] is the module
number.

Recommended Action Enter the **show environment temperature** command to
check the temperature of the module. Enter the **show environment alarm
threshold** command to display the alarm threshold limits. Ensure that the
room temperature is not too high and that air flow to the module is not blocked.
If this condition persists, the environmental monitor might shut down the
system. Copy the error message exactly as it appears on the console or in the
system log. Also, copy the output of the **show environment temperature**
command and the output of the **show environment alarm threshold**
command. Contact your Cisco technical support representative, and provide
the representative with all the gathered information.

PM_SCP-6

Error Message `PM_SCP-6-LCP_FW_ERR_INFORM: Module [dec] is`
`experiencing the following error: [chars]`

Explanation This message indicates that the firmware of the module detected
an error condition. The module is informing the supervisor engine about the
error condition. [dec] is the module number, and [chars] is the error.

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

POLARIS Messages

This section contains the Layer 3 CEF engine (POLARIS) messages.

POLARIS-4

Error Message `POLARIS-4-ERR_INTRPT: Interrupt [chars] occurring in Polaris Layer 3 ASIC`

Explanation This message indicates that an error in the Layer 3 forwarding ASIC occurred. [chars] is the error description.

Recommended Action Enter the **show earl status** command on the consoles of the switch supervisor engine and any DFC-enabled modules. Contact your Cisco technical representative, and provide the representative with the gathered information.

PORT_ASIC Messages

This section contains port ASIC (PORT_ASIC) messages.

PORT_ASIC-4

Error Message `PORT_ASIC-4-MACADDRERR: Failed to get Mac Base Address from platform`

Explanation The four-gigabit Ethernet interface ASIC could not obtain a MAC base address.

Recommended Action System operation continues normally. No action is required.

Error Message `PORT_ASIC-4-OUTOFSYNC: GMAC is not in SYNC: port [dec]`

Explanation The four-gigabit Ethernet interface ASIC is not in synchronization with the rest of the system.

Recommended Action System operation continues normally. No action is required.

QM Messages

This section contains the quality of service management (QM) messages.

QM-2

Error Message `QM-2-PLC_ATTACH_REJECT: Command rejected: (policy [chars] interface [chars] dir [chars])`

Explanation This message indicates one of the following conditions:

– The **set** commands and the **police/trust** commands have been used to mark traffic in the same traffic class. The **set** commands and the **police/trust** commands are not supported in the same traffic class.

– A policy map that is associated with an interface has been modified in an unsupported manner.

The first [chars] is the policy, the second [chars] is the interface, and the third [chars] is the direction (either ingress or egress).

Recommended Action Remove either the **set** commands or the **police/trust** commands from the same traffic class. In the case of a policy map that has been modified in an unsupported manner, no action is required because the command is rejected.

QM-3

Error Message `QM-3-ERROR: [chars] in [chars]: [dec]`

Explanation This message can indicate a range of software errors. The first [chars] is the error description, and the second [chars] is the location. [dec] is the error ID.

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

Error Message `QM-3-ERROR-STAT: [chars] stat: [dec] in [chars]: [dec]`

Explanation This message can indicate a range of software errors.

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

QM-4

Error Message `QM-4-ACTION_NOT_SUPPORTED: Action is not supported in policymap [chars]`

Explanation This message indicates that an action other than the **set**, **trust**, and **police policy-map class** configuration commands was configured in a policy map. The action has encountered a hardware limitation. [chars] is the policy.

Recommended Action Configure only the supported actions of **set**, **trust**, and **police** when in policy-map class configuration mode.

Error Message `QM-4-CLASS_NOT_SUPPORTED: Classification is not`
`supported in classmap [chars]`

Explanation This message indicates one of the following conditions:

- – An unsupported **match class-map** configuration command was used in a policy map and attached to an egress interface.

- – More than one **match** command was configured.

Recommended Action Reconfigure the class map or the policy map. Use only the **match ip dscp dscp-list class-map** configuration command in a policy map that is attached to an egress interface. Only one match per class map is supported.

Error Message `QM-4-HARDWARE_NOT_SUPPORTED: Hardware limitation has`
`reached for policymap [chars]`

Explanation This message indicates that the policy map configuration has exceeded the limitation of the hardware. You either configured more QoS ACL entries than the number specified in the Switch Database Management (SDM) template, or you configured more policers in a policy map than are supported (by using the **police** or **police aggregate policy-map class** configuration command). [chars] is the policy.

Recommended Action Reconfigure the class map or the policy map, and reduce the number of QoS ACLs or policers.

Error Message `QM-4-MATCH_NOT_SUPPORTED: Match type is not`
`supported in classmap [chars]`

Explanation This message indicates that the match type is not supported in the class map. Match ACL, match ip dscp, and match ip precedence are the match types that are supported. [chars] is the class.

Recommended Action Reconfigure the class map. Use only the **match access-group**, **match ip dscp**, and **match ip precedence class-map** configuration commands within the class map.

QM-6

Error Message QM-6-NBAR_DISABLED: Packets will not be software switched.

Explanation This message indicates that NBAR is disabled. Traffic will not be punted to the RP.

Recommended Action No action needed.

Error Message QM-6-NBAR_ENABLED: Packets will be software switched.

Explanation This message indicates that NBAR is enabled. All the traffic will be punted to the RP.

Recommended Action No action needed.

RPC Messages

This section contains the remote procedure call (RPC) messages.

RPC-2

Error Message RPC-2-APPNOTREG: Remote application '[char]' not registered

Explanation This message indicates that the remote application has not registered itself with the RPC subsystem. [char] is the application.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that may provide information about the error. If you cannot determine the

type of error from the error message text or from the **show tech-support** output, contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message RPC-2-FAILED: Failed to send RPC request [char]

Explanation This message indicates that a communication error occurred during an RPC request. [char] is the RPC request.

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

Error Message RPC-2-FAILED_RETRY: Failed to send RPC request [chars] (will try again)

Explanation This message indicates that a communication error occurred during an RPC request. The RPC will retry the request.

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 through the Internet http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative, and provide the representative with the gathered information.

Error Message `RPC-2-FAILED_USERHANDLE: Failed to send RPC request [chars]`

Explanation   This message indicates that a communication error occurred during an RPC request.

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

Error Message `RPC-2-NOMEM: No memory available for [char]`

Explanation   This message indicates that the RPC subsystem could not obtain the memory it needed. [char] is the operation for which memory was insufficient.

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

RPC-3

Error Message `RPC-3-ARRAYSIZE: Requested size ([dec]) exceeds the`
`maximum size of the variable array '[chars]' ([dec]) for RPC`
`request [chars]:[chars]`

Explanation An application has specified a variable array that is larger than the maximum allowed for that variable array. The supplied array is truncated to the maximum before the RPC request is sent. The first [dec] is the requested size of the array, the first [chars] is the variable array name, the second [dec] is the maximum size of the variable array, and the two [chars] variables identify the RPC request.

Recommended Action Copy the error message exactly as it appears on the console or in the system log. Enter the **show rpc application** command to gather data about the error. If you cannot determine the type of error from the error message or from the **show rpc application** command output, contact your Cisco technical support representative, and provide the representative with the gathered information.

RPC-4

Error Message `RPC-4-BADID: Application ID [dec] is invalid`

Explanation This message indicates that the application ID used by the RPC subsystem is invalid. [dec] is the application ID.

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

Error Message `RPC-4-DUPREG: Application '[char]' is already registered`

Explanation   This message indicates that the application has already registered itself with the RPC subsystem. [char] is the application.

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

Error Message `RPC_4-TOOMANY: Too many RPC applications, '[char]' not registered`

Explanation   This message indicates that there are too many applications registered with the RPC subsystem. [char] is the applications that are not registered.

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

RUNCFGSYNC Messages

This section contains the Auto-Running Configuration Synchronization (RUNCFGSYNC) messages.

RUNCFGSYNC-6

Error Message `RUNCFGSYNC-6-HASRMSTATE: [chars]`

Explanation This message indicates that the state of High Availability Single Router Mode has changed. The error message text provides additional details.

Recommended Action No action is required.

SBETH Messages

This section contains the MAC Controller (SBETH) messages.

SBETH-1

Error Message `SBETH-1-BAD_IDB: Invalid Interface Descriptor Block`

Explanation This message indicates that the driver failed an attempt to obtain the interface descriptor block of the interface.

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

Error Message `SBETH-1-BAD_MEDIA: Unknown media-type in subblock`

Explanation This message indicates that the media type specified in the driver subblock is invalid.

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

Error Message SBETH-1-BAD_PARTICLE: Problem getting particle size

Explanation This message indicates that the driver was unable to get the particle size for this interface.

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

Error Message SBETH-1-BAD_PLUGIN: Plugin function table incomplete or missing

Explanation This message indicates that the driver could not access the specific function table of the PA.

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

Error Message SBETH-1-BAD_POOL: Could not init buffer pools

Explanation This message indicates that the driver failed to get a pool of buffers from the Cisco IOS software.

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

Error Message SBETH-1-BAD_SB_NOMEM: [chars] - Cannot create IDB subblock due to insufficient memory

Explanation This message indicates that there was insufficient system memory to create the subblock.

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

Error Message SBETH-1-BAD_STRUCT: Could not initialize structure

Explanation This message indicates that the driver failed to initialize a structure.

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

Error Message SBETH-1-BAD_SUBBLOCK: [chars] - Could not install or use IDB subblock

Explanation This message indicates that an internal Cisco IOS software error prevented the interface descriptor block subblock from being installed or used.

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

Error Message SBETH-1-IDBTYPE_UNK: Unknown IDBTYPE while starting driver

Explanation This message indicates that the interface descriptor block type in the instance structure of the interface is undefined for this driver.

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

Error Message SBETH-1-INITFAIL_NOMEM: [chars], initialization failed, no buffer memory

Explanation This message indicates that the Ethernet port initialization failed due to insufficient memory.

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

Error Message `SBETH-1-MODE_INVALID: Unknown or invalid chip mode (MII/TBI)`

Explanation This message indicates that the driver subblock contains an invalid or undefined chip operating mode (either media-independent interface or Ten-Bit Interface mode).

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

Error Message `SBETH-1-RESET: MAC Still in Reset`

Explanation This message indicates that an attempt was made to access the MAC while it was resetting.

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

SBETH-2

Error Message `SBETH-2-NOISL: Interface [chars] does not support ISL`

Explanation This message indicates that Inter-Switch Link (ISL) is not supported on the hardware of the specified interface.

Recommended Action No action is required.

SBETH-3

Error Message SBETH-3-BAD_GBIC_EEPROM: [chars] - GBIC contains a bad EEPROM

Explanation Because the specified interface contains a GBIC with a faulty EEPROM, the link is down.

Recommended Action Ensure that the GBIC type is compatible with the interface. Verify that the GBIC was obtained from Cisco or a supported vendor.

Error Message SBETH-3-ERRINT: [chars], error interrupt, mac_status = [hex]

Explanation This message indicates that the MAC controller has signalled an error condition.

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

Error Message SBETH-3-TOOBIG: [chars], packet too big ([dec]), from [enet]

Explanation This message indicates that the interface detects a packet that is larger than the MTU.

Recommended Action Check the MTU setting of the other station.

Error Message `SBETH-3-UNKNOWN_GBIC: [chars] - Unknown GBIC type`

Explanation This message indicates that the interface contains a GBIC of an unknown type. This condition causes the link to be down.

Recommended Action Make sure that the GBIC type is compatible with the interface. Verify that the GBIC was obtained from Cisco or a supported vendor.

SCP Messages

This section contains the Switch-Module Configuration Protocol (SCP) messages.

SCP-2

Error Message `SCP-2-NOMEM: No memory available for [char]`

Explanation This message indicates that the SCP subsystem could not obtain the memory it needed. [char] is the operation for which there was insufficient memory.

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

Error Message `SCP-2-NOTREG: Process [dec]([char]) not registered for SCP`

Explanation This message indicates that the SCP application cannot send an SCP message because the SCP application has not registered for the SAP. [dec] identifies the process, and [chars] is the process.

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

Error Message `SCP-2-TOO_MANY_SAP: Not enough space to register process [dec]([char]) for SCP`

Explanation This message indicates that the SCP application cannot register for a service access point (SAP) because all possible numbers have been assigned. [dec] identifies the process, and [char] is the process.

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

SCP-4

Error Message `SCP-4-DACK_TIMEOUT_MSG: SCP delivery ack timeout for opcode=[hex]`

Explanation This message indicates that the route processor did not receive SCP delivery acknowledgements from the switch processor after two retries. [hex] identifies the operational code.

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

Error Message `SCP-4-GET_PAK_MSG: Failed for message size=[dec]`

Explanation This message indicates that the system is out of pak-type buffers of the required size. [dec] is the required size.

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

SPAN Messages

This section contains the Switched Port Analyzer (SPAN) messages.

SPAN-3

Error Message SPAN-3-MEM_UNAVAIL: Memory was not available to perform the SPAN operation

Explanation This message indicates that the system was unable to perform a SPAN operation because of a lack of memory.

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

Error Message SPAN-3-UNKN_ERR: An internal error occurred during a SPAN operation

Explanation This message indicates that SPAN detected an error in its internal operation.

Recommended Action The error might be transient. Try the SPAN operation again. If a second attempt also fails, try reloading the switch to complete the operation.

Error Message SPAN-3-UNKN_ERR_PORT: An internal error occurred when configuring SPAN on port [dec] / [chars]

Explanation This message indicates that SPAN detected an error in its internal operation. [dec] is the slot, and [chars] is the interface number.

Recommended Action The error might be transient. Try the SPAN operation again. If a second attempt also fails, try reloading the switch to complete the operation.

SPANTREE Messages

This section contains the spanning tree (SPANTREE) messages.

SPANTREE-2

Error Message SPANTREE-2-BLOCK_BPDUGUARD: Received BPDU on port
[chars] with BPDU Guard enabled. Disabling port.

Explanation   This message indicates that a BPDU was received on the specified interface, which has the spanning tree BPDU guard feature enabled. As a result, the interface was administratively shut down. [chars] is the port.

Recommended Action   Either remove the device sending BPDUs or disable the BPDU guard feature. The BPDU guard feature can be locally configured on the interface or globally configured on all ports that are PortFast enabled. After the situation has been resolved, reenable the interface by entering the **no shutdown** command in interface configuration mode.

Error Message SPANTREE-2-BLOCK_PVID_LOCAL: Blocking [chars] on
[chars] Inconsistent local vlan

Explanation   This message indicates that the spanning tree port associated with the listed spanning tree instance and interface will be held in spanning tree blocking state until the port VLAN ID (PVID) inconsistency is resolved. The listed spanning tree instance is the same one as the native VLAN ID on the listed interface. [chars] is the spanning tree port ID.

Recommended Action   Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the 802.1Q trunk connection. Once corrected, spanning tree automatically unblocks the interfaces as appropriate.

Error Message SPANTREE-2-BLOCK_PVID_PEER: Blocking on [chars]
[chars]. Inconsistent peer vlan

Explanation This message indicates that the spanning tree port associated with
the listed spanning tree instance and interface will be held in spanning tree
blocking state until the port VLAN ID (PVID) inconsistency is resolved. The
listed spanning tree instance is the same one as the native VLAN ID of the
interface on the peer switch to which the listed interface is connected. [chars]
is the spanning tree port ID.

Recommended Action Verify that the configuration of the native VLAN ID is
consistent on the interfaces on each end of the 802.1Q trunk connection. Once
corrected, spanning tree automatically unblocks the interfaces as appropriate.

Error Message SPANTREE-2-CHNL_MISCFG: Detected loop due to
etherchannel misconfiguration of [chars] [chars]

Explanation This message indicates that the misconfiguration of a channel
group was detected. For example, ports of one side of the EtherChannel either
are not configured to be in the channel or failed to bundle, while ports on the
other side of the EtherChannel were successfully bundled. [chars] is the
channel group ID.

Recommended Action Determine the misconfigured local ports by entering the
show interfaces status err-disabled command. Check the EtherChannel
configuration on the remote device by entering the **show etherchannel
summary** command on the remote device. Once the configuration is
corrected, enter the **shutdown/no shutdown** command on the associated
port-channel interface.

Error Message SPANTREE-2-LOOPGUARD_BLOCK: Loop guard blocking port
[chars] on [chars]

Explanation This message indicates that the spanning tree message age timer
has expired because no BPDUs were received from the designated bridge.
Because this condition could be caused by a unidirectional link failure, the

interface is put into blocking state and marked as loop guard inconsistent to prevent loops. The first [chars] is the port, and the second [chars] is the MST instance or the VLAN number.

Recommended Action   Enter the **show spanning-tree inconsistentports** command to review the list of interfaces with loop guard inconsistencies. Determine why devices connected to the listed ports are not sending BPDUs. If the specified port does not run STP (Spanning Tree Protocol), disable loop guard on the inconsistent interface or start STP on the other side of the link. If the cable has a failure that makes the link unidirectional (you can transmit, but you cannot receive), replace the failed cable with a working cable.

Note   This message is only generated once per second for each physical interface, not for each MST instance or VLAN. Although this message indicates a specific MST instance or VLAN, it could also apply to other MST instances or VLANs in the same physical interface.

Error Message   SPANTREE-2-LOOPGUARD_CONFIG_CHANGE: Loop guard [chars] on port [chars]

Explanation   This message indicates that the spanning tree loop guard configuration for the specified interface has changed. If loop guard is enabled, the interface is put into blocking state and marked as loop guard inconsistent when the message age time expires because no BPDUs were received from the designated bridge. The first [chars] is the state of loop guard on the interface (enabled or disabled), and the second [chars] is the port number.

Recommended Action   Verify that the configuration for the specified interface is correct. Correct the configuration as needed. If the configuration is already correct, no action is required.

Error Message SPANTREE-2-LOOPGUARD_UNBLOCK: Loop guard unblocking
port [chars] on [chars]

Explanation This message indicates that the specified interface has received a
BPDU while in loop guard inconsistent state. The system cleared any previous
loop guard inconsistency and took the specified interface out of blocking state,
if appropriate. The first [chars] is the port, and the second [chars] is the MST
instance or the VLAN number.

Recommended Action No action is required.

> **Note** This message is only generated once per second for each physical
> interface, not for each MST instance or VLAN. Although this message
> indicates a specific MST instance or VLAN, it could also apply to other
> MST instances or VLANs in the same physical interface.

Error Message SPANTREE-2-RECV_1Q_NON_1QTRUNK: Received 802.1Q BPDU
on non 802.1Q trunk [chars] [chars]

Explanation This message indicates that the listed interface, on which a Shared
Spanning Tree Protocol (SSTP) bridge protocol data unit (BPDU) was
received, was in trunk mode but was not using 802.1Q encapsulation. [chars]
is the interface ID.

Recommended Action Verify that the configuration and operational state of the
listed interface and that of the interface to which it is connected are in the same
mode (access or trunk). If the mode is trunk, verify that both interfaces have
the same encapsulation (ISL or 802.1Q). Once these parameters are consistent,
spanning tree automatically unblocks the interface as appropriate.

Error Message SPANTREE-2-RECV_BAD_TLV: Received SSTP BPDU with bad
TLV on [chars] [chars]

Explanation This message indicates that the listed interface received an SSTP
BPDU that was missing the VLAN ID tag. The BPDU is discarded. The first
[chars] is the port, and the second [chars] is the VLAN number.

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

Error Message SPANTREE-2-RECV_PVID_ERR: Received BPDU with
inconsistent peer vlan id [dec] on [chars] [chars]

Explanation This message indicates that the listed interface received an SSTP
BPDU that is tagged with a VLAN ID that does not match the VLAN ID on
which the BPDU was received. This error occurs when the native VLAN is not
consistently configured on both ends of an 802.1Q trunk. [dec] is the VLAN
ID. [chars] is the interface ID.

Recommended Action Verify that the configuration of the native VLAN ID is
consistent on the interfaces on each end of the 802.1Q trunk connection. Once
corrected, spanning tree automatically unblocks the interfaces as appropriate.

Error Message SPANTREE-2-ROOTGUARD_BLOCK: Root guard blocking port
[chars] on [chars]

Explanation This message indicates that a BPDU was received on the specified
interface. The BPDU falsely advertises a superior spanning tree root bridge to
the one currently in use. The system puts the interface into blocking state and
marks it as root guard inconsistent to prevent the formation of a less efficient
spanning tree topology. The first [chars] is the port, and the second [chars] is
the MST instance or the VLAN number.

Recommended Action Enter the **show spanning-tree inconsistentports**
command to display the list of interfaces with root guard inconsistencies.
Determine why devices connected to the listed ports are sending BPDUs with
a superior root bridge and take action to prevent further occurrences. Once the

BPDUs that falsely advertise a superior root bridge are stopped, the interfaces automatically recover and operate normally. Make sure that it is appropriate to have root guard enabled on the interfaces.

Note   This message is only generated once per second for each physical interface, not for each MST instance or VLAN. Although this message indicates a specific MST instance or VLAN, it could also apply to other MST instances or VLANs in the same physical interface.

Error Message   SPANTREE-2-ROOTGUARD_CONFIG_CHANGE: Root guard [chars] on port [chars]

Explanation   This message indicates that the spanning tree root guard configuration for the listed interface has been changed. If enabled, any BPDU received on this interface that advertises a superior spanning tree root bridge to the one already in use causes the interface to be put into blocking state and marked as root guard inconsistent. The first [chars] is the state of root guard on the interface (enabled or disabled), and the second [chars] is the port number.

Recommended Action   Verify that the spanning tree root guard configuration for the specified interface is correct. If it is incorrect, change the configuration. If it is correct, no action is required.

Error Message   SPANTREE-2-ROOTGUARD_UNBLOCK: Root guard unblocking
port [chars] on [chars]

Explanation   This message indicates that the specified interface is no longer
receiving BPDUs that advertise a superior root bridge. The root guard
inconsistency is cleared for the interface. The interface is taken out of blocking
state if appropriate. The first [chars] is the port, and the second [chars] is the
MST instance or the VLAN number.

Recommended Action   No action is required.

Note   This message is only generated once per second for each physical
interface, not for each MST instance or VLAN. Although this message
indicates a specific MST instance or VLAN, it could also apply to other
MST instances or VLANs in the same physical interface.

Error Message   SPANTREE-2-RX_PORTFAST: Received BPDU on PortFast
enabled port.
Disabling [chars]

Explanation   This message indicates that a BPDU was received on the listed
interface, which has spanning tree PortFast enabled. Because spanning tree
BPDU guard is also enabled, the interface is administratively shut down.
[chars] is the port ID.

Recommended Action   Verify PortFast configuration on the interface. If PortFast
behavior is desired, verify that the interface is connected only to a host or
router and not to a bridge or a switch. After resolving the conflict, reenable the
interface by entering a **no shutdown** command on the interface.

Error Message `SPANTREE-2-UNBLOCK_CONSIST_PORT: Unblocking [chars] on [chars]. Port consistency restored`

Explanation This message indicates that the port VLAN ID and/or port type inconsistencies have been resolved and spanning tree will unblock the listed interface of the listed spanning tree instance as appropriate. [chars] is the interface ID.

Recommended Action No action is required.

SPANTREE-3

Error Message `SPANTREE-3-PORT_SELF_LOOPED: [chars] disabled - received BPDU src mac 9%e) same as that of interface`

Explanation This message indicates that a BPDU was received on the listed interface with a source MAC address that matches the address assigned to the listed interface; thus, a port looped back to itself, possibly due to a diagnostic cable being plugged in to the interface. The interface will be administratively shutdown. [chars] is the interface ID.

Recommended Action Check the interface configuration and any cable plugged into the interface. Once the problem is resolved, reenable the interface by entering the **no shutdown** command on the interface.

SPANTREE-6

Error Message `SPANTREE-6-PORT_STATE: Port [chars] instance [dec] moving from [chars] to [chars]`

Explanation This message indicates that the specified spanning tree port has changed from the first specified state to the second specified state.

Recommended Action No action is required.

SPANTREE-7

Error Message SPANTREE-7-BLOCK_PORT_TYPE: Blocking [chars] on
[chars]. Inconsistent port type

Explanation This message indicates that the listed interface is being held in
spanning tree blocking state until the port type inconsistency is resolved.
[chars] is the port ID.

Recommended Action Verify that the configuration and operational state of the
listed interface and that of the interface to which it is connected are in the same
mode (access or trunk). If the mode is trunk, verify that both interfaces have
the same encapsulation (ISL or 802.1Q). Once these parameters are consistent,
spanning tree automatically unblocks the interface as appropriate.

Error Message SPANTREE-7-RECV_1Q_NON_TRUNK: Received 802.1Q BPDU
on non trunk [chars] [chars]

Explanation This message indicates that an SSTP BPDU was received on the
listed interface, which is not an operational trunking interface. [chars] is the
interface ID.

Recommended Action Verify that the configuration and operational state of the
listed interface and that of the interface to which it is connected are in the same
mode (access or trunk). If the mode is trunk, verify that both interfaces have
the same encapsulation (none, ISL, or 802.1Q). Once these parameters are
consistent, spanning tree automatically unblocks the interface as appropriate.

SPANTREE-FAST Messages

This section contains the spanning tree fast convergence (SPANTREE-FAST) messages.

SPANTREE-FAST-7

Error Message `SPANTREE-FAST-7-PORT_FWD_UPLINK: Port [chars] [chars] moved to Forwarding (UplinkFast)`

Explanation This message indicates that the specified interface has been selected as the new root interface for the listed spanning tree instance.

Recommended Action No action is required.

SPANTREE-SP Messages

SPANTREE-SP-5

Error Message `SPANTREE-SP-5-EXTENDED_SYSID:Extended SysId enabled for type vlan`

Explanation The extended system identification feature has been either enabled or disabled for the given type of spanning tree. If enabled, the spanning tree instance identifier is stored in the lower portion of the bridge identification priority field and is causing the allowed values for the bridge priority to be limited to the range of 0 to 61440 in increments of 4096. If disabled, the bridge identification priority field consists entirely of the configured priority, but some spanning tree features may not be available on a given platform (for example, 4096 VLAN support). On some platforms, this feature may be mandatory.

Recommended Action No action is required.

SREC Messages

This section contains the statistics record (SREC) messages.

SREC-4

Error Message `SREC_OPEN-4-ERROR_ALLOC: Error: Can't allocate [dec] bytes for srec data`

Explanation This message indicates that the system is unable to allocate the required memory to access the file.

Recommended Action Check the memory usage of the system, and retry the operation.

Error Message `SREC_OPEN-4-ERROR_OPEN: Error: Can't open [chars]`

Explanation This message indicates that the system is unable to open the specified file.

Recommended Action Ensure that the file name is correct. Enter the **dir** command to check the file name.

Error Message `SREC_OPEN-4-ERROR_READ: Error: srec file [chars] read failed`

Explanation This message indicates that an unknown error has occurred while the system was converting the SREC file to a binary file.

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

Error Message `SREC_OPEN-4-ERROR_SIZE: Error: Bad file size [chars]`

Explanation This message indicates that the file is too small or too large for the SREC file.

Recommended Action Enter the **dir** command and check the size of the file. Retry the operation.

STORM_CONTROL

This section contains the storm control (STORM_CONTROL) messages.

STORM_CONTROL-2

Error Message `STORM_CONTROL-2-SHUTDOWN: Storm control shut down [chars]`

Explanation This message indicates that excessive traffic has been detected on a port that has been configured to shut down if a storm event is detected.

Recommended Action After the source of the packet storm has been fixed, reenable the port using the **port configuration** command.

SW-VLAN Messages

This section contains the VLAN manager (SW-VLAN) messages.

SW-VLAN-3

Error Message `SW-VLAN-3-VLAN-PM-NOTIFICATION-FAILURE: VLAN manager synchronization failure with Port Manager over [chars]`

Explanation This message indicates that due to a lack of ready pool space, the VLAN manager dropped a notification from the port manager as indicated by the message. [chars] is the type of PM notification.

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

Error Message `SW-VLAN-3-VTP-PROTOCOL-ERROR: VTP protocol code internal error: [chars]`

Explanation This message indicates that the VTP code encountered an error while processing a configuration request, packet, or time expiration. [chars] is the error.

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

SW-VLAN-4

Error Message `SW-VLAN-4-BAD-PM-VLAN-COOKIE-RETURNED: VLAN manager unexpectedly received a bad PM VLAN cookie from the Port Manager, VLAN indicated: [dec]`

Explanation This messages indicates that the VLAN manager received a call from the port manager containing a VLAN cookie that translated to an invalid VLAN number. [dec] is the VLAN ID.

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

Error Message `SW-VLAN-4-BAD-STARTUP-VLAN-CONFIG-FILE: Failed to configure VLAN from startup-config. Fallback to use VLAN configuration file from non-volatile memory`

Explanation This message indicates that the VLAN software failed to use the VLAN configuration from the startup configuration file. The VLAN manager tries to use the startup configuration file if it contains VLAN commands. If the VTP is not in transparent mode, the VLAN commands in the startup configuration file are ignored. Or, if either the VTP domain or the VTP mode information in the startup configuration and the VLAN configuration mode in nonvolatile memory do not match, the VLAN commands in the startup configuration file are ignored. Instead, the VLAN manager uses the binary VLAN configuration file in nonvolatile memory.

Recommended Action No action is required.

Error Message `SW_VLAN-4-EXT_VLAN_CREATE_FAIL: Failed to create VLANs [chars]: [chars]`

Explanation This message indicates that the specified VLANs were not created. The first [chars] is the VLANs that were not created, and the second [chars] is the reason that the specified VLANs were not created.

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

Error Message `SW_VLAN-4-EXT_VLAN_INTERNAL_ERROR: Extended VLAN manager received an internal error [dec] from [chars]: [chars]`

Explanation This message indicates that the VLAN Manager received an error code from the extended VLAN configuration software. [dec] is the error code. The first [chars] is the function that returned the error code, and the second [chars] is the text of the error code.

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

Error Message `SW_VLAN-4-EXT_VLAN_INVALID_DATABASE_DATA:` Extended
VLAN manager received bad data of type [chars]: value [dec] from
function [chars]

Explanation This message indicates that the extended VLAN Manager
received invalid data from an extended VLAN configuration database routine.
The first [chars] is the device type, and the second [chars] is the function that
sent the invalid data. [dec] is the invalid data value.

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

Error Message `SW-VLAN-4-IFS-FAILURE:` VLAN manager encountered file
operation error: call = [chars] / code = [dec] ([chars]) / bytes
transferred = [dec]

Explanation This message indicates that the VLAN manager received an
unexpected error return from a Cisco IOS File System (IFS) call. The first
[chars] is the IFS operation that failed, the first [dec] is the error code, the
second [chars] is the textual interpretation of the error code, and the second
[dec] is the number of bytes transferred.

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

Error Message `SW-VLAN-4-NO-PM-COOKIE-RETURNED: VLAN manager unexpectedly received a null [chars] type cookie from the Port Manager, data reference: [chars]`

Explanation   This message indicates that the VLAN manager queried the port manager for a reference cookie but received a NULL pointer instead. The first [chars] is the type of port manager cookie, and the second [chars] is the interface or VLAN that is the source of the problem.

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

Error Message `SW_VLAN-4-STARTUP_EXT_VLAN_CONFIG_FILE_FAILED: Failed to configure extended range VLAN from startup-config. Error [chars]`

Explanation   This message indicates that the VLAN software failed to use the extended VLAN configuration from the startup configuration file. All configurations for extended-range VLANs will be lost after the system boots up. [chars] is the type of error.

Recommended Action   No action is required.

Error Message `SW-VLAN-4-VTP-INTERNAL-ERROR: VLAN manager received an internal error [dec] from vtp function [chars]: [chars]`

Explanation   This message indicates that an unexpected error code was received by the VLAN manager from the VLAN Trunk Protocol (VTP) configuration software. [dec] is the error code, the first [chars] is the VTP function, and the second [chars] is an error code description.

Recommended Action   Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that may provide information about the error. If you cannot determine the

type of error from the error message text or from the **show tech-support**
output, contact your Cisco technical support representative, and provide the
representative with the gathered information.

Error Message SW-VLAN-4-VTP-INVALID-DATABASE-DATA: VLAN manager
received bad data of type [chars]: value [dec] from vtp database
function [chars]

Explanation This message indicates that invalid data was received by the
VLAN manager from the VTP configuration database routine. The first [chars]
is the data type, [dec] is the inappropriate value that was received, and the
second [chars] is the VTP database function.

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

Error Message SW-VLAN-4-VTP-INVALID-EVENT-DATA: VLAN manager
received bad data of type [chars] while being called to handle
a [chars] event

Explanation This message indicates that the VLAN manager received invalid
data from the VTP configuration software. The first [chars] is the data type,
and the second [chars] is the type of event.

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

Error Message `SW_VLAN-4-VTP_SEM_BUSY: VTP semaphore is unavailable for function [chars]. Semaphore locked by [chars]`

Explanation This message indicates that the VTP database is locked by another task and is not available.

Recommended Action Retry the operation later.

SW-VLAN-6

Error Message `SW-VLAN-6-OLD-CONFIG-FILE-READ: Old version [dec] VLAN configuration file detected and read OK. Version [dec] files will be written in the future`

Explanation This message indicates that the VLAN software detected an old version of the VLAN configuration file format. The software was able to interpret the file with no problems but will create files using the new format in the future. The first [dec] is the old version number, and the second [dec] is the new version number.

Recommended Action No action is required.

Error Message `SW_VLAN-6-VTP_MODE_CHANGE: VLAN manager changing device mode from [chars] to [chars].`

Explanation Some switch devices must automatically change VTP device modes upon receipt of a VLAN configuration database containing more than a set number of VLANs. This message indicates that this type of change has occurred, what the previous mode was, and what the current mode is.

Recommended Action No action is required.

Error Message `SW_VLAN-6-VTP_DOMAIN_NAME_CHG: VTP domain name changed to [chars].`

Explanation The VTP domain name was changed through configuration to the name specified in the message. A management domain is the naming scope of a VLAN name. Each VLAN has a name that is unique within the management domain.

Recommended Action No action is required.

Error Message `SW-VLAN-6-VTP_MODE_CHANGE: VLAN manager changing device mode from [chars] to [chars]`

Explanation This message indicates that some switch devices must automatically change VTP device modes upon receipt of a VLAN configuration database containing more than a set number of VLANs, depending on the device. This message indicates that such a spontaneous conversion has occurred, what the previous mode was, and what the current mode is. [chars] is the VTP device mode.

Recommended Action No action is required.

SYSTEM_CONTROLLER Messages

This section contains the system controller (SYSTEM_CONTROLLER) messages.

> **Note** In later 12.1 E releases, the SYSTEM_CONTROLLER facility name replaces the MISTRAL facility name. For example, MISTRAL-3-ERROR becomes SYSTEM_CONTROLLER-3-ERROR. Both messages indicate the same system condition.

> **Note** An "SP" between the facility and the severity level (for example, SYSTEM_CONTROLLER-SP-3-ERROR) indicates that the condition is coming from the Mistral ASIC on the supervisor engine. If nothing appears between the

facility and the severity level (for example, SYSTEM_CONTROLLER-3-ERROR), the condition is coming from the Mistral ASIC on the MSFC.

SYSTEM_CONTROLLER-3

Error Message `SYSTEM_CONTROLLER-3-COR_MEM_ERR: Correctable DRAM memory error. Count [dec], log [hex]`

Explanation A correctable error in the system DRAM has occurred; normal operation continues.

Recommended Action If additional DRAM errors do not occur, no action is needed. If the error recurs, copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message `SYSTEM_CONTROLLER-3-DUMP: System controller Global Registers Dump`

Explanation This message provides information about the internal state of the system controller.

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

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

Error Message SYSTEM_CONTROLLER-3-ERROR: Error condition detected: [chars]

Explanation   The most common errors from the Mistral ASIC on the MSFC are TM_DATA_PARITY_ERROR, SYSDRAM_PARITY_ERROR, SYSAD_PARITY_ERROR, and TM_NPP_PARITY_ERROR. Possible causes of these parity errors are random static discharge or other external factors.

Recommended Action   If the error message is only seen once (or rarely), the recommendation is to monitor the switch syslog to confirm the error message was an isolated incident. If these error messages are reoccurring, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, 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 `SYSTEM_CONTROLLER-3-FATAL: An unrecoverable error has been detected. The system is being reset.`

Explanation The system controller has detected an unrecoverable error condition.

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

Error Message `SYSTEM_CONTROLLER-3-INFO1: [chars]=[hex]`

Explanation This message provides information about the internal state of the system controller.

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

Error Message `SYSTEM_CONTROLLER-3-INFO2: [chars]=[hex]([hex])`

Explanation This message provides information about the internal state of the system controller.

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

Error Message `SYSTEM_CONTROLLER-3-INVALID_SEND : Invalid send operation (packet on [chars])`

Explanation An internal error caused an illegal call to a device driver.

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

Error Message `SYSTEM_CONTROLLER-3-INV_TX_PACKET : [chars]: packet neither on IBL nor on OBL`

Explanation The packet to be transmitted is neither on the Input Buffer Logic, including the memory for the incoming packet cache, nor on the Output Buffer Logic, including the output buffer memory.

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

Error Message `SYSTEM_CONTROLLER-3-MORE_COR_ERR: [chars] [dec] correctable DRAM memory errors in previous hour`

Explanation Multiple correctable errors have occurred in the system DRAM.

Recommended Action During the next convenient maintenance window, reboot the system. If the error persists after the reboot, 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 through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to

your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

Error Message SYSTEM_CONTROLLER-3-NOBUF : Dropping the packet.

Explanation The Mistral ASIC receive buffer pool has been exhausted. No further input packets can be processed until some buffers are returned to the pool.

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

Error Message SYSTEM_CONTROLLER-3-RESET: Resetting system controller due to [chars]

Explanation The system controller is being reset because of internal errors.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact

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

Error Message SYSTEM_CONTROLLER-SP-3-ERROR: Error condition detected: [chars]

Explanation The most common errors from the Mistral ASIC on the supervisor engine are TM_DATA_PARITY_ERROR and TM_NPP_PARITY_ERROR. Possible causes of these parity errors are random static discharge or other external factors.

Recommended Action If the error message is only seen once (or rarely), the recommendation is to monitor the switch syslog to confirm the error message was an isolated incident. If these error messages are reoccurring, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, 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.

SYSTEM_CONTROLLER-6

Error Message MISTRAL-6-BAD_IDB : Bad idb for vector [chars]: [chars] vlan [dec] total [dec]

Explanation An invalid IDB has been returned from a "get" operation.

Recommended Action Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the issue using the tools and utilities provided at http://www.cisco.com/tac. With some messages, these tools and utilities will supply clarifying information. Search for resolved software issues using the Bug Toolkit at http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. If you

still require assistance, open a case with the Technical Assistance Center through the Internet at http://www.cisco.com/cgi-bin/front.x/case_tools/caseOpen.pl, or contact your Cisco technical support representative and provide the representative with the information you have gathered. Attach the following information to your case in nonzipped, plain-text (.txt) format: the output of the **show logging** and **show tech-support** commands and your pertinent troubleshooting logs.

UFAST_MCAST_SW Messages

This section contains the UplinkFast multicast (UFAST_MCAST_SW) messages.

UFAST_MCAST_SW-3

Error Message `UFAST_MCAST_SW-3-PROC_START_ERROR: No process available for transmitting UplinkFast packets.`

Explanation This message indicates that UplinkFast packets will not be transmitted because the process could not be created to transmit them.

Recommended Action UplinkFast will not work unless you reload. If this problem persists even after you reload, copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** command to gather data that may provide information about the error. If you cannot determine the type of error from the error message text or from the **show tech-support** output, contact your Cisco technical support representative, and provide the representative with the gathered information.

UFAST_MCAST_SW-4

Error Message `UFAST_MCAST_SW-4-MEM_NOT_AVAILABLE: No memory is available for transmitting UplinkFast packets on Vlan [dec].`

Explanation This message indicates that UplinkFast packets will not be transmitted on the specified VLAN because of a lack of available memory.

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

UNICAST_FLOOD Messages

This section contains unicast flooding (UNICAST_FLOOD) messages.

UNICAST_FLOOD-4

Error Message `UNICAST_FLOOD-4-DETECTED: Host [enet] on vlan [dec] is flooding to an unknown unicast destination at a rate greater than/equal to [dec] Kfps`

Explanation This message indicates that a host is alternating between ports.

Recommended Action Verify the reason why the host is sending traffic to an unknown unicast destination.

Error Message `UNICAST_FLOOD-4-FILTER_TABLE_FULL: The filter table is full`

Explanation This message indicates that the system has detected too many floods to unknown destinations.

Recommended Action Investigate the reason why so many hosts in the network are sending traffic to unknown unicast destinations.

UNICAST_FLOOD-5

Error Message `UNICAST_FLOOD-5-FILTER_INSTALLED: Filter for host [enet] has been installed. It will be removed in [dec] minute(s)`

Explanation This message indicates that a host was flooding unicast packets to an unknown destination. A filter has been installed.

Recommended Action No action is required.

VELA Messages

This section contains the Catalyst 6500/Cisco 7600 bus interface (VELA) messages.

VELA-4

Error Message `VELA-4-ERR_INTRPT: Interrupt [chars] occurring in Vela ASIC`

Explanation This message indicates that an error in the indicated ASIC occurred. [chars] is the error description.

Recommended Action Enter the **show earl status** command on the consoles of the switch supervisor engine and any DFC-enabled modules. Contact your Cisco technical representative, and provide the representative with the gathered information.

VSEC Messages

This section contains the VACL logging (VSEC) messages.

VSEC-6

Error Message `VSEC-6-VLANACCESSLOGP: vlan [dec] (port [dec]/[dec]) denied [chars] [int] ([dec]) -> [int] ([dec]), [dec] packet(s)`

Explanation   This message indicates that a TCP or UDP packet from the identified VLAN and physical port that matches the VACL log criteria was detected. The first [dec] is the VLAN number, the second [dec]/[dec] is the module/port number, the third [dec] is the source Layer 4 port number, the fourth [dec] is the destination Layer 4 port number, and the fifth [dec] is the number of packets received during the last logging interval. [chars] is either TCP or UDP. The first [int] is the source IP address, and the second [int] is the destination IP address.

Recommended Action   No action is required. This message is provided for information only.

Error Message `VSEC-6-VLANACCESSLOGRP: vlan [dec] (port [dec]/[dec]) denied igmp [int] -> [int] ([dec]), [dec] packet(s)`

Explanation   This message indicates that an IGMP packet from the identified VLAN and physical port that matches the VACL log criteria was detected. The first [dec] is the VLAN number, the second [dec]/[dec] is the module/port number, the third [dec] is the IGMP packet type, and the fourth [dec] is the number of packets received during the last logging interval. The first [int] is the source IP address, and the second [int] is the destination IP address.

Recommended Action   No action is required. This message is provided for information only.

Error Message VSEC-6-VLANACCESSLOGDP: vlan [dec] (port
[dec]/[dec]) denied icmp [int] -> [int] ([dec]/[dec]), [dec]
packet(s)

Explanation This message indicates that an ICMP packet from the identified
VLAN and physical port that matches the VACL log criteria was detected. The
first [dec] is the VLAN number, the second [dec]/[dec] is the module/port
number, the third [dec]/[dec] is the ICMP packet type and the ICMP code, and
the fourth [dec] is the number of packets received during the last logging
interval. The first [int] is the source IP address, and the second [int] is the
destination IP address.

Recommended Action No action is required. This message is provided for
information only.

Error Message VSEC-6-VLANACCESSLOGNP: vlan [dec] (port
[dec]/[dec]) denied ip protocol = [dec] [int] -> [int], [dec]
packet(s)

Explanation This message indicates that an IP packet from the identified
VLAN and physical port that matches the VACL log criteria was detected. The
first [dec] is the VLAN number, the second [dec]/[dec] is the module/port
number, the third [dec] is the Layer 4 protocol type, and the fourth [dec] is the
number of packets received during the last logging interval. The first [int] is
the source IP address, and the second [int] is the destination IP address.

Recommended Action No action is required. This message is provided for
information only.