



## **Catalyst 4500 Series Switch Cisco IOS System Message Guide**

Cisco IOS Release 12.2(20)EW

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Contents



## Preface

This preface describes who should read the *Catalyst 4500 Series Switch Cisco IOS System Message Guide*, how it is organized, and its document conventions.

## Audience

This publication is designed for installers and users with a working knowledge of the Catalyst 4500 series switch system software. Users of this publication might also include network administrators and other individuals responsible for setting up and maintaining these switches.

## Organization

This publication is organized as follows:

Chapter	Title	Description
1	System Message Format	Describes how to read a system or error message.
2	Messages and Recovery Procedures	Contains explanations of messages and recommended actions.

## **Related Documentation**

Although their Release Notes are unique, the 4 platforms (Catalyst 4500, Catalyst 4900, Catalyst ME 4900, and Catalyst 4900M) use the same *Software Configuration Guide*, *Command Reference Guide*, and *System Message Guide*. Refer to the following home pages for additional information:

• Catalyst 4500 Series Switch Documentation Home

http://www.cisco.com/go/cat4500/docs

• Catalyst 4900 Series Switch Documentation Home

http://www.cisco.com/go/cat4900/docs

• Cisco ME 4900 Series Ethernet Switches Documentation Home

http://www.cisco.com/en/US/products/ps7009/tsd\_products\_support\_series\_home.html

#### **Hardware Documents**

Installation guides and notes including specifications and relevant safety information are available at the following URLs:

• Catalyst 4500 Series Switches Installation Guide

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/installation/guide/78-14409 -08/4500inst.html

Catalyst 4500 E-series Switches Installation Guide

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/catalyst4500e/installation/g uide/Eseries.html

• For information about individual switching modules and supervisors, refer to the *Catalyst 4500* Series Module Installation Guide at:

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/module/guide/mod\_inst.ht ml

• Regulatory Compliance and Safety Information for the Catalyst 4500 Series Switches

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/regulatory/compliance/78\_13233.html

- Installation notes for specific supervisor engines or for accessory hardware are available at: http://www.cisco.com/en/US/products/hw/switches/ps4324/prod\_installation\_guides\_list.html
- Catalyst 4900 and 4900M hardware installation information is available at: http://www.cisco.com/en/US/products/ps6021/prod\_installation\_guides\_list.html
- Cisco ME 4900 Series Ethernet Switches installation information is available at: http://www.cisco.com/en/US/products/ps7009/prod\_installation\_guides\_list.html

#### **Software Documentation**

Software release notes, configuration guides, command references, and system message guides are available at the following URLs:

• Catalyst 4500 release notes are available at:

http://www.cisco.com/en/US/products/hw/switches/ps4324/prod\_release\_notes\_list.html

• Catalyst 4900 release notes are available at:

http://www.cisco.com/en/US/products/ps6021/prod\_release\_notes\_list.html

• Cisco ME4900 4900 Series Ethernet Switch release notes are available at:

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/release/note/OL\_11511.html

Software documents for the Catalyst 4500 Classic, Catalyst 4500 E-Series, Catalyst 4900, and Cisco ME 4900 Series Ethernet Switches are available at the following URLs:

• Catalyst 4500 Series Software Configuration Guide

 $http://www.cisco.com/en/US/products/hw/switches/ps4324/products\_installation\_and\_configuration\_guides\_list.html$ 

• Catalyst 4500 Series Software Command Reference

http://www.cisco.com/en/US/products/hw/switches/ps4324/prod\_command\_reference\_list.html

• Catalyst 4500 Series Software System Message Guide

http://www.cisco.com/en/US/products/hw/switches/ps4324/products\_system\_message\_guides\_list .html

#### **Cisco IOS Documentation**

Platform-independent Cisco IOS documentation may also apply to the Catalyst 4500 and 4900 switches. These documents are available at the following URLs:

• Cisco IOS configuration guides, Release 12.x

http://www.cisco.com/en/US/products/ps6350/products\_installation\_and\_configuration\_guides\_lis t.html

• Cisco IOS command references, Release 12.x

http://www.cisco.com/en/US/products/ps6350/prod\_command\_reference\_list.html

You can also use the Command Lookup Tool at:

http://tools.cisco.com/Support/CLILookup/cltSearchAction.do

• Cisco IOS system messages, version 12.x

http://www.cisco.com/en/US/products/ps6350/products\_system\_message\_guides\_list.html

You can also use the Error Message Decoder tool at:

http://www.cisco.com/pcgi-bin/Support/Errordecoder/index.cgi

 For information about MIBs, refer to: http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

## **Conventions**

Screen examples use the following conventions:

Convention	Description
boldface font	Commands, command options, and keywords are in <b>boldface</b> .
<i>italic</i> font	Command arguments for which you supply values are in <i>italic</i> .
[]	Command elements in square brackets are optional.
{ x   y   z }	Alternative command keywords are grouped in braces and separated by vertical bars.
[ x   y   z ]	Optional alternative command keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the command string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in screen font.

Convention	Description
<b>boldface screen</b> font	Information you must enter is in <b>boldface screen</b> font.
<i>italic screen</i> font	Arguments for which you supply values are in <i>italic screen</i> font.
	This pointer highlights an important line of text in an example.
Ctrl-D	This key combination means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords, are in angle brackets.

Notes use the following conventions:



Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

## **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.





# **System Message Format**

This chapter describes the Cisco IOS system message structure and error message traceback report. This chapter contains the following sections:

- Message Structure, page 1-1
- Error Message Traceback Reports, page 1-4

## **Message Structure**

The message includes the following information:

- Facility code
- Severity level
- Mnemonic code
- Description field

System error messages are structured as follows:

FACILITY-SEVERITY-MNEMONIC: Message-text

## **Facility Code**

The facility code consists of at least two uppercase letters that indicate the facility to which the message refers. A facility can be a hardware device, a protocol, or a module of the system software. Table 1-1 lists the system facility codes.

Code	Facility
ACL	Access control list
BUFFERMANAGER	Memory buffer management
CHASSIS	Chassis
COMMONHWACLMAN	Common hardware ACL management
DAIMAN	Dynamic ARP inspection management
DHCP_SNOOPING	DHCP snooping messages

Table 1-1 Facility Codes

Code	Facility
DOT1X	802.1X-related port-based authentication
DTP	Dynamic Trunking Protocol
EBM	Ethernet bridge management
EC	EtherChannel
GBICMAN	Gigabit Interface Converter (GBIC) manager
HW	Hardware
HWACLMAN	Hardware ACL management
HWL2MAN	Layer 2 hardware management
HWNETFLOWMAN	NetFlow management
HWPORTMAN	Hardware port management
IDBMAN	Interface descriptor block management
ILCPROTOCOLERROR	ILC protocol
IOSACLMAN	Cisco IOS ACL management
IOSDHCPSNOOPMAN	Cisco IOS DHCP snoop management
IOSIGMPSNOOPMAN	Cisco IOS IGMP snoop management
IOSINTF	Catalyst 4500 IOS interface operation
IOSIPROUTEMAN	Cisco IOS IP route management
IOSL2MAN	Cisco IOS Layer 2 management
IOSMODPORTMAN	Cisco IOS port management
IOSSYS	Catalyst 4500 IOS system
IOSSYSMAN	Catalyst 4500 IOS system management
IPROUTEMAN	Catalyst 4500 IOS IP routing management
L3HWFORWARDING	Layer 3 hardware forwarding
LINECARDMGMTPROTOCOL	Line Card Management Protocol
PKTPROCESSING	Packet processing
PM	Port manager
PORTFANOUTASIC4X1000MAN	Port fan-out ASIC 4x1000 management
PORTFANOUTASIC8X1000HW	Port fan-out ASIC 8x1000 hardware
PORTFANOUTASIC8X100MAN	Port fan-out ASIC 8x100 management
QOS	Quality of Service
REDUNDANCY	Redundant supervisor
SERVICECARDMAN	Service card management
SPANTREE	Spanning Tree Protocol
SPANTREE_VLAN_SW	Spanning Tree VLAN switch management
STORM_CONTROL	Broadcast storm control
STORE	Memory

 Table 1-1
 Facility Codes (continued)

Code	Facility
SUPERVISOR	Supervisor
SWITCH-QOS-TB	Switch QoS management
SW_DAI	Dynamic ARP inspection
SW-VLAN	Switch VLAN management
SWITCHINGENGINEMAN	Switching engine management
SWITCHMANAGER	Switch management
SWNETFLOWMAN	Software NetFlow management
SYSMAN	System management
UFAST	UplinkFast
VQPCLIENT	VLAN query protocol client
WATCHDOG	Watchdog timer

## **SEVERITY Level**

The severity level is a single-digit code from 0 to 7 that reflects the severity of the condition. The lower the number, the more serious the situation. Table 1-2 lists the message severity levels.

Severity Level	Description
0	Emergency—System is unusable
1	Alert—Immediate action required
2	Critical—Critical condition
3	Error—Error condition
4	Warning—Warning condition
5	Notification—Normal but significant condition
6	Informational—Informational message only
7	Debugging—Message that appears during debugging only

 Table 1-2
 Message Severity Levels

#### **MNEMONIC** Code

The MNEMONIC code uniquely identifies the error message. All mnemonics are all uppercase character strings.

#### **Message Text**

Message text is a text string that describes the error condition. The text string may contain detailed information about the event, including terminal port numbers, network addresses, or addresses that correspond to locations in the system memory address space. Because variable fields change from message to message, they are represented here by short strings that are enclosed in square brackets ([]). A decimal number, for example, is represented as [*dec*]. Table 1-3 lists the variable fields in messages.

Table 1-3	Representation of Variable Fields in Messages
-----------	---

Representation	Type of Information	
[dec]	Decimal	
[chars] or [char]	Character string	
[hex]	Hexadecimal integer	
[num]	Number	

#### Sample System Error Messages

The following is an example of a system error message:

Error Message LINK-2-BADVCALL: Interface [chars], undefined entry point

Some error messages also indicate the card and slot reporting the error. These error messages are structured as follows:

CARD-SEVERITY-MSG:SLOT FACILITY-SEVERITY-MNEMONIC: Message-text

- *CARD* is a code that describes the type of card reporting the error.
- *MSG* is a mnemonic indicating that this is a message. It is always shown as *MSG*.
- *SLOT* indicates the slot number of the card reporting the error. It is shown as *SLOT* followed by a number (for example, SLOT5).

## **Error Message Traceback Reports**

Some messages describe internal errors and contain traceback information, which provides the stack trace of the function calls that resulted in the message. This trace helps the engineers track down the problem that is indicated in the message. You should include this information when you report a problem to your technical support representative.

The traceback report includes the following sample information:

-Process= "Exec", level= 0, pid= 17

-Traceback= 1A82 1AB4 6378 A072 1054 1860

The numbers that are printed above indicate which lines of code that caused the message to occur.



# снарте 2

# **Messages and Recovery Procedures**

This chapter lists and describes the Cisco IOS system error messages for the Catalyst 4500 series switch 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, if available.

The system sends these error messages to the console (and, optionally, to a logging server on another system). Not all system error messages indicate problems with your system; some messages are purely informational, while other messages help diagnose problems with communication lines, internal hardware, or the system software.

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.



Writing to a module's serial EEPROM is not standard practice; when the module comes from the factory, the serial EEPROM is set to the correct values. We do not recommend that you change the factory defaults, because this action can cause the module to malfunction.

If the explanation that is provided for a given command does not sufficiently explain your problem and no recommended action is given, copy the error message exactly as it appears on the console or in the system log.

You should research and attempt to resolve the error using the Output Interpreter at this URL: https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl.

You can also enter the **show tech-support** command to gather additional information about the error. If the error message text, information from the Output Interpreter, or output from the **show tech-support** command do not help you solve the problem, contact your technical support representative and provide the representative with the information that you have gathered. For detailed information on how to contact your technical support representative, see the Obtaining Documentation and Submitting a Service Request, page viii.

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## **ACL Messages**

This section contains the access control list (ACL) message.

Error Message C4K\_ACL-4-OUTOFMEMORY:Out of Memory while allocating [char]

**Explanation** This message indicates that the software has failed to allocate memory for the given object while processing ACLs. The configuration might have exceeded its maximum limit. If so, the feature using this ACL will not work.

**Recommended Action** If it is mandatory that the feature work normally, remove other unwanted features that require ACLs and retry the operation. If there are no features using ACLs that can be removed, contact your technical support representative.

## **BUFFERMANAGER** Messages

This section contains the memory buffer management (BUFFERMANAGER) message.

```
Error Message C4K_BUFFERMANAGER-3-OUTOFVBUFS: Have run out of vbufs (internal buffers)
```

**Explanation** This message indicates that the switch has run out of the internal memory buffers that are used for various tasks. This error is unusual because the internal buffers are used for only a short time, released, and then available for reuse. Typically, this condition is transitory.

**Recommended Action** If the message reappears, reboot the switch.

## **CHASSIS Messages**

This section contains the chassis (CHASSIS) messages.

## **CHASSIS-2**

**Error Message** C4K\_CHASSIS-2-INLINEPOWEROFF: Inline power to the switch has been turned off

**Explanation** This message indicates that the software has detected that the pass-through current is disabled. This condition will cause all phones drawing inline power from the switch to be powered off.

**Recommended Action** If you want inline power, verify that the inline power switch on the switch is turned on.

**Error Message** C4K\_CHASSIS-2-INSUFFICIENTFANSDETECTED: Too few working fans, the chassis will overheat. If not resolved, in 5 minutes all line cards will be placed into Reset-Mode

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

**Recommended Action** Replace the system fan tray or broken fans.

**Error Message** C4K\_CHASSIS-2-INSUFFICIENTFANSSHUTDOWN:Resetting linecards due to too few working fans

**Explanation** This message indicates that one or more required fans in the fan tray or the power supplies has failed. The modules have been reset to reduce heat generation.

Recommended Action Replace the broken fans as soon as possible.

**Error Message** C4K\_CHASSIS-2-INSUFFICIENTPOWERDETECTED:Insufficient power available for the current chassis configuration

**Explanation** This message indicates that the current chassis configuration exceeds power availability. If this condition persists, the modules will reset.

**Recommended Action** If the power availability problem persists and impacts performance, replace the power supply with a power supply that has a larger capacity.

**Error Message** C4K\_CHASSIS-2-INSUFFICIENTPOWERSHUTDOWN:Holding module in slot [dec] in reset, due to insufficient power

**Explanation** This message indicates that the switch has been using more power than is available for the allowed time interval. The modules were reset to reduce power consumption.

**Recommended Action** If the power availability problem persists and impacts performance, replace the power supply with a power supply that has a larger capacity.

 $\label{eq:chassis} \ensuremath{\texttt{Error}}\xspace{\textstyle} Message C4K\_CHASSIS-2-OVERHEATINGSHUTDOWN: Resetting linecards due to critical temperature$ 

**Explanation** This message indicates that the maximum allowable operating temperature for the switch has been exceeded. The modules have been reset to reduce heat generation.

**Recommended Action** Verify that the switch is in the proper operating environment and that the fans are functioning properly.

## CHASSIS-3

**Error Message** C4K\_CHASSIS-3-BADGBIC:Port [char]: Gbic's seeprom is bad, try reinserting: vendor: [char], p/n: [char], s/n: [char]

**Explanation** This message indicates that a Gigabit Interface Converter (GBIC) with a serial EEPROM has been detected in the specified port in the message. Although a reading of the serial EEPROM's contents has succeeded, the contents are not valid (possibly due to a bad checksum).

The message lists the vendor, part number, and serial number from the GBIC's serial EEPROM. This error occurs if the GBIC is not seated correctly.

**Recommended Action** Remove and reinsert the GBIC. If this message appears repeatedly, insert the GBIC in another port to verify that it is the GBIC and not the port that is bad. If the GBIC fails in a different port, return the GBIC to your technical support representative for reprogramming. If the GBIC works in the other ports but not in the original port, the original port is bad, and you need to return the module to your technical support representative for repair. To test the port further, insert a different GBIC into the port. If the other GBIC fails in that port, the port is bad.

**Error Message** C4K\_CHASSIS-3-BADMACRANGEINSPROM:Module [dec]'s serial eeprom contains [dec] mac addresses, but needs [dec]

**Explanation** This message indicates that the contents of the module's serial EEPROM is incorrect, and the range is smaller than the number of front-panel ports for the module. The module's serial EEPROM contains a range of MAC addresses for this module, and the range should contain the same number of MAC addresses as the number of front-panel ports because each MAC address corresponds to a front-panel port.

**Recommended Action** Contact your technical support representative; you will likely have to return the module to Cisco to reprogram the serial EEPROM.

**Error Message** C4K\_CHASSIS-3-DAUGHTERCARDSEEPROMREADFAILED:Failed to read the serial eeprom on module [dec], daughter card [dec]

**Explanation** This message indicates that the serial EEPROM for a daughter card on the specified module is unreadable. Because reading this EEPROM is the only way to determine the type of card, the card remains offline, as if it was not installed on the module.

**Recommended Action** Remove the module, and then remove and reseat the daughter card in the module. If this message reappears after you reinsert the module into the switch, the serial EEPROM might be bad. Contact your technical support representative; you will likely have to return the module to Cisco to reprogram or replace the serial EEPROM.

**Error Message** C4K\_CHASSIS-3-GBICSEEPROMREADFAILED:Failed to read gbic serial eeprom on port [char], try reinserting

**Explanation** This message indicates that a Gigabit Interface Converter (GBIC) with a serial EEPROM has been detected in the specified port, but a reading of the contents of the EEPROM has failed. The EEPROM must be read to determine the GBIC type. The read might fail if the GBIC is not seated correctly.

**Recommended Action** Remove and reinsert the GBIC. If this message reappears, insert the GBIC in another port to verify that it is the GBIC and not the port that is bad. If the GBIC fails in the other port, return the GBIC to your technical support representative for reprogramming. If the GBIC works in the other ports but not in the original port, the original port is bad, and you need to return the module to your technical support representative for repair. To test the port further, insert a different GBIC into the port. If the other GBIC also fails in that port, the port is bad.

**Error Message** C4K\_CHASSIS-3-INSUFFICIENTPOWER:Insufficient power to bring up module in slot [dec]

**Explanation** This message indicates that the module type has been identified, but the switch does not have sufficient power to bring the module up. The switch holds the module in reset mode to consume less power.

**Recommended Action** Add or replace a power supply to expand the power capacity of the chassis.

**Error Message** C4K\_CHASSIS-3-INSUFFICIENTPOWERSUPPLIESDETECTED: Insufficient power supplies present for specified configuration

**Explanation** This message indicates that the system software has detected that the current chassis configuration has fewer power supplies than required for the existing configuration.

**Recommended Action** Add a power supply to meet the needs of the current chassis configuration.

**Error Message** C4K\_CHASSIS-3-LINECARDNOTVALIDINSLOT: Module (Field Replaceable Unit minor type [dec]) is not supported in slot [dec]

**Explanation** This message indicates that the line card type has been identified, but it cannot be supported in this slot due to the insufficient number of backplane ports in this slot.

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

**Error Message** C4K\_CHASSIS-3-LINECARDSEEPROMREADFAILED:Failed to read module [dec]'s serial eeprom, try reinserting module

**Explanation** This message indicates that the switch cannot read the serial EEPROM of the specified module, and the module will not boot because the EEPROM failed to identify the module type. The read might fail if the module is not seated correctly in the slot.

**Recommended Action** Remove and reinsert the module. If this message reappears, reboot the switch. If the switch is still unable to read the EEPROM, contact your technical support representative. You will likely have to return the module to Cisco to reprogram or replace the serial EEPROM.

**Error Message** C4K\_CHASSIS-3-LINECARDSEEPROMWRITEFAILED:Failed to write module [dec]'s serial eeprom

**Explanation** This message indicates that writing to the serial EEPROM has failed. The write might fail if the module is not seated correctly in the slot.

**Recommended Action** Remove and reinsert the module. If this message reappears, reboot the switch. If the switch is still unable to write to the EEPROM, contact your technical support representative. You will likely have to return the module to Cisco to reprogram or replace the serial EEPROM.

**Error Message** C4K\_CHASSIS-3-MIXINPOWERDETECTED: Power supplies in the chassis are of different types (AC/DC) or wattage

**Explanation** This message indicates that the software has detected different kinds of power supplies in the chassis. In a Catalyst 4006 chassis, the power values default to the wattage of the weakest power supply. If you mix power supplies in a Catalyst 4500 series chassis, the switch will use the power supply in power supply bay 1 (PS1) and ignore the power supply in power supply bay 2 (PS2). We do not recommend mixing power supplies of different wattages.

**Recommended Action** Verify that both power supplies are the same kind and wattage.

**Error Message** C4K\_CHASSIS-3-MODULENOTSUPPORTHALF:Module [dec] does not support 10 Mb or 100Mb Half duplex operation. Please have your card upgraded if you need half duplex operation.

**Explanation** This message indicates that some preproduction boards have interfaces that do not work in half-duplex mode.

**Recommended Action** Contact your technical support representative; you will likely have to return the module to Cisco.

**Error Message** C4K\_CHASSIS-3-ONLYLXSFPSALLOWED:Port [char] has a non-LX SFP, which is not supported

**Explanation** This message indicates that the WS-X4448-GB-LX module supports only LX SFP. It marks any other type of Small Form-factor Pluggable (SFP) as faulty.

**Recommended Action** Replace the SFP with an LX SFP that Cisco supports.

**Error Message** C4K\_CHASSIS-3-OUTOFMEMORY:Ran out of memory - cannot allocate internal buffers

**Explanation** This message indicates that the switch has run out of memory in the temporary buffers.

**Recommended Action** If this message reappears, reboot the switch.

**Error Message** C4K\_CHASSIS-3-SEEPROMREADFAILEDAFTERWRITE:Error reading back module [dec]s serial EEPROM data after write

**Explanation** This message indicates that after writing a module's serial EEPROM in response to a CLI request, the switch tries to read it back in, to ensure that the correct values were written out. What the switch reads back in differs from what the switch wrote out. The read or write might fail if the module is not seated correctly in the slot.

**Recommended Action** Remove and reinsert the module. If that does not work, reboot the switch. If the read or write still fails, contact your technical support representative. You will likely have to return the module to Cisco to reprogram or replace the serial EEPROM.



Writing the module's serial EEPROM is not standard practice; when the module comes from the factory, its serial EEPROM is set to the correct values. We do not recommend that you change the factory defaults, because this action could cause the module to malfunction.

**Error Message** C4K\_CHASSIS-3-SFPCRCINTEGRITYCHECKFAILED:SFP integrity check on port [char] failed: bad crc

**Explanation** This message indicates that only the Cisco-qualified Small Form-factor Pluggables (SFPs) are supported. Other SFPs place the associated port in a faulty status.

The checksum of the SFP SEEPROM is not valid, indicating a bad or non-Cisco SFP.

**Recommended Action** Replace the SFP with an SFP that Cisco supports.

**Error Message** C4K\_CHASSIS-3-SFPINTEGRITYCHECKFAILED:SFP integrity check on port [char] failed: bad key

**Explanation** This message indicates that only the Cisco-qualified Small Form-factor Pluggables (SFPs) are supported. Other SFPs place the associated port in a faulty status.

**Recommended Action** Replace the SFP with an SFP that Cisco supports.

**Error Message** C4K\_CHASSIS-3-SFPSERIALINTEGRITYCHECKFAILED:SFPs on ports [char] and [char] have duplicate serial numbers

**Explanation** This message indicates that only the Cisco-qualified Small Form-factor Pluggables (SFPs) are supported. Other SFPs place the associated port in the faulty status.

All SFPs must have a unique serial number. This message indicates a cloned SFP SEEPROM.

**Recommended Action** Replace the SFP with an SFP that Cisco supports.

**Error Message** C4K\_CHASSIS-3-STUBPHYMISMATCH: Stub type mismatch: stub [dec]/[dec] is type [dec], should be type [dec]

**Explanation** This message indicates that the stubs have nonmatching physical types for the specified module.

**Recommended Action** Verify that the physical types for every stub on the module match.

**Error Message** C4K\_CHASSIS-3-TEMPERATURESENSORREADFAILED: Failed to read the supervisor temperature sensor

**Explanation** The temperature sensor on the supervisor engine cannot be read. If the chassis becomes overheated, this condition will not be reported.

**Recommended Action** If this message appears only once, this error could be transient and no action is required. If this message appears repeatedly (once every 30 minutes), inspect and, if necessary, replace the temperature sensor on the supervisor engine.

**Error Message** C4K\_CHASSIS-3-UNKNOWNLINECARD:Unknown module (Field Replaceable Unit minor type [dec]) in slot [dec]

**Explanation** This message indicates that the module's serial EEPROM has been read, and that the FRU minor type is unknown. Your current software image does not recognize this kind of module. A software upgrade is necessary.

**Recommended Action** Upgrade the software to a version that is compatible with the module.

#### **CHASSIS-4**

**Error Message** C4K\_CHASSIS-4-CANTWRITESUPERVISORSPROM:Writing the supervisor's SPROM is not supported

**Explanation** This message indicates that rewriting the supervisor engine's serial programmable read-only memory (SPROM) is not allowed, because if it is done incorrectly, it could make the system unusable.

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

**Error Message** C4K\_CHASSIS-4-INLINEPOWERRESTORED:Resuming normal phone operation since inline power has been restored

**Explanation** This message indicates that the inline power supply to the switch has been restored, and normal phone operation will resume.

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

**Error Message** C4K\_CHASSIS-4-OVERHEATINGOVER:Resuming normal operation after return to acceptable temperatures.

**Explanation** This message indicates that the unit's modules have been reset to reduce heat generation, because the unit reached a critical temperature. The switch has returned to an acceptable temperature range, and normal operation has resumed.

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

**Error Message** C4K\_CHASSIS-4-SUFFICIENTFANSRESTORED:Resuming normal operation after restoration of adequate fan cooling

**Explanation** This message indicates that the unit's modules have been reset to reduce heat generation, because there were not enough working fans. Adequate fan cooling has been restored, and normal operation is resuming.

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

**Error Message** C4K\_CHASSIS-4-SUFFICIENTMODULEPOWERRESTORED:Module in slot [dec] resuming normal operation after restoration of adequate power

**Explanation** This message indicates that the module was in reset mode to conserve power because the system had inadequate power available. Adequate power has been restored, and normal operation is resuming.

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

**Error Message** C4K\_CHASSIS-4-SUFFICIENTPOWERRESTORED:Resuming normal operation after restoration of adequate power

**Explanation** This message indicates that the modules have been reset to conserve power, because the available power was exceeded. Adequate power has been restored, and normal operation is resuming.

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

#### **CHASSIS-7**

**Error Message** C4K\_CHASSIS-7-GBICINSERTED:Port [char]: New gbic inserted: vendor: [char], p/n: [char], s/n: [char]

**Explanation** This message indicates that a Gigabit Interface Converter (GBIC) with a serial EEPROM has been detected in the specified interface. The message lists the vendor, part number, and serial number from the GBIC's serial EEPROM.

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

## **COMMONHWACLMAN Messages**

This section contains the common hardware ACL management (COMMONHWACLMAN) messages.

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#### **COMMONHWACLMAN-4**

**Error Message** C4K\_COMMONHWACLMAN-4-FAILEDTOSWITCHPORTTAGS:Failed to switch port tags, old tag: [object-info] new tag: [object-info] . Software paths: [dec] Hardware paths: [dec]

**Explanation** This message indicates that the software has failed to switch tags. This error could be transient. The ACL that you were trying to configure will not become active.

**Recommended Action** Detaching and reattaching the ACLs (and policies) might solve the problem.

**Error Message** C4K\_COMMONHWACLMAN-4-FAILEDTOSWITCHVLANTAGS:Failed to switch vlan tags, old tag: [object-info] new tag: [object-info] . Software paths: [dec] Hardware paths: [dec]

**Explanation** This message indicates that the software has failed to switch tags. This error could be transient. The ACL that you were trying to configure will not become active.

Recommended Action Detaching and reattaching the ACLs (and policies) might solve the problem.

Error Message C4K\_COMMONHWACLMAN-4-OUTOFPATHS: Could not allocate path for ( [object-info] )

**Explanation** This message indicates that there are too many ports or VLANs that are using ACLs. The ACLs might not work correctly.

**Recommended Action** Remove unnecessary ACLs from some interfaces.

Error Message C4K\_COMMONHWACLMAN-4-OUTOFTAGS:No more free tags available for path
( [object-info] )

**Explanation** This message indicates that all the tags are being used or are about to be used. Because you have configured either too many features using ACLs or features using ACLs that are attached to ports or VLANs, the hardware forwards the packets to CPU for ACL processing.

Recommended Action Remove unnecessary ACLs from some interfaces.

**Error Message** C4K\_COMMONHWACLMAN-4-PERMITALL: Out of resources for Qos, permit all for [object-info]

**Explanation** This message indicates that the switch is running out of hardware CAM resources. All packets are permitted, and QoS is applied.

**Recommended Action** Remove unnecessary ACLs from some interfaces.

**Error Message** C4K\_COMMONHWACLMAN-4-PORTBASEDACLSDISABLED: Output Port Acl [char] has been disabled on port [char]

**Explanation** This message indicates that the output port ACL is disabled on the interface because there are not enough hardware resources or there are ACEs that require CPU processing of packets.

The port ACL is disabled and displays a warning message because the software cannot handle the output port ACLs.

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

**Error Message** C4K\_COMMONHWACLMAN-4-PUNTTOSOFTWARE:Out of resources, punt packets to sw for [object-info]

**Explanation** This message indicates that the hardware content-addressable memory (CAM) resources have been depleted. The hardware forwards the packets to the software for ACL processing.

**Recommended Action** Remove unnecessary ACLs from some interfaces.

#### **COMMONHWACLMAN-6**

**Error Message** C4K\_COMMONHWACLMAN-6-CHANGEDTAGSHARINGALGO: Now using [object-info] algorithm

**Explanation** This message indicates that the algorithm that is used for tag sharing has been changed.

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

## COMMONSTUBMAN Messages

This section contains the Catalyst 4500 series ASIC-specific messages.

Error Message C4K\_COMMONSTUBMAN-4-DIAGSFAILED: [char] failed diagnostics

**Explanation** This message indicates that an ASIC in slot [*char*] failed diagnostics.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_COMMONSTUBMAN-4-FAILEDTOSENDLOOPBACKTRIES: [char] port [dec] failed to send packet in [dec] tries

**Explanation** This message indicates that an ASIC in slot [*char*] was unable to send a loopback packet on port [*dec*] and this is the [*dec*]th time it tried to send and failed. This suggests that the switch is out of memory. The software will only attempt to send a loopback packet three times.

Recommended Action Contact your technical support representative.

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**Error Message** C4K\_COMMONSTUBMAN-4-UNEXPECTEDLOOPBACK: [char] sent out a loopback packet on port [dec], but it came back on port [dec]

**Explanation** The ASIC diagnostics for slot [*char*] sent a loopback packet out port [dec] and it came back on another port [*dec*]. This is unexpected because the loopback is done within the hardware.

Recommended Action Contact your technical support representative.

Error Message C4K\_COMMONSTUBMAN-7-LOSTPACKET: [char] port [dec] lost a packet

**Explanation** A loopback packet was lost during online diagnostics of an ASIC in slot [char].

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

## **DAIMAN Messages**

This section contains the Catalyst 4500 series-specific dynamic ARP inspection (DAIMAN) message.

**Error Message** C4K\_DAIMAN-4-OUTOFRESOURCES:Resources for constructing ACLs, are not available.

**Explanation** This message indicates that the software resources are not available to set up the hardware to redirect ARP packets to the software. Dynamic ARP inspection will not work if this message displays.

**Recommended Action** Remove unnecessary ACLs from some interfaces.

## **DHCP\_SNOOPING Messages**

This section contains the DHCP snooping (DHCP\_SNOOPING) messages.

#### DHCP\_SNOOPING-3

**Error Message** DHCP\_SNOOPING-3-DHCP\_SNOOPING\_INTERNAL\_ERROR: DHCP Snooping internal error

**Explanation** This message indicates that a software sanity check has failed in the DHCP snooping process.

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

## DHCP\_SNOOPING-4

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

**Explanation** This message is logged once every 30 minutes and displays the [*dec*] number of failures that occurred for a given reason [*chars*] during the past 30 minutes.

This message is a rate-limited version of the DHCP\_SNOOPING-4-AGENT\_OPERATION\_FAILED message.

**Recommended Action** Based on the reason for the error [*chars*], look at the explanation for the DHCP\_SNOOPING-4-AGENT\_OPERATION\_FAILED message, and take the appropriate action.

**Error Message** DHCP\_SNOOPING-4-AGENT\_OPERATION\_FAILED: DHCP snooping binding transfer failed. Unable to access URL.

**Explanation** This message indicates that the DHCP snooping binding transfer has failed. The reason for failure can include any of the following:

- The URL is not available to use.
- Not enough memory is available for creating an agent.
- The number of agents has reached the maximum supported limit.
- The switch is unable to create an agent.
- The switch is unable to access the URL.
- The switch is unable to start the agent.
- The Abort timer has expired.
- The number of entries has exceeded the maximum supported limit.
- An error has occurred when reading the remote database.
- An error has occurred while writing to the remote database.
- DHCP snooping expected more data during the read.
- The string type is invalid.
- The version string type is invalid.
- DHCP snooping is expecting a new line in the database.
- 'TYPE' was not found in the remote database.
- 'VERSION' was not found in the remote database.
- 'BEGIN' was not found in the remote database.
- 'END' was not found in the remote database.
- The type string was not found in the remote database.
- The version string was not found in the remote database.
- The checksum has failed upon entry into the remote database.

**Recommended Action** Based on the reason for the error (listed above), take the appropriate action.

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

**Explanation** This message indicates that DHCP snooping has detected a DHCP packet rate-limit violation on the specified interface. The interface will be placed in the errdisable state.

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

**Error Message** DHCP\_SNOOPING-4-DHCP\_SNOOPING\_PVLAN\_WARNING: DHCP Snooping configuration may not take effect on secondary vlan [dec]. [char]

**Explanation** This message indicates that the DHCP snooping configuration on the primary VLAN automatically propagates to all secondary VLANs if private VLANs are enabled.

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

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

**Explanation** This message indicates that the IP source filter on the primary VLAN automatically propagates to all secondary VLANs if private VLANs are enabled.

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

#### **DHCP\_SNOOPING-6**

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

**Explanation** This message indicates that DHCP snooping has successfully read or written to the database.

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

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

**Explanation** This message indicates that one or more bindings from the database file has a MAC address and VLAN combination for which the switch already holds DHCP snooping bindings.

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

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

**Explanation** This message indicates that the interface that is listed in the database file's binding is not available, that the interface is a router port, or that the interface is a DHCP snooping-trusted Layer 2 interface.

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

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

**Explanation** This message indicates that the DHCP lease for the given number of bindings from the database file has expired its read.

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

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

**Explanation** This message indicates that parsing has failed because of the [*dec*] number of bindings from the database file when read.

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

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

**Explanation** This message indicates that the VLAN is not supported by DHCP snooping.

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

## DOT1X (802.1X) Messages

This section contains the IEEE 802.1X-related (DOT1X) port-based authentication messages.

#### **DOT1X-4**

**Error Message** DOT1X-4-MEM\_UNAVAIL:Memory was not available to perform the 802.1X action

**Explanation** This message indicates that due to a lack of memory, 802.1X cannot perform authentication, so it will not be enabled.

**Recommended Action** Reduce other system activity to ease memory demands. Install more memory, if necessary.

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Error Message DOT1X-4-MSG\_ERR: Unknown message event received

**Explanation** This message indicates that due to an unexpected event, the 802.1X process has received an unknown message.

**Recommended Action** Restart 802.1X in case the condition is transient. If the restart fails, reload the device.

Error Message DOT1X-4-PROC\_START\_ERR: DOT1X unable to start

Explanation This message indicates that for unknown reasons, 802.1X cannot start.

**Recommended Action** Restart 802.1X by entering the **dot1x system-auth-control** command in case the condition is transient. If the restart fails, reload the device.

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

**Explanation** This message indicates that due to an unexpected internal error, 802.1X cannot operate.

Recommended Action Reload the device.

#### **DOT1X-5**

Error Message DOT1X-5-ERR\_CHANNELLING: Dot1x can not be enabled on Channelling ports

**Explanation** This message indicates that because this port is a bundled port, **dot1x port-control** cannot enter enable state with **auto** mode or disable state with **force-authorized** mode.

**Recommended Action** Disable channeling on the interface, and then enable 802.1X.

Error Message DOT1X-5-ERR\_DYNAMIC: Dot1x can not be enabled on Dynamic ports

**Explanation** This message indicates that because this port is a dynamic port, **dot1x port-control** cannot enter enable state with **auto** mode (or disable state with **force-authorized** mode).

**Recommended Action** Disable the dynamic mode on the interface, and then enable 802.1X.

**Error Message** DOT1X-5-ERR\_DYNAMIC\_VLAN: Dot1x can not be enabled on dynamic VLAN ports.

**Explanation** This message indicates that because this port is a dynamic VLAN port, **dot1x port-control** cannot enter enable state with **auto** mode (or disable state with **force-authorized** mode).

Recommended Action Disable the dynamic VLAN on the interface, and then enable 802.1X.

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

**Explanation** This message indicates that the authorization settings obtained are either unsupported or invalid.

**Recommended Action** Change the value to reflect the correct settings.

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

**Explanation** This message indicates that the provided TUNNEL\_MEDIUM\_TYPE is either unsupported or invalid.

Recommended Action Change the value to reflect the correct tunnel medium type.

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

**Explanation** This message indicates that the provided TUNNEL\_TYPE is either unsupported or invalid.

**Recommended Action** Change the value to reflect the correct tunnel type.

**Error Message** DOT1X-5-ERR\_MULTI\_ACCESS:Dot1x can not be enabled on voice vlan configured ports.

**Explanation** This message indicates that 802.1X cannot be enabled on a voice VLAN-configured port. This condition is caused by trying 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, and then enable 802.1X.

DOT1X-5-ERR\_PER\_USR\_MAC\_ACL: Applied per-user MAC ACL was unsuccessful on interface [char]

**Explanation** This message indicates that 802.1X cannot successfully apply a per-user MAC ACL possibly because of an invalid pub from the RADIUS server.

**Recommended Action** Examine the RADIUS pub and configure a correct one.

**Error Message** DOT1X-5-ERR\_PROTO\_TUNNELLING:Dot1x can not be enabled on protocol tunnelling enabled ports.

**Explanation** This message indicates that 802.1X cannot be enabled on the protocol tunneling-enabled port. This condition is caused by trying to set 802.1X port control to **auto** or **force-unauthorized** (**force\_unauth**) mode on a protocol tunneling-enabled port, which is not allowed.

**Recommended Action** Disable protocol tunneling on the interface, and then enable 802.1X.

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

**Explanation** This message indicates that the switch cannot enable 802.1X on the interface that uses the same VLAN number for the access VLAN and the voice VLAN. This condition was caused by trying to set 802.1X port-control to **auto** or **force-unauthorized** (**force\_unauth**) mode on a voice VLAN that uses the same VLAN as the access VLAN, which is not allowed.

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

**Error Message** DOT1X-5-ERR\_PVLAN\_TRUNK:Dot1x can not be enabled on private VLAN trunk ports.

**Explanation** This message indicates that 802.1X cannot coexist with private VLAN trunking on the same port.

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

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

**Explanation** This message indicates that the RADIUS server has attempted to assign a VLAN to a supplicant on an interface whose voice VLAN settings are identical to the access VLAN settings.

**Recommended Action** Update the RADIUS configuration so that the access VLAN settings are not identical to the voice VLAN settings for this interface.

**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 cannot be enabled on the remote SPAN VLAN port. This condition is caused by trying to set 802.1X port control to **auto** or **force-unauthorized** (**force\_unauth**) mode on a port that is in the remote SPAN VLAN, which is not allowed.

**Recommended Action** Disable **remove span** on the VLAN, and then enable 802.1X.

Error Message DOT1X-5-ERR\_TRUNK: Dot1x can not be enabled on Trunk port

**Explanation** This message indicates that because this port is a trunk port, **dot1x port-control** cannot enter enable state with **auto** mode (or disable state with **force-authorized** mode).

**Recommended Action** Disable trunking on the interface, and then enable 802.1X.

**Error Message** DOT1X-5-ERR\_TUNNEL:Dot1x can not be enabled on 802.1q tunnelling enabled ports

**Explanation** This message indicates that 802.1X cannot be enabled on the dot1q tunneling-enabled port. This condition is caused by trying 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, and then enable 802.1X.

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

**Explanation** This message indicates that the VLAN is used internally and cannot be assigned on this port.

**Recommended Action** Update the configuration so that this VLAN is not used.

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

**Explanation** This message indicates that the VLAN specified is out of range and cannot be assigned on this port.

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

**Error Message** DOT1X-5-ERR\_VLAN\_NOT\_ASSIGNABLE: RADIUS tried to assign a VLAN to dot1x port [char] whose VLAN cannot be assigned

**Explanation** This message indicates that because this port is configured so that a VLAN cannot be changed, the RADIUS server has failed when it attempted to assign a VLAN to a client that is attached to this port. For example, this port could be a routed port.

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

**Error Message** DOT1X-5-ERR\_VLAN\_NOT\_FOUND: RADIUS tried to assign non-existent VLAN name [char] to dot1x port

**Explanation** This message indicates that the RADIUS server has tried to assign a VLAN to a client on a port, but the VLAN name was not found in the VTP database.

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

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

**Explanation** This message indicates that the specified VLAN is a reserved VLAN and cannot be assigned for use on this port.

**Recommended Action** Update the configuration so that this VLAN is not used.

**Error Message** DOT1X-5-ERR\_VLAN\_RSPAN\_CONFIGURED: VLAN [dec] is configured as a Remote SPAN VLAN

**Explanation** This message indicates that remote SPAN should not be enabled on a VLAN in which ports are configured with 802.1X enabled.

**Recommended Action** Either disable remote SPAN configuration on the VLAN, or disable 802.1X on all the ports in this 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 This is an informational message only. No action is required.

**Error Message** DOT1X-5-INVALID\_INPUT: Dot1x Interface parameter is Invalid on interface [char]

**Explanation** This message indicates that the parameter that is specified for the 802.1X interface is not valid (it could be outside the range of valid values).

**Recommended Action** Try again, using a valid value. See the CLI help to find the valid 802.1X parameters.

Error Message DOT1X-5-INVALID\_MAC: Invalid MAC address(drop

**Explanation** This message indicates that authentication is allowed for an invalid source MAC address, because it is nonzero, it is not a broadcast, and it is not a multicast MAC address.

**Recommended Action** Connect an 802.1X-supported host to the 802.1X-enabled interface.

**Error Message** DOT1X-5-NOT\_DOT1X\_CAPABLE: Dot1x disabled on interface [char] because it is not an Ethernet interface

**Explanation** This message indicates that 802.1X can be enabled on Ethernet module interfaces only.

**Recommended Action** Enable 802.1X authentication on Ethernet interfaces only.

**Error Message** DOT1X-5-SECURITY\_VIOLATION: Security violation on interface [char] in single-host mode. Authorized MAC address was [mac-addr]

**Explanation** This message indicates that the port is configured in Single Host mode, so that any new host that is added to this interface results in a security violation and the port is shut down.

**Recommended Action** Ensure that the port is configured to use only one host. Enter the **shutdown** command followed by the **no shutdown** command to restart the port.

# **DTP Messages**

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

### DTP-4

 $\ensuremath{\mathsf{Error}}\xspace \texttt{MEM}_UNAVAIL: \texttt{Memory} not available to perform the trunk negotiation action$ 

**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 necessary, upgrade to a larger memory configuration.

**Error Message** DTP-4-TMRERR: An internal timer error occurred when trunking on interface [char]

**Explanation** This message indicates that occasionally, a timer that is used by the trunking protocol expires unexpectedly. This problem is corrected internally.

**Recommended Action** This problem has no long-term ramifications. However, if further trunking problems persist, you should reload the device.

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 has generated an error that the protocol (DTP, in this case) did not expect to handle.

Recommended Action Reload the device.

# DTP-5

Error Message DTP-5-ILGLCFG:Illegal config(on

**Explanation** This message indicates that the two ports on the link are set to the ON mode, but one is set to 802.1Q encapsulation, while the other is set to ISL encapsulation. When both ports on a link are set to the ON mode, their encapsulation types must match.

**Recommended Action** Configure both ports on the link to have the same encapsulation type.

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 is an informational message only. No action is required.

**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 is an informational message only. No action is required.

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 is an informational message only. No action is required.

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

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

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

### **EBM Messages**

This section contains the Ethernet bridge management (EBM) messages.

#### EBM-3

**Error Message** C4K\_EBM-3-CANTALLOCATEEBMPORT:No EbmPort memory to allocate EbmPort for PimPort [char]

**Explanation** This message indicates that there is insufficient memory for information that is associated with the specified port.

**Recommended Action** Install additional memory.

**Error Message** C4K\_EBM-3-CANTALLOCATEIENODE:No interposition table memory to add entry for addr %ea

**Explanation** This message indicates that there is insufficient memory for this internal data structure.

**Recommended Action** Install additional memory.

**Error Message** C4K\_EBM-3-CANTALLOCATEIGMPGROUPENTRY:No igmp group memory to add new group entry for addr [mac-addr]

**Explanation** This message indicates that insufficient memory exists to support additional Internet Group Management Protocol (IGMP) group entries. This error occurs if you have created a large number of IGMP groups.

Recommended Action Either install additional memory, or reduce the number of IGMP groups.

**Error Message** C4K\_EBM-3-CANTALLOCATEPORTHOSTENTRY:No port host table memory to add entry for addr [mac-addr] / [mac-addr]

**Explanation** This message indicates that insufficient memory exists for this internal data structure.

**Recommended Action** Install additional memory.

 ${\tt Error\,Message}$  C4K\_EBM-3-CANTALLOCATEVLANGROUPENTRY:No vlan group table memory to add entry for addr %ea

**Explanation** This message indicates that insufficient memory exists to support additional Layer 2 group entries corresponding to IP multicast groups.

**Recommended Action** Install additional memory. If memory is unavailable, turn off Cisco Group Management Protocol (CGMP)/Internet Group Management Protocol (IGMP).

 $\ensuremath{\mathsf{Error}}\xspace Message C4K\_\ensuremath{\mathsf{EBM-3-CANTALLOCATEVLANHOSTENTRY:No}\xspace$  vlan host table memory to add entry for addr %ea

**Explanation** This message indicates that insufficient memory exists to support additional host addresses.

**Recommended Action** Install additional memory.

### EBM-4

**Error Message** C4K\_EBM-4-HOSTFLAPPING:Host [mac-addr] in vlan [dec] is flapping between port [char] and port [char]

**Explanation** This message indicates that the specified host is detected as a source address on multiple ports. Typically, a host is supposed to be learned on only one port. A spanning tree loop is the most common cause of this condition. All traffic from the specified host is temporarily dropped. After 15 seconds, forwarding is reenabled. If the problem persists, the traffic from the problem host continues to be dropped indefinitely.

**Recommended Action** Make sure that spanning tree is enabled to prevent spanning tree loops. If you have spanning tree disabled, make sure that you have no spanning tree loops in your network.

**Error Message** C4K\_EBM-4-ZEROETHERADDR:Filtering Ethernet MAC address of value zero from agent host table interface (port: [char])

**Explanation** This message indicates that the switch has learned about a host with the MAC address 00:00:00:00:00:00:00. This MAC address is not valid and was probably generated by some non-IEEE 802.1D-compliant hardware or software in the network.

The host sort algorithm does not sort hosts with MAC addresses that have all zeros (00:00:00:00:00:00), because a MAC address that has all zeros is not listed in the learned host table. A request to show learned hosts, either by the **show cam dynamic** command or by an SNMP request, does not list a MAC address that has all zeros.

**Recommended Action** Track the source of the bad MAC address, because it might cause other problems.

# **EC Messages**

This section contains the EtherChannel (EC) messages.

### EC-4

Error Message EC-4-NOMEM: Not enough memory available for [char]

**Explanation** This message indicates that the Port Aggregation Protocol or EtherChannel cannot obtain the memory it needs.

### EC-5

Error Message EC-5-BUNDLE: Interface [char] joined port-channel [char]

**Explanation** This message indicates that the interface has joined the bundle.

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

Error Message EC-5-CANNOT\_ALLOCATE\_AGGREGATOR: Aggregator limit reached

**Explanation** This message indicates that a new aggregator cannot be allocated in the group.

**Recommended Action** Change the port attributes of the ports in the group so that they match and join the same aggregator.

Error Message EC-5-CANNOT\_BUNDLE1:Port-channel [char] is admin-down

**Explanation** This message indicates that the administrative state of the aggregation port channel is down. The port remains in a standalone state until the state of the aggregation port is up.

**Recommended Action** Ensure that all of the ports in the bundle have the same configuration.

**Error Message** EC-5-CANNOT\_BUNDLE2:[char] is not compatible with [char] and will be suspended ([char])

**Explanation** This message indicates that the port has different port attributes from those of the port channel (or the ports within the port channel).

**Recommended Action** Adjust the port attributes to match those of the port channel.

**Error Message** EC-5-CANNOT\_BUNDLE\_LACP: [char] is not compatible with aggregators in channel [dec] and cannot attach to them ([char])

**Explanation** This message indicates that this port has different port attributes than other ports within the port channel.

**Recommended Action** Match the port attributes to that of the port channel.

**Error Message** EC-5-CANNOT\_BUNDLE\_QOS: Removed [char] from port channel because a QoS policy cannot be supported across multiple DFC cards.

**Explanation** This message indicates that the port that is specified in the error message cannot join a port channel, because the QoS policy that is attached to the port channel cannot support multiple DFC cards.

**Recommended Action** Place the port in another port channel, or remove the QoS policy from the port channel.

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

**Explanation** This message indicates that the specified interface is not operational because its attributes are different from the attributes of the port channel or the attributes of the interfaces within the port channel. The switch detects that the attributes of the specified port now match the port-channel attributes.

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

Error Message EC-5-DONTBNDL: [char] suspended: incompatible partner port with [char]

**Explanation** This message indicates that the configuration of the partner port is different from the configuration of the other ports in the bundle. A port can join the bundle only when the global configuration of the port and the configuration of the partner port are the same as the 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-ERRPROT: Channel protocol mismatch for interface [char] in group [dec]: the interface can not be added to the channel group

**Explanation** This message indicates that the interface cannot be added to the channel group with the specified mode.

**Recommended Action** Change the channel group or the mode for the interface.

**Error Message** EC-5-ERRPROT2: Command rejected: the interface [char] is already part of a channel with a different type of protocol enabled

**Explanation** This message indicates that the interface cannot be selected for the specified protocol, because it is already part of a channel with a different type of protocol enabled.

**Recommended Action** Remove the interface from the channel group.

**Error Message** EC-5-ERRPROT3: Command rejected: the interface [char] is already part of a channel

**Explanation** This message indicates that the interface cannot be unselected for the specified protocol, because it is already part of a channel.

**Recommended Action** Remove the interface from the channel group.

**Error Message** EC-5-L3DONTBNDL1:[char] suspended: PAgP not enabled on the remote port.

**Explanation** This message indicates that PAgP is enabled on the Layer 3 interface, but the partner port does not have PAgP enabled. In this mode, the port is put in a suspended state.

Recommended Action Enable PAgP on the remote side.

**Error Message** EC-5-L3DONTBNDL2: [char] suspended: LACP currently not enabled on the remote port.

**Explanation** This message indicates that LACP is enabled on a Layer 3 interface, but the partner port does not have LACP enabled. In this mode, the port is put in a suspended state.

**Recommended Action** Enable LACP on the remote side.

Error Message EC-5-NOLACP: Invalid EC mode

**Explanation** This message indicates that LACP is not included in the image. You cannot set EC mode to active or passive.

**Recommended Action** Upgrade to an image with LACP, or set the mode to On.

Error Message EC-5-NOPAGP: Invalid EC mode

**Explanation** This message indicates that PAgP is not included in the image, so the EtherChannel mode cannot be set to desirable/auto.

Recommended Action Obtain an image that includes PAgP, or set the mode to ON.

Error Message EC-5-PORTDOWN: Shutting down [char] as its port-channel is admin-down

**Explanation** This message indicates that the administrative state of the aggregate port is down, which forces the administrative state of the port to also be down. The administrative state of the port is controlled by the administrative state of its aggregate port.

**Recommended Action** Enter the **no shutdown** command on the aggregate port to activate the aggregation port.

Error Message EC-5-STAYDOWN: no-shut not allowed on [char]. Module [dec] not online

**Explanation** This message indicates that an interface with EtherChannel configuration cannot be adminstratively up if its port channel is adminstratively down. Although this interface has an EtherChannel configuration, it has no information about the port channel. The **no shutdown** command is not supported.

Recommended Action Wait for the module to come online.

Error Message EC-5-UNBUNDLE: Interface [char] left the port-channel [char]

**Explanation** This message indicates that the interface fell off the bundle.

Error Message EC-5-UNSUITABLE: [char] will not join any port-channel

**Explanation** This message indicates that the configurations for PortFast, VMPS, and Dest-SPAN are incompatible with EtherChannel.

**Recommended Action** Unconfigure the three features so that the port can form a bundle.

### **GBICMAN Messages**

This section contains the Gigabit Interface Converter (GBIC) Manager (GBICMAN) messages.

### **GBICMAN-3**

**Error Message** C4K\_GBICMAN-3-BADGBIC:Port [char]: Gbic's seeprom is bad, try reinserting: vendor: [char], p/n: [char], s/n: [char]

**Explanation** This message indicates that the Gigabit Interface Converter (GBIC) serial EEPROM data is corrupted.

Recommended Action Remove and reinsert the GBIC.

**Error Message** C4K\_GBICMAN-3-GBICSEEPROMREADFAILED: Failed to read gbic serial eeprom on port [char], try reinserting

**Explanation** This message indicates that the switch cannot identify the newly inserted GBIC/SFP.

Recommended Action Remove and reinsert the GBIC or SFP.

**Error Message** C4K\_GBICMAN-3-S2WERROR: S2w bus error while looking for changed gbics on port [char]: [char]

**Explanation** This message indicates that there was an internal communication error when the software read the GBIC/SFP control data.

Recommended Action Contact your technical support representative.

#### **GBICMAN-7**

Error Message C4K\_GBICMAN-7-GBICREMOVED: Port [char]: Gbic removed

**Explanation** A GBIC or SFP has been removed.

# **HW Messages**

This section contains the hardware (HW) message.

**Error Message** C4K\_HW-3-S2WERROR:[char] [char] [dec] Error: [object-info] Device Addr: [dec] Mem Addr: [object-info] Value: [dec]

**Explanation** This message indicates that an unexpected error has occurred when the switch accessed the hardware device specified in the message.

Recommended Action Contact your technical support representative.

# HWACLMAN Messages

This section contains the hardware ACL Manager (HWACLMAN) messages.

Error Message C4K\_HWACLMAN-4-ACLHWPROGERR:[char] [char] - hardware TCAM limit, [char]

**Explanation** This message indicates that some ACL-based feature(s) cannot be fully programmed into the hardware. Packets that traverse these feature(s) complete processing in the software. If the feature is a policy map, then QoS is completely disabled (on the specific interface).

This message lists the impacted feature; further message(s) list the specific failure that has occurred.

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

Error Message C4K\_HWACLMAN-4-ACLHWPROGERRREASON: [char] [char] - [char]

**Explanation** This message indicates the specific failure that has prevented an ACL-based feature(s) from being fully programmed into the hardware.

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

**Error Message** C4K\_HWACLMAN-4-CAMAUDIT: AC1/QOS CAM Health Check: [input/output] [char] Index: [dec] [char] ( Cumulative Error Count: [dec] )

**Explanation** This message indicates that the background system health monitor has detected a potential problem.

**Recommended Action** If this is a software error, the system has already healed itself automatically and no action is required. If this is a hardware error, power cycle the switch.

**Error Message** C4K\_HWACLMAN-4-WARNINGSTRING: [char]

**Explanation** This message indicates that a warning message has been displayed.

**Recommended Action** See the message string [*char*] for more information.

# **HWL2MAN Messages**

This section contains the Layer 2 Hardware Manager (HWL2MAN) message.

Error Message C4K\_HWL2MAN-3-STMPARITYERROR: Parity error in Spanning Tree Memory.

**Explanation** This message indicates that there is a parity error in the spanning tree memory, which can indicate a transient hardware problem or a more permanent problem.

**Recommended Action** If you see this message too often, you should reboot the switch.

# **HWNETFLOWMAN** Messages

This section contains the NetFlow Manager (HWNETFLOWMAN) messages.

### **HWNETFLOWMAN-3**

**Error Message** C4K\_HWNETFLOWMAN-3-NETFLOWSTOPPED: Too many netflow parity errors encountered. It is very likely that this is bad Netflow hardware. Stopping all netflow related activities.

**Explanation** This message indicates that the supervisor engine has received too many parity errors from the NetFlow Services Card. The supervisor engine stops all NetFlow-related activities.

Recommended Action Contact your technical support representative.

### **HWNETFLOWMAN-4**

**Error Message** C4K\_HWNETFLOWMAN-4-ERRORADDRS:Netflow Fatal Error Info: Interrupt Status ( [dec] ), FDT1 Err Addr ( [dec] ), FDT2 Err Addr ( [dec] ), FLD Err Addr ( [dec] )

**Explanation** This message indicates that a fatal NetFlow error has occurred. The message contains critical information that can help you determine if the NetFlow hardware is functioning properly or is bad.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_HWNETFLOWMAN-4-FATALERRORINTERRUPTSEEN: Netflow Fatal Error interrupt seen

**Explanation** This message indicates that the NetFlow Services Card has sent a fatal interrupt call to the supervisor engine which can crash the service card, the supervisor engine, and the entire switch. This condition is extremely rare.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_HWNETFLOWMAN-4-FLOWSLOSTERR: Netflow stats lost due to full hw flow table. [char] [dec] packets.

**Explanation** This message indicates that if the cache is full, then some flow statistics are lost. This message informs users about the total collected flow statistics. If the counter that tracks the lost statistics has overflowed, an accurate count of total lost flows is not available.

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

**Error Message** C4K\_HWNETFLOWMAN-4-NONFATALPARITYERRORINTERRUPTSEEN:Netflow Non Fatal Parity Error interrupt seen

**Explanation** This message indicates that the supervisor engine has received a nonfatal parity error from the Netflow Services Card. The system should be able to recover from this condition. If this condition reoccurs often, the Netflow Services Card is probably bad.

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

# **HWPORTMAN Messages**

This section contains the hardware port management (HWPORTMAN) messages.

### **HWPORTMAN-4**

**Error Message** C4K\_HWPORTMAN-4-BLOCKEDTXQUEUE:Blocked transmit queue HwTxQId[dec] on [char], count=[dec]

**Explanation** A transmit queue on a port is blocked. Bad hardware or continuous pause frames from the peer can cause this problem.

**Recommended Action** Determine if the peer is continually sending pause frames to the port. If so, troubleshoot the peer. If not, contact your technical support representative.

**Error Message** C4K\_HWPORTMAN-4-CHECKFORDUPLEXMISMATCH:[char] Tx-Queue could be blocked due to duplex mismatch

**Explanation** This message indicates that the Tx queue on this port could be blocked due to a duplex mismatch.

Recommended Action Fix the duplex mismatch to unblock the Tx queue.

### **HWPORTMAN-7**

**Error Message** C4K\_HWPORTMAN-7-FLOWCONTROLPACKET: Received invalid flow control packet from [char] da [mac-addr] sa [mac-addr] ethertype [hex] opcode [hex]

**Explanation** This message indicates that the supervisor engine has forwarded a malformed flow control packet to the software, because one or both of the EtherType and flow control/operation code is incorrect. For flow control packets, the expected EtherType is 0x8808, and the expected operation code is 1 (xoff).

**Recommended Action** If the devices that are connected to the switch can generate flow control and are configured for flow control, verify that the devices can generate well-formed flow control packets with valid EtherType and operation code fields.

# **IDBMAN Messages**

This section contains the interface descriptor block (IDB) management (IDBMAN) messages.

### **IDBMAN-3**

**Error Message** IDBMAN-3-AGGPORTMISMATCH:[char]:[char]([dec] / [dec]) does match internal slot/port state [char]([dec] / [dec])

**Explanation** This message indicates that due to an internal error, the software is using an invalid aggregate port.

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

Error Message IDBMAN-3-DELETEDAGGPORT:[char]([dec] / [dec]) Group [dec] has been
deleted

**Explanation** This message indicates that due to an internal error, the software is reusing a deleted interface for a new aggregate port.

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

**Error Message** IDBMAN-3-INVALIDAGGPORTBANDWIDTH:[char]([dec] / [dec]) has an invalid bandwidth value of [dec]

**Explanation** This message indicates that due to an internal error, the software is using an invalid bandwidth for an aggregate port.

Error Message IDBMAN-3-INVALIDPORT:[char]:trying to use invalid port number [dec]
(Max [dec])

**Explanation** This message indicates that due to an internal error, the software is using an invalid port number.

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

Error Message IDBMAN-3-INVALIDVLAN: [char]: trying to use invalid Vlan [dec]

**Explanation** This message indicates that due to an internal error, the software is using an invalid VLAN.

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

Error Message IDBMAN-3-NOTANAGGPORT: [char] ([dec] / [dec]) is not an aggregate port

**Explanation** This message indicates that due to an internal error, the software is using an interface that is not an aggregate port for aggregate port operations.

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

Error Message IDBMAN-3-PORTNOTINAGGPORT:[char]([dec] / [dec]) is not present in
Aggport [char]([dec] / [dec])

**Explanation** This message indicates that due to an internal error, the software recognizes that the invalid port belongs to an aggregate port.

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

Error Message IDBMAN-3-VLANINUSE: [char]: Vlan [dec] is in use by [char]

**Explanation** This message indicates that each Layer 3 interface has a VLAN that is associated with it. This message indicates that the VLAN that is associated with the interface is being used by some other Layer 3 interface.

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

**Error Message** IDBMAN-3-VLANNOTSET:[char]:Vlan [dec] not set since it already has Vlan [dec]

**Explanation** This message indicates that due to an internal error, an interface set its VLAN to a nonrequested value.

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

### **IDBMAN-4**

Error Message IDBMAN-4-ACTIVEPORTSINAGGPORT:[char]([dec] / [dec]) has [dec] active
ports

**Explanation** This message indicates that due to an internal error, the software has removed an aggregate port with active ports.

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

### **IDBMAN-6**

Error Message IDBMAN-6-VLANMAPPED:Vlan [dec] is mapped to [char]

**Explanation** This message indicates that the given VLAN is mapped to the given interface.

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

# **ILCPROTOCOLERROR Messages**

This section contains the ILC Protocol (ILCPROTOCOLERROR) message.

Error Message C4K\_ILC-3-ILCPROTOCOLERROR: Service Module failed S2W protocol, error
[dec], state [dec]

**Explanation** This message indicates that the Serial 2-Wire (S2W) communication with an intelligent line card has deviated from the defined protocol.

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

# **IOSACLMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS ACL management (IOSACLMAN) messages.

**Error Message** C4K\_IOSACLMAN-4-ACLTYPEMISMATCH: Acl RkiosSharedIos[char] was earlier attached as [char] Acl. Please unconfigure all its uses before using it as a [char] Acl

**Explanation** This message displays if you attach a named ACL as one type, delete the ACL, and configure an ACL of a different type with the same name. For example, you configure a named IP ACL using the name DefaultAcl, attach it to a router port, and then delete the ACL DefaultAcl by entering **no ip access-list extended DefaultAcl**. You could configure a MAC ACL using the same name. This message is displayed when you try to configure any ACEs in the MAC ACL.

**Recommended Action** Remove all configurations where the ACL is being used as an IP ACL before configuring a MAC ACL with the same name.

**Error Message** C4K\_IOSACLMAN-4-MOLACLALLOCFAILURE: Mol Acl Allocation for [char] is failed

**Explanation** This message indicates that a new MOL ACL was created but there is insufficient memory for a MOL ACL. The ACL is not applied.

**Recommended Action** Remove all configurations where the ACL is being used as an IP ACL before configuring a MAC ACL with the same name.

**Error Message** C4K\_IOSACLMAN-4-MOLACLFEATUREALLOCFAILURE: Mol AclFeature Allocation for Mol Acl: [dec] is failed

**Explanation** This message indicates that a new MOL ACL was created but there is insufficient memory for a MOL ACL. The ACL is not applied.

**Recommended Action** Remove all configurations where the MOL ACL is being used as an IP ACL before configuring a MOL ACL with the same name.

**Error Message** C4K\_IOSACLMAN-4-VLANMAPOUTOFMEMORY: Could not add an entry to Vlan Map [char]. Out of memory

**Explanation** This message indicates that the system has insufficient memory to allocate an entry for this VLAN map.

**Recommended Action** Remove all configurations where the ACL is being used as an IP ACL before configuring a MAC ACL with the same name.

# **IOSDHCPSNOOPMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS DHCP Snooping Manager (IOSDHCPSNOOPMAN) messages.

**Error Message** C4K\_IOSDHCPSNOOPMAN-4-CANNOTADDNEWIPLIST: Cannot add new IP list for dhcp security on [char] and vlan [dec]

**Explanation** This message indicates that the switch has attempted to add a new IP address to the list of permitted IP addresses but has failed. The new addresses are not permitted.

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

**Error Message** C4K\_IOSDHCPSNOOPMAN-4-CANNOTENABLESECURITY: Cannot enable dhcp security on [char] and vlan [dec]

**Explanation** This message indicates that the switch has failed to enable IP source guard on the interface and indicated VLAN. This error probably occurred because there might be too many interface-VLAN pairs that have the feature enabled.

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

# **IOSIGMPSNOOPMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS IGMP Snooping Manager (IOSIGMPSNOOPMAN) message.

**Error Message** C4K\_IOSIGMPSNOOPMAN-3-NOSPACELEFT:No igmp group memory to add new group entry

**Explanation** This message indicates that insufficient memory exists to support additional IGMP group entries, which are added automatically when you run CGMP/IGMP.

Recommended Action Install additional memory, or reduce the number of IGMP groups.

# **IOSINTF Messages**

This section contains the Catalyst 4500 series Cisco IOS interface operation (IOSINTF) messages.

### **IOSINTF-4**

**Error Message** C4K\_IOSINTF-4-INTVLANALLOCFAIL:Failed to allocate internal VLAN for interface [char]. The interface will remain down.

**Explanation** This message indicates that when a routed port or port-channel interface is enabled, it must map to an internal VLAN in order to operate. If there are no internal VLANs available when an interface is enabled, the interface remains down and this message is logged.

**Recommended Action** An internal VLAN can be freed by disabling some other routed port or port-channel interface or by deleting a user-configured VLAN in the 1006 to 4094 range. Once a VLAN is made available, the interface will come up if it is disabled and reenabled.

**Error Message** C4K\_IOSINTF-4-REFLEXIVEACLNOTSUPPORTED: Reflexive Acls are not supported. Ignoring the [char] entry.

**Explanation** This message indicates that the reflexive ACLs are not supported. ACEs with the **evaluate** and **reflect** keywords are ignored.

**Recommended Action** Do not configure ACEs with the **evaluate** or **reflect** keywords.

### **IOSINTF-5**

**Error Message** C4K\_IOSINTF-5-NOTXVLAN:Router Port [char] has no internal vlan assigned to transmit packet

**Explanation** This message indicates that the specified Layer 3 interface does not have an assigned internal VLAN because duplicate IP network assignments exist on different Layer 3 interfaces.

**Recommended Action** Remove the duplicate IP network that is configured on the interface. Assign the correct IP network, and enter the **no shutdown** command on this interface.

**Error Message** C4K\_IOSINTF-5-STALEPHYPORT:Dropping packets to be transmitted out on port [char] (Linecard in Slot [dec] may have been removed)

**Explanation** This message indicates that occasionally, during hot-swapping operations, a previously queued packet is transmitted after the module in that slot has already been removed. Because the module no longer exists, the packets are dropped.

**Recommended Action** If the problem persists even without any hot-swapping operations, contact your technical support representative.

**Error Message** C4K\_IOSINTF-5-TXL3PKTONPHYPORT:Transmitting L3 packet on a physical port [char] that is part of [char] ([dec] packets). Make sure the physical port in the L3 port channel does not have an ip addresses configured on it.

**Explanation** This message indicates that the Layer 3 protocols operate at the logical, not the physical, port level. Layer 3 protocol packets were sent on a physical port that is part of a bundle. This condition occurs if there is a misconfiguration; a physical port that is part of a Layer 3 port channel might have been assigned an IP address.

**Recommended Action** Verify that the physical interface in the Layer 3 port channel does not have an IP address that is assigned to it.

**Error Message** C4K\_IOSINTF-5-TXPKTDROPONETHERCHANNEL:Dropping transmit packet out of interface [char]

**Explanation** This message indicates that a packet that will be transmitted out of a port channel is dropped during transitions in the port-channel membership. This condition occurs when a packet is transmitted out of the aggregate port by higher layer protocols, but the software cannot find the specific state information or when physical ports transition into or out of the port-channel membership.

Recommended Action If the problem persists, contact your technical support representative.

# **IOSIPROUTEMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS IP Route Manager (IOSIPROUTEMAN) messages.

#### **IOSIPROUTEMAN-3**

**Error Message** C4K\_IOSIPROUTEMAN-3-ADJMANNOMOREADJS:AdjMan: hardware adjacency resources exhausted, performance may be degraded.

**Explanation** This message indicates that the hardware adjacency resources have been exhausted. The supervisor engine will forward packets to this adjacency in the software. This action will likely represent a significant performance degradation.

**Recommended Action** Reduce the number of adjacencies that are loaded into the routing table, and then clear the IP routing table.

**Error Message** C4K\_IOSIPROUTEMAN-3-FIBCANTALLOCATEFIBADJ:IOS IP Route Manager:No memory available to allocate FIB Adjacency for [object-info]

**Explanation** This message indicates that the switch has insufficient memory to allocate space for this adjacency; Supervisor Engine III will forward it in the software instead.

**Recommended Action** Reconfigure the network so that there are fewer hosts that are directly adjacent to the Catalyst 4500 series switch, and then clear and reload all of the routes (or reboot) so that the adjacent hosts that were being sent to the software get reloaded.

**Error Message** C4K\_IOSIPROUTEMAN-3-FIBCANTALLOCATEFIBENTRY:IOS IP Route Manager:No memory available to allocate FIB Entry for [ip-addr]

**Explanation** This message indicates that the switch has insufficient memory to allocate space for the route that is associated with this network.

**Recommended Action** Contact your technical support representative because memory leaks might exist.

**Error Message** C4K\_IOSIPROUTEMAN-3-PBRDOESNOTSUPPORTQOS:Route-map ' [char] ' on interface ' [char] ' specifies Quality of Service rewriting which is not supported via Policy-Based Routing on this platform. Please use the Quality of Service feature instead. This action on the specified route map will be ignored.

**Explanation** This message indicates that the Catalyst 4500 series switch does not support QoS services that are implemented using PBR route maps. The PBR route map that is specified will be loaded, but references to QoS services will be ignored.

Recommended Action Use the QoS policy maps and class maps to configure this feature.

**Error Message** C4K\_IOSIPROUTEMAN-3-VRFMANNOMOREVRFS: VrfMan: VPN routing forwarding resources exhausted.

**Explanation** This message indicates that the VPN routing forwarding resources have been exhausted.

Recommended Action Reduce the total number of VPNs in the switch.

# **IOSL2MAN Messages**

This section contains the Catalyst 4500 series Cisco IOS Layer 2 Manager (IOSL2MAN) message.

Error Message C4K\_IOSL2MAN-3-VLANCREATIONERROR: Unable to create new vlan [dec]

**Explanation** This message indicates that the switch has insufficient memory to allocate new VLANs, so new VLAN allocation has failed.

**Recommended Action** Contact your technical support representative because memory leaks might exist.

# **IOSMODPORTMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS module Port Manager (IOSMODPORTMAN) messages.

### **IOSMODPORTMAN-2**

**Error Message** C4K\_IOSMODPORTMAN-2-INLINEPOWEROVERCRITICAL:Measured inline power exceeds module limit

**Explanation** This message indicates that the measured PoE is at least 50 W higher than the module's physical limit. The switch is either misconfigured or an unauthorized powered device is causing this situation that can crash the system.

**Recommended Action** You can use the **show power detail** command and keyword or the **show module** command to compare the administrative (configured) power (measured) consumption to the operating power consumption. Verify that PoE is set correctly and that no unauthorized powered devices are connected to the switch.

### **IOSMODPORTMAN-3**

**Error Message** C4K\_IOSMODPORTMAN-3-SPANCONFIGOUTOFMEMORY: RkiosSpanMan: Out of memory. Unable to process information for RkiosSpanMan: ID. [dec]

**Explanation** This message indicates that the system has run out of memory.

Recommended Action Contact your technical support representative.

**Error Message** C4K\_IOSMODPORTMAN-3-UNKNOWNPOWERSUPPLY: Unsupported Power Supply has been inserted in slot [dec]

**Explanation** This message indicates that an unsupported or unknown power supply has been inserted.

**Recommended Action** Replace the power supply with a supported power supply.

### **IOSMODPORTMAN-4**

**Error Message** C4K\_IOSMODPORTMAN-4-CRITICALTEMP: Chassis temperature is at or over critical threshold - current temp: [dec]C, critical threshold: [dec]C

**Explanation** This message indicates that the chassis temperature is above a critical threshold. If some action is not taken immediately to cool the chassis, the system shuts down to prevent damage to the hardware.

**Recommended Action** Remove one or more modules to reduce the temperature of the chassis, and check if the fan tray is functional.

Error Message C4K\_IOSMODPORTMAN-4-FANTRAYBAD: Fan tray has failed

**Explanation** This message indicates that the fan tray has failed.

Recommended Action Replace the fan tray as soon as possible.

Error Message C4K\_IOSMODPORTMAN-4-FANTRAYREMOVED: Fan tray has been removed

**Explanation** This message indicates that the fan tray has been removed.

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

**Error Message** C4K\_IOSMODPORTMAN-4-INLINEPOWEROVERWARNING:Measured inline power higher than configured value

**Explanation** This message indicates that the measured PoE is at least 50 w higher than the configured value. The switch has either misconfigured PoE or an unauthorized powered device that is connected to the switch and is drawing a lot of PoE.

**Recommended Action** You can use the **show power detail** command and keyword or the **show module** command to compare the administrative (configured) power (measured) consumption to the operating power consumption. Verify that PoE is set correctly and that no unauthorized powered devices are connected to the switch.

**Error Message** C4K\_IOSMODPORTMAN-4-INLINEPOWERSUPPLYBAD: Inline power from power supply [dec] has failed or been turned off

**Explanation** This message indicates that a PoE source from a power supply has failed or has been turned off. The hardware cannot make a distinction between the two cases.

**Recommended Action** Fix or replace the power supply as soon as possible.

**Error Message** C4K\_IOSMODPORTMAN-4-NFLABSENT: Netflow Services Card absent or idprom invalid on [char] supervisor.

**Explanation** This message indicates that the recommended configuration for using the NetFlow Services Card is to have it installed on both the standby and active supervisor engines. Otherwise, during switchover, the system might lose its NetFlow capabilities.

**Recommended Action** Verify that the NetFlow Services Card is installed on both supervisor engines.

**Error Message** C4K\_IOSMODPORTMAN-4-NFLIDPROMINVALID: Netflow Services Card has invalid idprom on [char] supervisor

**Explanation** This message indicates that the IDPROM on the Netflow Services Card on the supervisor engine indicated in the message is invalid.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_IOSMODPORTMAN-4-NFLMISMATCH: Netflow Services Cards have mismatched [char]. ([dec] on [char] and [dec] on [char]).

**Explanation** This message indicates that the IDPROM attributes of the NetFlow Services Cards that are installed on the active and the standby supervisor engines do not match.

**Recommended Action** Verify that the NetFlow Services Card is installed on both supervisor engines.

Error Message C4K\_IOSMODPORTMAN-4-PEMBAD: Power Entry Module has failed

**Explanation** This message indicates that the external power supply source providing PoE power is bad.

Recommended Action Check the external power supply and replace it, if necessary.

**Error Message** C4K\_IOSMODPORTMAN-4-POWERSUPPLYBAD:Power Supply [dec] has failed or been turned off

**Explanation** This message indicates that a power supply has failed or has been turned off. The hardware cannot make a distinction between the two cases.

**Recommended Action** Replace the power supply as soon as possible.

**Error Message** C4K\_IOSMODPORTMAN-4-POWERSUPPLYFANBAD: Fan of power supply [dec] has failed

**Explanation** This message indicates that a power supply fan has failed.

**Recommended Action** Replace the power supply as soon as possible.

**Error Message** C4K\_IOSMODPORTMAN-4-POWERSUPPLYREMOVED:Power supply [dec] has been removed

**Explanation** This message indicates that the power supply has been removed.

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

**Error Message** C4K\_IOSMODPORTMAN-4-TEMPHIGH: Chassis temperature is at or over threshold - CurrentTemp: [dec]C, Threshold: [dec]C

**Explanation** This message indicates that the chassis temperature is above the threshold. If the temperature goes above a critical threshold, another message is logged and the system shuts down to prevent damage to the hardware.

**Recommended Action** Inspect the chassis to determine why the temperature has risen. Cool the system.

**Error Message** C4K\_IOSMODPORTMAN-4-TEMPUNDERCRITICAL: Chassis temperature is now under critical threshold but still very high - current temp: [object-info] C, critical threshold: [object-info] C

**Explanation** This message indicates that the chassis temperature has returned below the critical threshold. The chassis is still operating above the normal temperature.

**Recommended Action** Inspect the chassis to determine why the temperature has risen. Cool the system.

**Error Message** C4K\_IOSMODPORTMAN-4-FANTRAYPARTIALFAILURE: One or more fans in system fan tray have failed

**Explanation** This is a warning message indicating that one or more fans in the system fan tray have failed.

**Recommended Action** Replace the fan tray as soon as possible.

### **IOSMODPORTMAN-6**

Error Message C4K\_IOSMODPORTMAN-6-FANTRAYGOOD: Fan tray is okay

**Explanation** This message indicates that the failed fan tray has been fixed.

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

Error Message C4K\_IOSMODPORTMAN-6-FANTRAYINSERTED: Fan tray has been inserted

**Explanation** This message indicates that the fan tray has been inserted.

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

Error Message C4K\_IOSMODPORTMAN-6-INLINEPOWEROK: Inline power usage within limits

**Explanation** This message indicates that the measured PoE is now below the configured value and the physical limit for the module.

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

Error Message C4K\_IOSMODPORTMAN-6-MODULEOFFLINE: Module [dec] is offline

**Explanation** This message indicates that the specified module has gone offline.

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

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Error Message C4K\_IOSMODPORTMAN-6-MODULEONLINE: Module [dec] is online

**Explanation** This message indicates that the specified module has gone online.

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

 ${\tt Error\,Message}$  C4K\_IOSMODPORTMAN-6-PEMGOOD: Power Entry Module has been restored to working condition

**Explanation** This message indicates that the external power supply source providing inline power is working correctly.

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

**Error Message** C4K\_IOSMODPORTMAN-6-POWERSUPPLYFANGOOD:Fan of power supply [dec] is okay

**Explanation** This message indicates that a failed power supply has been fixed.

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

Error Message C4K\_IOSMODPORTMAN-6-POWERSUPPLYGOOD: Power supply [dec] is okay

**Explanation** This message indicates that a failed power supply has been fixed.

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

**Error Message** C4K\_IOSMODPORTMAN-6-POWERSUPPLYINSERTED:Power supply [dec] has been inserted

**Explanation** This message indicates that the specified power supply has been inserted.

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

**Error Message** C4K\_IOSMODPORTMAN-6-TEMPOK: Chassis temperature is now ok - CurrentTemp: [dec]C, Threshold: [dec]C

**Explanation** This message indicates that the chassis temperature has returned to a normal temperature.

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

Error Message C4K\_IOSMODPORTMAN-6-MODULEINSERTED: Module [dec] is inserted

**Explanation** A module was inserted into slot [*dec*].

Error Message C4K\_IOSMODPORTMAN-6-MODULEREMOVED: Module [dec] is removed

**Explanation** A module was removed from slot [*dec*].

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

# **IOSSYS** Message

This section contains the Catalyst 4500 series IOS system (IOSSYS) messages.

### **IOSSYS-3**

Error Message C4K\_IOSSYS-3-BLANKSTARTUPCONFIG: Blank or invalid startup-config

**Explanation** This message indicates that an empty or invalid startup-config file was found in the NVRAM. The switch is booting up with default settings.

**Recommended Action** Configure the switch and save the configuration to NVRAM as the file for the next reboot. If this message persists even after saving the startup-config file in the NVRAM, contact your technical support representative.

**Error Message** C4K\_IOSSYS-3-SAVEPOSTRESULTFAILED: Failed to save POST results to [char]. [char].

**Explanation** This message indicates that the system cannot save the POST results to bootflash because the bootflash memory might be full.

**Recommended Action** Check if the bootflash memory is full. If the bootflash memory is full, delete the old POST results by entering the **delete \force post\*** and the **squeeze bootflash:** commands.

### **IOSSYS-4**

Error Message C4K\_IOSSYS-4-BLANKPRIVATECONFIG: Blank or invalid private-config

Explanation An invalid private-config is found in the NVRAM, or the private-config was missing.

**Recommended Action** If this message comes up after a software upgrade, try saving the configuration again and reboot the switch. If the message goes away in the next boot, then it can be ignored. If this message displays each time that the switch is rebooted, contact your Technical Support representative.

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### **IOSSYS-7**

 $\mbox{Error}\,\mbox{Message}$  C4K\_IOSSYS-7-INVALIDVALUE: [char] Type [dec] not handled returning a default of 0

**Explanation** This message is a debug message that is used by developers only and should not occur during operation.

**Recommended Action** Contact your technical support representative.

Error Message C4K\_IOSSYS-7-SETENVERR: Failed to set environment variable: [char].

**Explanation** This message indicates that the system cannot write the specified environment variable because the bootflash memory or NVRAM has insufficient memory.

**Recommended Action** Clear the unnecessary environment variables by entering the **clear platform environment variable unsupported** command, and then reboot your switch.

# **IOSSYSMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS System Manager (IOSSYSMAN) messages.

#### **IOSSYSMAN-0**

Error Message C4K\_IOSSYSMAN-0-FATALERRORCRASH:Forced crash due to: [char]

**Explanation** This message indicates that the system has become unusable due to software and/or hardware failures.

**Recommended Action** Analyze the memory dump, if any, and determine the cause of the failure, or contact your technical support representative.

### **IOSSYSMAN-3**

Error Message C4K\_IOSSYSMAN-3-ENVVARNAMETOOLONG:Name of environment variable

**Explanation** This message indicates that the environment variable name is too long.

Recommended Action Enter the unset command to shorten it.

**Error Message** C4K\_IOSSYSMAN-3-OUTOFPACKETHEADERS:Cannot allocate buffer for a packet header

**Explanation** This message indicates that the system cannot allocate a buffer for the packet header.

**Recommended Action** Contact your technical support representative, and provide the configuration information for the switch.

#### **IOSSYSMAN-4**

**Error Message** C4K\_IOSSYSMAN-4-ENVVARTOOLONG: Value of env. variable [char] is too long

**Explanation** This message indicates that the software writes certain configuration values to the NVRAM. The variable name that is being stored is too long (greater than 4096 bytes).

**Recommended Action** Boot the system into ROMMON mode. At the ROMMON prompt, enter the **unset** command to change the environment variable name to a shorter name.

Error Message C4K\_IOSSYSMAN-4-NOSPACEFORENVVAR: Env. variable [char] cannot be set: no space

**Explanation** This message indicates that the software writes certain configuration values to the NVRAM. The switch has insufficient memory to write an environment variable.

**Recommended Action** Boot the system into ROMMON mode. At the ROMMON prompt, enter the **unset** command to remove the unused environment variables to reclaim the space.

# **IPROUTEMAN Messages**

This section contains the Catalyst 4500 series Cisco IOS IP Routing Manager (IPROUTEMAN) messages.

#### **IPROUTEMAN-3**

**Error Message** C4K\_IPROUTEMAN-3-CANTALLOCATEIPETHERADDRENTRY:IP Route Manager:No memory to add Router Port MAC Address, numInUse: [dec]

**Explanation** This message indicates that each router port in the system can listen to secondary MAC addresses as the "router's MAC address," which is a process that is useful for protocols like Hot Standby Routing Protocol (HSRP). The system has insufficient memory for holding secondary MAC addresses.

**Recommended Action** Boot the switch into ROMMON mode. At the ROMMON prompt, enter the **unset** command to remove the unused environment variables to reclaim the space.

**Error Message** C4K\_IPROUTEMAN-3-FIBADJMANDUPLICATEADJ:FIB Entry:Tried to create a duplicate adj for key [object-info]

**Explanation** This message indicates that a request was made to add a duplicate adjacency to the Forwarding Information Base (FIB) adjacency database.

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

**Error Message** C4K\_IPROUTEMAN-3-FIBADJMANINUSEDELETION:FIB Adjacency Manager:Attempted to delete FIB Adjacency Id [dec] which is in use

**Explanation** This message indicates that a request was made to delete an adjacency from the Forwarding Information Base (FIB) database while that adjacency was still referenced by a routing table entry.

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

**Error Message** C4K\_IPROUTEMAN-3-FIBADJMANNONEXISTENTDELETION:FIB Adjacency Manager:Attempted to delete FIB Adjacency Id [dec] which does not exist

**Explanation** This message indicates that a request was made to delete an adjacency from a platform Forwarding Information Base (FIB) that does not exist.

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

**Error Message** C4K\_IPROUTEMAN-3-FIBDUPLICATEENTRY:FIB:Attempt to create a duplicate FIB Entry for [ip-addr]

**Explanation** This message indicates that a request to add a duplicate routing table entry to the Forwarding Information Base (FIB) database was detected.

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

**Error Message** C4K\_IPROUTEMAN-3-FIBENTRYNOSUCHADJTODELETE:FIB Entry:Couldn't delete adj [ip-addr] from FIB Entry [ip-addr], no such adj.

**Explanation** This message indicates that a request was made to delete an adjacency from a routing table entry in the platform Forwarding Information Base (FIB), and the adjacency was not found.

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

**Error Message** C4K\_IPROUTEMAN-3-FIBENTRYTOOMANYADJ:FIBEntry: FIB Entry: Too many adjacencies on FIB Entry for [ip-addr], tried to add adj [ip-addr]

**Explanation** This message indicates that a request was made to add another adjacency to a routing table entry in the platform Forwarding Information Base (FIB) when that entry was already at the maximum allowed value.

**Error Message** C4K\_IPROUTEMAN-3-FIBNONEXISTENTDELETION:FIB:Attempted to delete FIB Entry Id [dec] which does not exist

**Explanation** This message indicates that a request was made to delete a nonexistent routing table entry from the platform Forwarding Information Base (FIB).

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

**Error Message** C4K\_IPROUTEMAN-3-NOMOREK2FIBADJS:K2FibUnicast:no more K2FibAdjs available, using punt adj instead for [ip-addr] route.

**Explanation** This message indicates that the hardware resources for adjacencies have been exhausted; switching will take place in the software instead. The switch performance might be degraded.

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

**Error Message** C4K\_IPROUTEMAN-3-VRFMANDUPLICATEVRF: Tried to create a duplicate VRF for key [object-info]

**Explanation** This message indicates that a request was made to add a duplicate VRF.

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

**Error Message** C4K\_IPROUTEMAN-3-VRFMANNONEXISTENTDELETION: Attempted to delete VRF with key [object-info] which does not exist

**Explanation** This message indicates that a request was made to delete a VRF that does not exist.

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

#### **IPROUTEMAN-4**

**Error Message** C4K\_IPROUTEMAN-4-CANTALLOCATEFIBENTRY: FIB: No memory available to allocate FIB Entry

**Explanation** This message indicates that the switch has insufficient memory to allocate space for the route that is associated with this network.

**Recommended Action** Install additional memory.

**Error Message** C4K\_IPROUTEMAN-4-VRFMANCANTALLOCATEVRF: No memory available to allocate VRF for key [object-info]

**Explanation** This message indicates that the switch has insufficient memory to allocate space for VRF.

**Recommended Action** Install additional memory.

# L3HWFORWARDING Messages

This section contains the Layer 3 hardware forwarding (L3HWFORWARDING) messages.

### L3HWFORWADING-2

**Error Message** C4K\_L3HWFORWARDING-2-FWDCAMFULL:L3 routing table is full. Switching to software forwarding.

**Explanation** This message indicates that the hardware routing table is full; forwarding takes place in the software instead. The switch performance might be degraded.

**Recommended Action** Reduce the size of the routing table. Enter the **ip cef** command to return to hardware forwarding.

### L3HWFORWADING-3

**Error Message** C4K\_L3HWFORWARDING-3-FTECONSISTENCYCHECKFAILED: FwdTableEntry Consistency Check Failed: index [dec]

**Explanation** This message indicates that there was a consistency check failure. If this error occurs frequently, it could indicate faulty hardware.

**Recommended Action** If you see this error message multiple times, contact your technical support representative.

**Error Message** C4K\_L3HWFORWARDING-3-FWDCAMCONSISTENCYCHECKFAILED: FwdCam Consistency Check Failed: index [dec]

**Explanation** This message indicates that there is a FwdCam Consistency Check Failure. If this error occurs frequently, it could indicate faulty hardware.

**Recommended Action** If you see this error message multiple times, contact your technical support representative.

**Error Message** C4K\_L3HWFORWARDING-3-FWDMEMPARITYERROR: Parity error in Forwarding Memory

**Explanation** This message indicates that there is a parity error in forwarding memory. This error message could indicate a transient hardware problem or a more permanent problem.

**Recommended Action** If you see this message multiple times, reboot the switch.

**Error Message** C4K\_L3HWFORWARDING-3-MASKTABLECONSISTENCYCHECKFAILED: MaskTable Consistency Check Failed: block [dec]

**Explanation** This message indicates that there was a mask table consistency check failure. If this error occurs frequently, it could indicate faulty hardware.

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

**Error Message** C4K\_L3HWFORWARDING-3-MASKTABLEREGIONCONSISTENCYCHECKFAILED: MaskTable Consistency Check Failed: region [object-info]

**Explanation** This message indicates that there is a consistency check failure in the mask table. The error is located in the region that is specified by [*object-info*].

Recommended Action This is an auxiliary message to help in troubleshooting. No action is required.

**Error Message** C4K\_L3HWFORWARDING-3-NOMOREK2FIBADJS:No hardware adjacency resource available for route [ip-addr]

**Explanation** This message indicates that the hardware adjacency table has insufficient memory to allocate the adjacency set for this route. Forwarding will take place in the software instead.

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

**Error Message** C4K\_L3HWFORWARDING-3-PBRBLOCKFAILEDTOADDFLATACE:K2FibPbrBlock:failed to add FlatAce [object-info] to block [dec]

**Explanation** This message indicates corruption within the policy-routing data structures. This memory corruption will probably crash the switch soon.

**Recommended Action** Contact your technical support representative immediately.

**Error Message** C4K\_L3HWFORWARDING-3-PBRBLOCKFAILEDTODELETEFLATACE:K2FibPbrBlock: failed to remove FlatAce [object-info] from block [dec]

**Explanation** This message indicates corruption within the policy-routing data structures. This memory corruption will probably crash the switch soon.

**Recommended Action** Contact your technical support representative immediately.

**Error Message** C4K\_L3HWFORWARDING-3-PBRFLATTENINGFAILED: Software resource exhaustion trying to load route-map for interface [char] ( [dec] ), elapsed time is [object-info] us

**Explanation** This message indicates that the switch has insufficient memory to process the access list for a route map.

**Error Message** C4K\_L3HWFORWARDING-3-PBRNOPBRCAMLEFT: K2FibPbr: attempted addition of [dec] blocks to PBR cam region failed, only managed to get [dec] for FRM [char]

**Explanation** This message indicates that there is insufficent memory to program a new route map.

**Recommended Action** Remove unused portions of the configuration to free the needed memory.

**Error Message** C4K\_L3HWFORWARDING-3-PBRPUNTINGPORT: Policy routing exceeded maximum TCAM usage, all IP unicast traffic on interface [char] will be switched in software.

**Explanation** This message indicates that the hardware policy-based routing forwarding engine has insufficient resources to handle the route map for the specified interface. All unicast IP traffic for that interface will be switched in the software instead.

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

### L3HWFORWADING-4

**Error Message** C4K\_L3HWFORWARDING-4-FLOWCACHEOUTOFSPACEFORFLOWCACHEENTRY: K2FibFlowCache: insufficient space to store flow of type [object-info] with label [packet-info]

**Explanation** This message indicates that the software cannot load a flow cache entry into the hardware due to insufficient memory.

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

### L3HWFORWADING-6

**Error Message** C4K\_L3HWFORWARDING-6-NOLONGERPBRPUNTINGPORT: Sufficient Policy Routing TCAM space has been found to handle PBR for interface [char] in hardware, no longer punting to software.

**Explanation** This message indicates that the hardware policy-based routing forwarding engine now has sufficient resources to handle the route map for the specified interface; hardware forwarding of unicast IP traffic has been restored.

# LINECARDMGMTPROTOCOL Messages

This section contains the module management protocol (LINECARDMGMTPROTOCOL) messages.

**Error Message** C4K\_LINECARDMGMTPROTOCOL-4-INITIALTIMEOUTWARNING: [char] - management request timed out.

**Explanation** This message indicates that there are communication problems with the module ASIC that fans out a single gigabit port to front-panel ports. A few messages are within tolerance levels.

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

**Error Message** C4K\_LINECARDMGMTPROTOCOL-4-ONGOINGTIMEOUTWARNING: [char] - consecutive management requests timed out.

**Explanation** This message indicates that there are persistent communication problems with the module ASIC that fans out a single gigabit port to front-panel ports.

Recommended Action Reinsert the module.

# **PKTPROCESSING Messages**

This section contains the packet processing (PKTPROCESSING) messages.

### **PKTPROCESSING-3**

**Error Message** C4K\_PKTPROCESSING-3-INVALIDVLAN:Packet received on invalid Vlan from hardware. PortId [dec] [l2-header] Vlan [dec] TagType [object-info]

**Explanation** This message indicates that the hardware has sent a packet to the CPU, but the receiving VLAN was incorrect. This message indicates a hardware problem.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PKTPROCESSING-3-OUTOFPACKETINFOTODRIVER: \"Ran out of memory to send packet information to the driver that enqueues packets to hardware\"

**Explanation** This message indicates that transmit packets are probably stuck in a queue, and some of the packets have been sent to multiple destinations. This event wastes memory, so new packet information cannot be allocated.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PKTPROCESSING-3-OUTOFPACKETSTODRIVER: \"Ran out of memory to send packets to the driver that enqueues packets to hardware\"

**Explanation** This message indicates that transmit packets are probably stuck in a queue, so new packets cannot be queued.

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

**Error Message** C4K\_PKTPROCESSING-3-REPLICATEDINVALIDVLAN: Replicated packet received on Vlan 0, CRC32 is valid. PortId [dec] [l2-header] Vlan [dec] TagType [object-info] count [object-info]

**Explanation** This message indicates that a replicated packet has been received on VLAN 0. The CRC32 packet is correct. If the count is high, there may be a hardware problem.

Recommended Action Contact your technical support representative.

**Error Message** C4K\_PKTPROCESSING-3-UNEXPECTEDOUTPUTACLHIT:Packet hit output ACL but sent to CPU as a result of hardware input Acl processing [l2-header] Port char] Vlan [dec]

**Explanation** This message indicates that an inconsistent hardware state might exist. A packet was sent to the CPU due to input ACL processing by the hardware. Unexpectedly, the packet encountered output ACL processing.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PKTPROCESSING-3-UNRECOGNIZEDEVENT:Packet received for an unimplemented event. CPU Subport [dec] TxQId [dec] PDD {[dec], [dec]}

**Explanation** This message indicates that the hardware has sent a packet to the CPU, but the software did not recognize the event that triggered the packet to be sent.

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

### **PKTPROCESSING-4**

Error Message C4K\_PKTPROCESSING-4-ERRORPACKET: [char]

**Explanation** This message indicates that the software is unable to process a packet; the packets have been forwarded to the CPU instead. Because this event is unexpected, the packet is being dropped.

**Error Message** C4K\_PKTPROCESSING-4-INVALIDACLACTION:Unable to determine the ACL action to take because we ran out of memory. Address: src [mac-addr] dst [mac-addr]

**Explanation** This message indicates that there is insufficient memory to create a list of actions to perform on the packet. As a result, the packet was dropped.

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

**Error Message** C4K\_PKTPROCESSING-4-UNKNOWNBRIDGEORROUTE:Unable to determine whether to route or bridge replicated software-processed packet with source address [mac-addr] and destination address [mac-addr]

**Explanation** This message indicates that when a replicated packet is sent to the software by an output ACL, the hardware does not indicate whether the packet needs to be bridged or routed.

When resources are exhausted or when the ACLs that are programmed in the hardware cannot handle processing directly (such as ACLs matching TCP flags), Supervisor Engine III sends the packets to the software for processing. If the software cannot determine whether to bridge or route, the packet might be dropped. This drop indicates that the packet was directed to a Hot Standby Routing Protocol (HSRP) router group MAC address.

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

**Error Message** C4K\_PKTPROCESSING-4-UNKNOWNSOURCELOCATIONFORBRIDGE:Unable to determine source host location of replicated software-processed packet with source address [mac-addr] and destination address [mac-addr]

**Explanation** This message indicates that when a replicated packet is sent by an output ACL to the software for processing, the hardware does not indicate the ingress port or VLAN ID.

When resources are exhausted or when the ACLs that are programmed in the hardware cannot handle processing directly (such as ACLs matching TCP flags), Supervisor Engine III sends the packets to the software for processing. Without the ingress port identifier, the supervisor engine might forward the packet back out the port on which it was received, possibly creating network loops or other problems. If the switch is unable to recognize the ingress port from other information, the packet is dropped.

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

**Error Message** C4K\_PKTPROCESSING-4-INVALIDACLACTIONFORSPANPORT: Unable to determine the ACL action to take because we ran out of memory. Address: src [mac-addr] dst [mac-addr]

**Explanation** This message indicates that there is insufficient memory to create a list of actions to perform on the packet. As a result, the packet was dropped.

### **PKTPROCESSING-5**

**Error Message** C4K\_PKTPROCESSING-5-NOTAPPLYINGACL:Not applying [input/output] Acl for packet [packet-info]

**Explanation** This message indicates that the software has not taken the ACL actions because it cannot determine the correct ACL entry that is indicated by the hardware. The hardware-provided index of the ACL content-addressable memory (CAM) indicates that the software needs to take the actions for the entry at that index. If the packet was queued in the hardware before being processed by the software, the index is out of date.

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

### **PKTPROCESSING-7**

**Error Message** C4K\_PKTPROCESSING-7-ADJLOOKUPFAILED:Draining the backed up packets in CPU queue when we cleaned up FIB adjacencies. Last drained packet's source address [ip-addr] and destination address [ip-addr]

**Explanation** This message indicates that this event can occur when the software processes the routed packets and the router port is shut down. The software can automatically repair adjacencies, but there was at least one packet in the queue that was lost.

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

# **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 the switch has insufficient memory for processing. Too many Layer 2 VLANs might have been configured in the system.

**Recommended Action** Remove Layer 2 VLANs or other 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 cannot obtain sufficient memory for the specified PM operation. [*char*] is the PM operation ID.

Error Message PM-2-VLAN\_ADD: Failed to add VLAN [dec] - [char].

**Explanation** This message indicates that the VLAN was not added to VTP, because of the reason stated in the text string.

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

#### **PM-3**

**Error Message** PM-3-ERR\_INCOMP\_PORT: [dec]/[dec] is set to inactive because [dec]/[dec] is a [char] port

**Explanation** This message indicates that the private host port cannot be configured with the trunk, private, promiscuous, and SPAN destination port on the same coil.

**Recommended Action** Try to configure the incompatible ports on different coils.

Error Message PM-3-INTERNALERROR:Port Manager Internal Software Error ([char]:[char]:[dec]:[char])

**Explanation** This message indicates that the access VLAN on the VMPS server is set to the same VLAN as a voice VLAN on the port. The access VLAN assignment on the VMPS server should be different from the voice VLAN.

Recommended Action Reset the VLAN assignments to remove the conflict.

#### **PM-4**

Error Message PM-4-BAD\_APP\_ID:an invalid application id [dec] was detected

**Explanation** This message indicates that the Port Manager has detected a request with an invalid application ID, where [*dec*] is the application ID.

**Recommended Action** Reset the VLAN assignments to remove the conflict.

**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 has detected an invalid request. The first [*char*] is the invalid request, and the second [*char*] is the application making the request.

**Recommended Action** Reset the VLAN assignments to remove the conflict.

Error Message PM-4-BAD\_CARD\_COOKIE: an invalid card cookie was detected

Explanation This message indicates that the Port Manager has detected an invalid request.

Recommended Action Reset the VLAN assignments to remove the conflict.

Error Message PM-4-BAD\_CARD\_SLOT: an invalid card slot [dec] was detected

**Explanation** This message indicates that the Port Manager has detected an invalid request on slot number [*dec*].

Recommended Action Reset the VLAN assignments to remove the conflict.

Error Message PM-4-BAD\_COOKIE: [char] was detected

**Explanation** This message indicates that the Port Manager has detected an invalid request.

Recommended Action Reset the VLAN assignments to remove the conflict.

**Error Message** PM-4-BAD\_HA\_ENTRY\_EVENT: Invalid Host access entry event ([dec]) is received

**Explanation** This message indicates that the entry event is not an add, delete, or update event (the only supported types).

**Recommended Action** Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the cause of the error from the error message or from the **show tech-support** command display, copy the error message exactly as it appears on the console or in the system log, contact your 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 has detected an invalid request.

**Recommended Action** Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the cause of the error from the error message or from the **show tech-support** command display, copy the error message exactly as it appears on the console or in the system log, contact your 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 has detected an invalid request on interface number [*dec*].

**Recommended Action** Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the cause of the error from the error message or from the **show tech-support** command display, copy the error message exactly as it appears on the console or in the system log, contact your technical support representative, and provide the representative with the gathered information.

Error Message PM-4-BAD\_VLAN\_COOKIE: an invalid vlan cookie was detected

**Explanation** This message indicates that the Port Manager has detected an invalid request.

**Recommended Action** Try a different VLAN on the device.

Error Message PM-4-BAD\_VLAN\_ID:an invalid vlan id [dec] was detected

**Explanation** This message indicates that the Port Manager has detected an invalid request. The invalid VLAN ID is [*dec*].

**Recommended Action** Try a different VLAN on the device.

Error Message PM-4-ERR\_DISABLE: [char] error detected on [char]

**Explanation** This message indicates that the Port Manager will put the interface in the errdisable state when it detects a misconfiguration or misbehavior. After the configured retry time (5 minutes by default), the system will attempt to recover the interface.

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

**Error Message** PM-4-ERR\_RECOVER:Attempting to recover from [char] err-disable state on [char]

**Explanation** This message indicates that the system is attempting to bring the interface back from the errdisable state.

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

Error Message PM-4-EXT\_VLAN\_INUSE: VLAN [dec] currently in use by [char]

**Explanation** This message indicates that the Port Manager has failed to allocate the VLAN for external use because the VLAN is currently occupied by another feature.

**Recommended Action** Reconfigure the feature to use another internal VLAN, or request another available VLAN.

Error Message PM-4-EXT\_VLAN\_NOTAVAIL: VLAN [dec] not available in Port Manager

**Explanation** This message indicates that the Port Manager has failed to allocate the requested VLAN. The VLAN might be used as an internal VLAN by other features.

**Recommended Action** Try a different VLAN on the device.

Error Message PM-4-INACTIVE: putting [char] in inactive state because [char]

**Explanation** This message indicates that the Port Manager has been blocked from creating a virtual port for the switch port and VLAN, causing the port to be inactive. The reason for this condition is specified in the error message.

Recommended Action Try a different VLAN on the device.

Error Message PM-4-INT\_FAILUP: [char] failed to come up. No internal VLAN available

**Explanation** This message indicates that the Port Manager has failed to allocate the internal VLAN, and the interface cannot start.

**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 has failed to find any available internal VLAN.

**Recommended Action** Delete some extended-range VLANs that are created by users, or remove some features that require internal VLAN allocation, such as a routed port.

Error Message PM-4-INVALID\_HOST\_ACCESS\_ENTRY: Invalid Host access entry type ([dec])
is received

**Explanation** This message indicates that the host access entry should be either configured or dynamic.

**Recommended Action** Reconfigure the host access entry using the correct type.

**Error Message** PM-4-LIMITS:Virtual port count for [char] exceeded the recommended limit of [dec]

**Explanation** This message indicates that there is a limit of 1200 virtual ports per module and a maximum of 4500 per switch. This limit was exceeded.

**Recommended Action** Reduce the number of trunks and VLANs in the module (or switch) that is specified in the error message. Make sure that the virtural port and VLAN port count is below the recommended limit.

Error Message PM-4-NO\_SUBBLOCK:No PM subblock found for [char]

**Explanation** This message indicates that a Port Manager (PM) subblock was not found for this interface.

**Recommended Action** Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the cause of the error from the error message or from the **show tech-support** command display, copy the error message exactly as it appears on the console or in the system log, contact your technical support representative, and provide the representative with the gathered information.

Error Message PM-4-PVLAN\_TYPE\_CFG\_ERR: Failed to set VLAN [dec] to a [char] VLAN

**Explanation** This message indicates that the platform has failed to set the private VLAN type.

**Recommended Action** Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the cause of the error from the error message or from the **show tech-support** command display, copy the error message exactly as it appears on the console or in the system log, contact your 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 has detected an invalid request. [*char*] is the application.

**Recommended Action** Reconfigure the host access entry using the correct type.

**Error Message** PM-4-UNKNOWN\_HOST\_ACCESS: Invalid Host access value ([dec]) is received

**Explanation** This message indicates that the host access table is being accessed with an invalid host access value.

**Recommended Action** Reconfigure the host access entry using the correct type.

Error Message PM-4-VMPS\_CFG: Dynamic access VLAN [dec] same as voice vlan on [char].

**Explanation** This message indicates that the access VLAN on the VMPS server is set to the same VLAN as the voice VLAN on the port.

**Recommended Action** Change the assignments so that the access VLAN assignment on the VMPS server is different from the voice VLAN.

Error Message PM-4-PORT\_BOUNCED: Port [dec]/[dec] was reactivated.

**Explanation** The Port Manager needed to perform a reactivation of a port in the link-down state during a switchover. A port is only reactivated when the port data structures lack consistency between the active and standby supervisors. The active ports in the link- down state were returned to the link-up state by the reactivation event.

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

## **PORTFANOUTASIC4X1000MAN Messages**

This section contains the Port Fan-out ASIC 4x1000 Manager (PORTFANOUTASIC4X1000MAN) messages. This ASIC takes a gigabit port and fans it out to four 1000-Mb ports.

Error Message C4K\_PORTFANOUTASIC4X1000MAN-4-DIAGSFAILED:[char] failed diagnostics

**Explanation** This message indicates that the module ASIC that is identified by [*char*] has failed diagnostics.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC4X1000MAN-4-FAILEDTOSENDLOOPBACKTRIES:[char] port [dec] failed to send packet in [dec] tries

**Explanation** This message indicates that for the *dec*th time, the module ASIC [*char*] was unable to send a loopback packet on module ASIC port [*dec*]. The switch has insufficient memory and will attempt to send a loopback packet only up to three times.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC4X1000MAN-4-UNEXPECTEDLOOPBACK: [char] sent out a loopback packet on port [dec], but it came back on port [dec]

**Explanation** This message indicates that the module ASIC diagnostics for [*char*] has sent a loopback packet out port [*dec*], and it came back on another port [*dec*]. This condition is rare because the loopback is internal to the hardware.

Recommended Action Contact your technical support representative.

## **PORTFANOUTASIC8X1000HW Messages**

This section contains the Port Fan-out ASIC 8x1000 Hardware (PORTFANOUTASIC8X1000HW) message. This ASIC takes a gigabit port and fans it out to eight 1000-Mb ports.

### PORTFANOUTASIC8X1000HW-3

**Error Message** C4K\_PORTFANOUTASIC8X1000HW-3-UNKNOWNDEVICEID: [char] - Linecard Management Protocol info register has unknown device id [hex]

**Explanation** This message indicates that each module ASIC has an information register on it that contains the device ID field (DID) of the ASIC. When the module ASIC driver read this register, it discovered that the DID type was invalid.

The [*char*] field of the DID might contain  $\langle asic \cdot code \rangle(x)$  where x is the gigabit port of the switching engine to which the module ASIC is attached. The hex field of the DID contains the device ID. The expected value is 0x0450.

**Recommended Action** Contact your technical support representative.

### PORTFANOUTASIC8X1000HW-4

Error Message C4K\_PORTFANOUTASIC8X1000MAN-4-DIAGSFAILED: [char] failed diagnostics

Explanation This message indicates that the module ASIC identified by [char] has failed diagnostics.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC8X1000MAN-4-FAILEDTOSENDLOOPBACKTRIES: [char] port [dec] failed to send packet in [dec] tries

**Explanation** This message indicates that the module ASIC [*char*] is unable to send a loopback packet on the module ASIC interface [*dec*] and this is the *decth* time that it has tried to send and failed. The switch attempts to send a loopback packet only up to three times. The switch is out of memory.

Recommended Action Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC8X1000MAN-4-UNEXPECTEDLOOPBACK: [char] sent out a loopback packet on port [dec], but it came back on port [dec]

**Explanation** This message indicates that the module ASIC diagnostics for [char] has sent a loopback packet out interface [dec] and has come back on another interface [dec]. This condition is unexpected because the loopback is internal to the hardware.

**Recommended Action** Contact your technical support representative.

## PORTFANOUTASIC8X1000HW-7

**Error Message** C4K\_PORTFANOUTASIC8X1000MAN-7-LOSTPACKET: [char] port [dec] lost one or more packets, [dec] transmitted [dec] received

Explanation A loopback packet was lost during online diagnostics of the module ASIC [char].

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

# **PORTFANOUTASIC8X100MAN Messages**

This section contains the Port Fan-out ASIC 8x100 Manager (PORTFANOUTASIC8X100MAN) messages. This ASIC takes a gigabit port and fans it out to eight 100-Mb ports.

### **PORTFANOUTASIC8X100MAN-4**

Error Message C4K\_PORTFANOUTASIC8X100MAN-4-DIAGSFAILED: [char] failed diagnostics

**Explanation** This message indicates that the module ASIC that is identified by [*char*] has failed diagnostics.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC8X100MAN-4-FAILEDTOSENDLOOPBACKTRIES:[char] port [dec] failed to send packet in [dec] tries

**Explanation** This message indicates that for the *decth* time, the module ASIC [*char*] is unable to send a loopback packet on the module ASIC port [*dec*]. The switch has insufficient memory; it will attempt to send a loopback packet up to three times.

**Recommended Action** Contact your technical support representative.

**Error Message** C4K\_PORTFANOUTASIC8X100MAN-4-UNEXPECTEDLOOPBACK: [char] sent out a loopback packet on port [dec], but it came back on port [dec]

**Explanation** This message indicates that the module ASIC diagnostics for [*char*] has sent the loopback packet out port [*dec*] and has come back on another interface [*dec*]. This condition is rare because the loopback is internal to the hardware.

Recommended Action Contact your technical support representative.

#### PORTFANOUTASIC8X100MAN-7

**Error Message** C4K\_PORTFANOUTASIC8X100MAN-7-LOSTPACKET:[char] port [dec] lost a packet

**Explanation** This message indicates that a loopback packet was lost during online diagnostics of this port.

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

## **QOS Messages**

This section contains the quality of service (QOS) message.

Error Message C4K\_QOS-4-OUTOFPOLICERRESOURCES:Out of memory to allocate a policer

**Explanation** This message indicates that the software has failed to allocate memory for a policer while processing the QoS configuration, possibly because the policer configuration has exceeded its maximum supported limit.

**Recommended Action** Remove policers from other unwanted policies, and retry the operation. Resend the command when other Telnet sessions are not sending debugging commands.

## **REDUNDANCY Messages**

This section contains the supervisor engine redundancy (REDUNDANCY) messages.

#### **REDUNDANCY-2**

**Error Message** C4K\_REDUNDANCY-2-IOS\_VERSION\_CHECK\_FAIL: [char]

**Explanation** This message indicates that the active and standby supervisor engine software is different. In this condition, redundancy operations are not guaranteed.

**Recommended Action** Configure the active and standby supervisor engines to use the same version of software.

Error Message C4K\_REDUNDANCY-2-IOS\_VERSION\_INCOMPATIBLE:[char]

**Explanation** The system has detected an incompatible redundancy condition. The active supervisor engine is running Cisco IOS Release 12.2 or later releases and the standby supervisor engine is running Cisco IOS Release 12.1. The system will reset the standby supervisor engine.

**Recommended Action** Configure the switch so that the active and standby supervisor engines are running the same release of Cisco IOS software.

Error Message C4K\_REDUNDANCY-2-NON\_SYMMETRICAL\_REDUNDANT\_SYSTEM: [char]

**Explanation** This message indicates that the active and standby supervisor engine hardware is different. In this condition, redundancy operations are not guaranteed.

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

Error Message C4K\_REDUNDANCY-2-POSTFAIL: POST failure on [char] supervisor detected

**Explanation** This message indicates that the active supervisor engine has failed POST. The current standby supervisor engine resets the current active supervisor engine to standby and attempts to become the active supervisor engine.

**Recommended Action** Run offline diagnostics on the failed supervisor engine to isolate the problem.

#### **REDUNDANCY-3**

**Error Message** C4K\_REDUNDANCY-3-COMMUNICATION: Communication with the peer Supervisor has been [char]

**Explanation** This message indicates that the status of the peer supervisor engine communication path has changed.

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

**Error Message** C4K\_REDUNDANCY-3-PEER\_RELOAD: The peer Supervisor is being reset because [char]

**Explanation** This message indicates that the supervisor engine was reset for the reason specified by [char]. See the reported error message for the specific reason. This allows recovery from an indeterminate standby state.

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

Error Message C4K\_REDUNDANCY-3-SIMPLEX\_MODE: The peer Supervisor has been lost

**Explanation** This message indicates that the peer supervisor engine is absent, and the switch has shifted to nonredundant mode.

### **REDUNDANCY-4**

**Error Message** C4K\_REDUNDANCY-4-CONFIGSYNCFAIL:Persistent-config Sync to Standby supervisor failed.

**Explanation** This message indicates that the active supervisor engine has failed to receive a confirmation message from the standby supervisor engine. There is a potential problem with the standby supervisor engine.

Recommended Action Contact your technical support representative.

**Error Message** C4K\_REDUNDANCY-4-KEEPALIVE\_WARNING: Keepalive messages from peer Supervisor are missing for [dec] seconds

**Explanation** This message indicates that keepalive messages have not been sent from the peer supervisor engine. If the situation persists and the keepalive messages do not resume, the peer supervisor engine will be eventually reset. This message is logged for every third missed keepalive message.

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

## **REDUNDANCY-5**

 $\ensuremath{\mathsf{Error}}\xspace{ Message C4K_REDUNDANCY-5-CONFIGSYNC:The [char] has been successfully synchronized to the standby supervisor$ 

**Explanation** This message indicates that the configuration has been successfully synchronized to the standby supervisor engine. [*char*] can be either a private configuration or a startup configuration.

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

**Error Message** C4K\_REDUNDANCY-5-CONFIGSYNC\_RATELIMIT: The [char] has been successfully synchronized to the standby supervisor

**Explanation** This message indicates that the configuration has been successfully synchronized to the standby supervisor engine. This is a rate-limited message. These messages are logged at 1-minute intervals, rather than continuously as with many other messages.

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

#### **REDUNDANCY-6**

Error Message C4K\_REDUNDANCY-6-ACTIVESUPNOTFOUND: Active supervisor not found.

**Explanation** This message is displayed on the redundant supervisor engine when it fails to communicate with the active supervisor engine.

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

**Error Message** C4K\_REDUNDANCY-6-ATTEMPTINGTOBECOMEACTIVE: Attempting to become active supervisor.

**Explanation** This message is displayed on the standby supervisor engine when it fails to communicate with the active supervisor engine and attempts to take over as the active supervisor engine.

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

Error Message C4K\_REDUNDANCY-6-INIT: Initializing as [char] supervisor

**Explanation** This message indicates that a supervisor engine that you are connected to is currently initializing as either the active or standby supervisor engine.

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

Error Message C4K\_REDUNDANCY-6-MODE: [char] supervisor initializing for [char] mode

**Explanation** This message indicates that the supervisor engine that you are not directly connected to is currently initializing as either the active or standby supervisor engine in RPR mode.

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

Error Message C4K\_REDUNDANCY-6-SWITCHOVER: Switchover activity detected

**Explanation** This message indicates that the standby supervisor engine has detected switchover activity.

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

Error Message C4K\_REDUNDANCY-6-DUPLEX\_MODE: The peer Supervisor has been detected

**Explanation** This mesage indicates that a peer supervisor engine has been detected, and the switch has shifted to duplex mode.

# **SERVICECARDMAN Messages**

This section contains the service card (SERVICECARDMAN) messages.

## **SERVICECARDMAN-3**

**Error Message** C4K\_SERVICECARDMAN-3-OUTOFMEMORY: Out of memory - cannot allocate internal buffers for module [dec]

Explanation This message indicates that the switch has run out of temporary buffers.

Recommended Action If this message reoccurs, reset the switch.

### **SERVICECARDMAN-6**

C4K\_SERVICECARDMAN-3-OUTOFMEMORY: Out of memory - cannot allocate internal buffers for module [dec]

**Explanation** This message indicates that the switch has run out of temporary buffers.

Recommended Action If this message reoccurs, reboot the switch.

**Error Message** C4K\_SERVICECARDMAN-6-EVENTTIMEOUT: Bringup Handshake timed out for module [dec]

**Explanation** This message indicates that the service card did not receive a response from the module in the expected time when trying to establish a connection at boot.

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

Error Message C4K\_SERVICECARDMAN-6-NEWCONFIGVBUF: New Vbuf message for module [dec]

**Explanation** This message indicates that the module has received a new buffer allocation message.

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

**Error Message** C4K\_SERVICECARDMAN-6-RESETNOTIFY: Reset notification message received for module [dec]

**Explanation** This message indicates that the module has received a reset notification for the module.

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

**Error Message** C4K\_SERVICECARDMAN-6-RUNREADY: Run ready notification message received for module [dec]

**Explanation** This message indicates that the module has received a run ready notification for the module.

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

## SFF8472 Messages

This section contains the floating-point subsystem (SFF8472) messages.

Error Message SFF8472-2-NOMEM: Not enough memory available for [char]

**Explanation** This message indicates that the SFF8472 subsystem could not obtain the memory that it needed.

**Recommended Action** Contact your technical support representative.

Error Message SFF8472-3-INTERNAL\_ERROR: [char]

**Explanation** This message indicates that the SFF8472 subsystem encountered an internal software error. The error message contains text that can be used to help identify the cause of the problem.

**Recommended Action** Contact your technical support representative.

Error Message SFF8472-3-THRESHOLD\_VIOLATION: [char]: [char]; Operating value: [char]

**Explanation** This message indicates that there has been a threshold violation as specified in the message.

Recommended Action Contact your technical support representative.

**Error Message** SFF8472-3-UNEXPECTEDEVENT: Process received unknown event (maj [hex] min [hex]).

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

**Recommended Action** Contact your technical support representative.

Error Message SFF8472\_FLOAT-3-INTERNAL\_ERROR: [char]

**Explanation** This message indicates that the SFF8472 floating-point subsystem encountered an internal software error. The error message contains text that can be used to help identify the cause of the problem.

**Recommended Action** Contact your technical support representative.

## **SPANTREE Messages**

This section contains the Spanning Tree Protocol (SPANTREE) messages.

## **SPANTREE-2**

**Error Message** SPANTREE-2-BLOCK\_BPDUGUARD:Received BPDU on port [char] with BPDU Guard enabled. Disabling port.

**Explanation** This message indicates that a BPDU was received in the specified interface that has the spanning tree BPDU guard feature enabled. As a result, the interface was administratively shut down.

**Recommended Action** Remove the device sending BPDUs, or disable the BPDU guard feature. BPDU guard can be locally configured on the interface or globally configured on all ports that have PortFast enabled. After the conflict has been resolved, reenable the interface by entering the **no shutdown** command in interface configuration mode.

**Error Message** SPANTREE-2-BLOCK\_PVID\_LOCAL: Blocking [char] on [char]. Inconsistent local vlan.

**Explanation** This message indicates that the spanning tree port that is associated with the listed spanning tree instance [*char*] and interface [*char*] is held in spanning tree blocking state until the port VLAN ID (PVID) inconsistency is resolved. The listed spanning tree instance is that of the native VLAN ID of the listed interface.

**Recommended Action** Verify that the configuration of the native VLAN ID is consistent on the interfaces at each end of the 802.1Q trunk connection. When the configuration is consistent, spanning tree automatically unblocks the interfaces.

**Error Message** SPANTREE-2-BLOCK\_PVID\_PEER: Blocking [char] on [char]. Inconsistent peer vlan.

**Explanation** This message indicates that the spanning tree port (with spanning-tree port ID [*char*]) that is associated with the listed instance and interface is held in blocking state until the port VLAN ID (PVID) inconsistency is resolved. The listed spanning tree instance is that of the native VLAN ID of the interface on the peer switch to which the listed interface is connected.

**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. When corrected, spanning tree automatically unblocks the interfaces.

**Error Message** SPANTREE-2-CHNL\_MISCFG:Detected loop due to etherchannel misconfiguration of [chars] [chars]

**Explanation** This message indicates that a misconfigured channel group (with channel group ID [*chars*]) was detected. For example, the 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 are successfully bundled.

**Recommended Action** Locate 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. After 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 [char] on [char].

**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 an unidirectional link failure, the interface is put into blocking state and marked as loop guard inconsistent in order to prevent possible loops from being created.

**Recommended Action** Use the **show spanning-tree inconsistentports** command to review the list of interfaces with loop guard inconsistencies. Determine why devices that are connected to the listed ports are not sending BPDUs. One reason could be that they do not run the Spanning Tree Protocol; in this case, you should disable loop guard in the inconsistent interfaces or start the Spanning Tree Protocol on the other side of the links, depending on the context. Another reason could be a failure in the cable. If the link has a failure that makes it unidirectional (you can transmit, but you cannot receive), you should replace the old cable with a new cable.

Error Message SPANTREE-2-LOOPGUARD\_CONFIG\_CHANGE: Loop guard [char] on port [char].

**Explanation** This message indicates that the spanning tree loop guard configuration for the listed interface has been changed. If enabled, the interface will be put into blocking state and marked as loop guard inconsistent when the message age timer expires because no BPDUs were received from the designated bridge. This feature is used to detect unidirectional links.

**Recommended Action** Verify that this is the desired configuration for the listed interface. Correct it if this is not the desired configuration; otherwise, no further action is required.

**Error Message** SPANTREE-2-LOOPGUARD\_UNBLOCK: Loop guard unblocking port [char] on [char].

**Explanation** This message indicates that the listed interface has received a BPDU, and if the inconsistency was due to an unidirectional link failure, the problem does not exist anymore. The loop guard inconsistency is cleared for the interface, which is taken out of the blocking state.

**Error Message** SPANTREE-2-PVSTSIM\_FAIL: Superior PVST BPDU received on VLAN [dec] port [char]

**Explanation** This message indicates that when a PVST+ switch is connected to an MST switch, the IST root (MSTOO) becomes the root for all PVST+ spanning trees. Looping occurs if any PVST+ spanning tree has a root with a better preference than IST. To prevent looping, the port, which is on the MST switch that receives the superior message from the PVST+ side, is blocked by root guard.

When STP is converging after a new switch or a switch port is added to the topology, this condition occurs transiently. The port unblocks automatically in such cases.

**Recommended Action** If the port remains blocked, identify the root bridge as reported in the message, and configure a worse priority for the VLAN spanning tree. There could be better PVST roots than the message indicates, and the port will not recover until all such roots are cleared. If you are unsure whether the roots are cleared, disable and enable the port again.

Error Message SPANTREE-2-RECV\_1Q\_NON\_1QTRUNK: Received 802.1Q BPDU on non 802.1Q trunk [char] [char].

**Explanation** This message indicates that a Shared Spanning Tree Protocol (SSTP) bridge protocol data unit (BPDU) was received on the listed interface. The interface was in trunk mode but was not using 802.1Q encapsulation. The interface ID is [*char*].

**Recommended Action** Verify that the configuration and operational state of the listed interface and 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.

**Error Message** SPANTREE-2-RECV\_BAD\_TLV:Received SSTP BPDU with bad TLV on [char][char].

**Explanation** This message indicates that the listed interface has received an SSTP BPDU that was missing the VLAN ID tag. The BPDU is discarded. [*char*] is the interface ID.

**Recommended Action** If the error message reappears, copy the message exactly as it appears on the console or in the system log, contact your 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 [char] [char]

**Explanation** This message indicates that the listed interface has 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 condition occurs when the native VLAN is not consistently configured on both ends of an 802.1Q trunk. [*dec*] is the VLAN ID. The interface ID is [*char*].

**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 the configuration is consistent, spanning tree automatically unblocks the interfaces.

Error Message SPANTREE-2-ROOTGUARD\_BLOCK: Root guard blocking port [char] on [char].

**Explanation** This message indicates that a BPDU was received on the listed interface that advertised a spanning tree root bridge that was superior to the one already in use. The interface is put into a blocking state and marked as root guard inconsistent to prevent a suboptimal spanning tree topology from forming.

**Recommended Action** Enter the **show spanning-tree inconsistentports** command to review the list of interfaces with root guard inconsistencies. Determine why devices that are connected to the listed ports are sending BPDUs with a superior root bridge, and then take action to prevent further occurrences. Once the invalid BPDUs have been stopped, the interfaces automatically recover and resume normal operation. By looking at the configuration, ensure that it is appropriate to enable root guard on the interface.

Error Message SPANTREE-2-ROOTGUARD\_CONFIG\_CHANGE: Root guard [char] on port [char].

**Explanation** This message indicates that the spanning tree root guard configuration for the listed interface has been changed. If root guard is enabled, any BPDU that is received on the interface that advertises a superior spanning tree root bridge to the one that is already in use will cause the interface to be put into blocking state and marked as root guard inconsistent.

**Recommended Action** Verify that this is the correct configuration for the listed interface. If this is not the correct configuration, change the configuration to one that is appropriate for the interface.

**Error Message** SPANTREE-2-ROOTGUARD\_UNBLOCK:Root guard unblocking port [char] on [char].

**Explanation** This message indicates that the listed interface is no longer receiving BPDUs that are advertising a superior root bridge. The root guard inconsistency is cleared for the interface and then is taken out of the blocking state if appropriate.

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

**Error Message** SPANTREE-2-UNBLOCK\_CONSIST\_PORT: Unblocking [char] on [char]. Port consistency restored.

**Explanation** This message indicates that the port VLAN ID and/or port type inconsistencies have been resolved. The Spanning Tree Protocol will unblock the listed interface of the spanning tree instance. The interface ID is [*char*].

#### **SPANTREE-3**

**Error Message** SPANTREE-3-BAD\_PORTNUM\_SIZE:Rejected an attempt to set the port number field size to [dec] bits (valid range is [dec] to [dec] bits).

**Explanation** This message indicates that the spanning tree port identifier is a 16-bit field that is, by default, divided evenly between the port priority and the port number. Each subfield is 8 bits wide, allowing the port number field to represent port numbers between 1 and 255. On systems with more than 255 ports, the STP subsystem must increase the size of the port number portion of the port ID to support the greater number of ports. This condition occurs at system initialization because the maximum number of ports on a particular platform will not change. This error occurs because of an error in the platform-specific code that caused it to request more (or fewer) bits than were possible.

**Recommended Action** Contact your technical support representative.

**Error Message** SPANTREE-3-PORT\_SELF\_LOOPED: [char] disabled.- received BPDU src mac ([mac-addr]) same as that of interface

**Explanation** This message indicates that a BPDU with a source MAC address that matches the address assigned to the listed interface was received. A port looped back on itself, possibly due to a diagnostic cable that was plugged into the interface. The interface is administratively shut down. [*char*] is the interface ID.

**Recommended Action** Check the interface configuration and any cable that is plugged into the interface. Once the problem is resolved, reenable the interface by entering the **no shutdown** command on the interface.

#### **SPANTREE-4**

Error Message SPANTREE-4-PORT\_NOT\_FORWARDING: [char] [char] [char] [char]

**Explanation** This message indicates that the specified interface is not in the forwarding state and forwarding packets.

Recommended Action Contact your technical support representative.

#### **SPANTREE-5**

Error Message SPANTREE-5-EXTENDED\_SYSID: Extended SysId [char] for type [char]

**Explanation** This message indicates that the extended system ID feature has been either enabled or disabled for the given type of spanning tree. If the feature was enabled, the spanning tree instance identifier is stored in the lower portion of the bridge ID priority field; this will cause the allowed values for the bridge priority to be limited to the range of 0 to 61,440, in increments of 4096. If the

feature was disabled, the bridge ID priority field consists entirely of the configured priority, but some spanning tree features might not be available on a given platform (for example, 4096 VLAN support).

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

#### **SPANTREE-6**

**Error Message** SPANTREE-6-PORT\_STATE: Port [char] instance [dec] moving from [char] to [char]

**Explanation** This message indicates that the spanning tree port has changed to another state.

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

#### **SPANTREE-7**

**Error Message** SPANTREE-7-BLOCK\_PORT\_TYPE: Blocking [char] on [char]. 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. The port ID is [*char*].

**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 type (ISL or 802.1Q). When these parameters are consistent, spanning tree automatically unblocks the interface.

Error Message SPANTREE-7-RECV\_1Q\_NON\_TRUNK: Received 802.1Q BPDU on non trunk [char]
[char].

**Explanation** This message indicates that an SSTP BPDU was received on the listed interface, which is not an operational trunking interface. The interface ID is [*char*].

**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 type (none, ISL, or 802.1Q). Once these parameters are consistent, spanning tree automatically unblocks the interface.

**Error Message** SPANTREE\_FAST-7-PORT\_FWD\_UPLINK: [char] [char] moved to Forwarding (UplinkFast).

**Explanation** This message indicates that the listed interface has been selected as the new root port for the listed spanning tree instance.

# SPANTREE\_VLAN\_SW Messages

This section contains the spanning tree fast convergence (SPANTREE\_VLAN\_SW) message.

**Error Message** SPANTREE\_VLAN\_SW-2-MAX\_INSTANCE:Platform limit of [dec] STP instances exceeded. No instance created for [char] (port [char]).

**Explanation** This message indicates that the number of currently active VLAN spanning tree instances has reached a platform-specific limit. No additional VLAN instances will be created until the number of instances drops below that limit.

**Recommended Action** Reduce the number of currently active spanning tree instances by either disabling some of the instances or deleting the VLANs that are associated with them. You need to manually enable those spanning trees that cannot be created due to limited instances.

# STORM\_CONTROL Messages

This section contains the broadcast storm control (STORM\_CONTROL) messages.

**Error Message** STORM\_CONTROL-3-FILTERED: A [char] storm detected on [char]. A packet filter action has been applied on the interface.

**Explanation** This message indicates that the amount of traffic that has been detected on the interface has exceeded the configured threshold values. The system filters excess traffic when a packet is received. Packet traffic is not being forwarded by the system.

**Recommended Action** Determine and fix the root cause of the excessive traffic on the interface.

**Error Message** STORM\_CONTROL-3-SHUTDOWN: A packet storm was detected on [char]. The interface has been disabled.

**Explanation** This message indicates that the amount of traffic that has been detected on the interface has exceeded the configured threshold values. Because the interface was configured to be shut down if a packet storm event is detected, it has been placed in an errdisable state.

**Recommended Action** If automatic recovery is preferred, the errdisable recovery mechanism can be used. Determine and fix the root cause of the excessive traffic on the interface.

## **STORE Messages**

This section contains the storage (STORE) message.

Error Message C4K\_STORE-2-OUTOFCHUNKS:Out of chunks of memory

**Explanation** This message indicates that the system has insufficient memory.

Recommended Action Reboot the switch. If this message reoccurs, add additional memory.

## SUPERVISOR Messages

This section contains the supervisor (SUPERVISOR) messages.

### **SUPERVISOR-2**

**Error Message** C4K\_SUPERVISOR-2-ALLCHASSISSEEPROMSINVALID: Contents of all chassis's serial eeproms are invalid

**Explanation** This message indicates that the contents of all of the serial EEPROMs in the chassis are invalid; they might have a bad checksum. In a nonredundant chassis, the single serial EEPROM is bad. If this is a redundant chassis, both serial EEPROMs are bad.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your techincal support representative. You will probably need to return the switch for service.

**Error Message** C4K\_SUPERVISOR-2-MUXBUFFERNOTPRESENT:Mux buffer (WS-X4K-MUX) [dec] is not present

**Explanation** This message indicates that the WS-X4K-MUX line card is either not connected to the backplane properly or is not present. If the line card present in this slot cannot be identified, its SEEPROM cannot be read and it will be unusable.

**Recommended Action** Contact your technical support representative; you will probably need to return the backplane for repair.

**Error Message** C4K\_SUPERVISOR-2-SUPERVISORSEEPROMINVALID:Contents of supervisor's serial eeprom are invalid

**Explanation** This message indicates that the contents of the supervisor engine's serial EEPROM are invalid (bad checksum, for example). This condition could occur if the supervisor engine is seated incorrectly.

**Recommended Action** Remove and reinsert the supervisor engine. If that action does not work, power cycle the switch. If the switch still fails to come online, contact your technical support representative. You will probably need to return the supervisor engine for repair.

#### **SUPERVISOR-3**

**Error Message** C4K\_SUPERVISOR-3-BACKPLANESEEPROMREADFAILED:Failed to read backplane's serial eeprom, read [dec], expected size [dec]

**Explanation** This message indicates that a failure has occurred when reading the backplane serial EEPROM.

**Recommended Action** Power cycle the switch. If that does not resolve the problem, contact your technical support representative. You will probably need to return the backplane for repair.

**Error Message** C4K\_SUPERVISOR-3-CHASSISTYPEMISMATCHINSPROM:Chassis type in supervisor's FPGA register and chassis' serial eeprom don't match

**Explanation** This message indicates that the chassis type in the field programmable gate array (FPGA) register on the supervisor engine does not match the type that is listed in the serial EEPROM on the chassis. This message should occur only in a prototype switch used in an early field trial.

**Recommended Action** Check the chassis serial EEPROM information. Contact your technical support representative; you may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-CLOCKMODULESEEPROMINVALID:Invalid Clock Module seeprom data

**Explanation** This message indicates that the clock module serial EEPROM cannot be read or has not been programmed. This message should occur only in a prototype switch used in an early field trial.

**Recommended Action** Check the chassis serial EEPROM information. Contact your technical support representative; you may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-CLOCKMODULESEEPROMREADFAILED: Failed to read clock module's seeprom

**Explanation** This message indicates that a failure has occurred while reading the clock module serial EEPROM. This message should occur only in a prototype switch used in an early field trial.

**Recommended Action** Check the chassis serial EEPROM information. Contact your technical support representative; you may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-FANTRAYSEEPROMREADFAILED: Failed to read fan tray's seeprom

**Explanation** This message indicates that a failure has occurred while reading the system fan tray serial EEPROM. This message should occur only in a prototype switch used in an early field trial.

**Recommended Action** Check the chassis serial EEPROM information. Contact your technical support representative; you may need to return some switch components for repair or replacement.

Error Message C4K\_SUPERVISOR-3-FANTRAYSEEPROMINVALID:Invalid fan tray seeprom data

**Explanation** This message indicates that the fan tray serial EEPROM cannot be read or has not been programmed. This message should occur only in a prototype switch used in an early field trial.

**Recommended Action** Check the chassis serial EEPROM information. Contact your technical support representative; you may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-FIRSTCHASSISSEEPROMINVALID: Contents of chassis's first serial eeprom are invalid

**Explanation** This message indicates that the contents of the first serial EEPROM are invalid (for example, a bad checksum). This message appears only on a Catalyst 4507R switch using the redundancy feature, which means that there is a second serial EEPROM.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-INVALIDMGMTETHERNETADDR:Chassis SPROM not set or invalid MAC address range

**Explanation** This message indicates that the out-of-band management port uses a MAC address from the system MAC address range. The contents of the serial programmable read-only memory (SPROM) are bad, so the management port does not have a MAC address.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-MUXBUFFERLOOPBACKFAILED: Failed to put [char] supervisor's module [dec] muxbuffers in loopback

**Explanation** This message indicates that the serial-to-wire write operation to put the line card mux buffers in loopback has failed. This might indicate problems with the line card mux buffers in the Catalyst 4500 series chassis.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-MUXBUFFERREADLOOPBACKFAILED: Failed to read whether [char] supervisor's module [dec] muxbuffers are in loopback

**Explanation** This message indicates that the serial-to-wire write operation to put the line card mux buffers in loopback has failed. This might indicate problems with the line card mux buffers in the Catalyst 4500 series chassis.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-MUXBUFFERSEEPROMINVALID:Invalid data in mux buffer [dec]'s serial eeprom

**Explanation** This message indicates that the mux buffer serial EEPROM cannot be read or has not been programmed.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-MUXBUFFERSEEPROMREADFAILED: Failed to read mux buffer [dec]'s serial eeprom

**Explanation** This message indicates that a failure has occurred while reading the mux buffer serial EEPROM.

**Recommended Action** Power cycle the switch. If the serial EEPROM is still invalid, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-NETFLOWCARDSEEPROMINVALID: Invalid Netflow Services Card seeprom data

**Explanation** This message indicates that the serial EEPROM on the NetFlow Services Card cannot be read or has not been programmed.

**Recommended Action** For more information, enter the **sprom read nffc** command at the ROMMON prompt.

**Error Message** C4K\_SUPERVISOR-3-NETFLOWCARDSEEPROMREADFAILED: Netflow Services Card seeprom read failed

**Explanation** This message indicates that a reading of the serial EEPROM on the NetFlow Services Card has failed.

**Recommended Action** For more information, enter the **sprom read nffc** command at the ROMMON prompt.

**Error Message** C4K\_SUPERVISOR-3-NETFLOWCARDSEEPROMUNKNOWNTYPE: Unknown Netflow Services Card revision: Read fru major/minor ([hex],[hex]) but expected ([hex],[hex]).

**Explanation** This message indicates that the serial EEPROM on the NetFlow Services Card has indicated a revision that is not compatible with this release of software. The card will be ignored.

**Recommended Action** For more information, enter the **sprom read nffc** command at the ROMMON prompt.

Error Message C4K\_SUPERVISOR-3-OLDWSX4124:WS-X4124-FX-MT revision [dec].[dec],
which is < 1.6, is not supported</pre>

**Explanation** This message indicates that the WS-X4124-FX-MT modules with hardware revisions 1.6 or earlier are not supported.

**Recommended Action** Replace this module with a WS-X4124-FX-MT module revision 1.6 or later.

**Error Message** C4K\_SUPERVISOR-3-POWERSUPPLYSEEPROMREADFAILED: Failed to read power supply [dec]'s serial eeprom

**Explanation** This message indicates that a failure has occurred while reading the power supply serial EEPROM.

**Recommended Action** Reinsert the power supply. If that does not work, replace the old power supply with a new power supply.

**Error Message** C4K\_SUPERVISOR-3-POWERSUPPLYSEEPROMINVALID:Invalid data in power supply [dec]'s serial eeprom

**Explanation** This message indicates that the power supply serial EEPROM cannot be read or has not been programmed.

**Recommended Action** Reinsert the power supply. If that does not work, replace the old power supply with a new power supply.

**Error Message** C4K\_SUPERVISOR-3-RETIMERDISABLEFAILED: Failed to disable the retimer of the active supervisor's uplink.

**Explanation** This message indicates that the retimer on the active supervisor engine cannot be initialized. In a redundant system, you might see packets that are transmitted out the active supervisor engine's nonactive uplink.

**Recommended Action** Disconnect the second uplink on the active supervisor engine.

**Error Message** C4K\_SUPERVISOR-3-RETIMERINITFAILED: Failed to initialize the retimer of the active supervisor's uplink.

**Explanation** This message indicates that the retimer on the active supervisor engine cannot be initialized. In a redundant system, you might see packets that are transmitted out the active supervisor engine's nonactive uplink.

**Recommended Action** Disconnect the second uplink on the active supervisor engine.

**Error Message** C4K\_SUPERVISOR-3-SEEPROMREADFAILED:Failed to read supervisor's serial eeprom, try reinserting supervisor

**Explanation** This message indicates that a reading of the supervisor engine's serial EEPROM has failed. The read might fail if the module is not seated correctly in the slot.

**Recommended Action** Remove and reinsert the module. If that does not work, power cycle the switch. If the read still fails, contact your technical support representative. You may need to return some switch components for repair or replacement.

**Error Message** C4K\_SUPERVISOR-3-VEO2SEEPROMMISPROGRAMMED: The seeprom has a FRU minor type of 335. It must be reprogrammed to 343.

**Explanation** This message indicates that early WS-X4248-RJ45V module prototypes had their SEEPROM FRU minor type programmed as 335. The correct value is 343.

**Recommended Action** You can fix this value by using the ROMMON's SPROM write command. The WS-X4248-RJ45V module will not work until you fix this condition.

**Error Message** C4K\_SUPERVISOR-3-FANTRAYREADFAILED: Failed to read system fan tray status register from hardware

**Explanation** This message indicates that the fan tray presence was detected, but the system failed to read the fan tray status register contents.

**Recommended Action** If this message appears only once, this could be a transient error and no action is required. If this message appears repeatedly (once every 10 minutes), replace the system fan tray.

#### SUPERVISOR-4

**Error Message** C4K\_SUPERVISOR-4-OTHERSUPERVISORACTIVEDEBOUNCE:Other supervisor is still holding hardware lock

**Explanation** This message indicates that this condition is detected when the redundancy register incorrectly indicates that the other supervisor engine is holding a lock. This error is probably caused by hardware signal latency. Unless there is a real hardware failure, the switch automatically recovers from this state. If there is a persistent hardware failure, this message appears four times.

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

**Error Message** C4K\_SUPERVISOR-4-SUPMGMTMACFATALRXERR:Supervisor MAC device type [hex] reset due to a fatal Rx error

**Explanation** This message indicates that an error has occurred with the out-of-band management port on the supervisor engine.

### **SUPERVISOR-7**

**Error Message** C4K\_SUPERVISOR-7-BACKPLANESEEPROMWRITEFAILED:Failed to write backplane's serial eeprom

**Explanation** This message indicates that the writing of the backplane serial EEPROM has failed.

Recommended Action Power cycle the switch.

Error Message C4K\_SUPERVISOR-7-POWERSUPPLYTYPE: Setting GalPowerSupplyType=
( [dec] ) from Perl interface for testing\"

**Explanation** This message indicates that this is a debug message only.

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

**Error Message** C4K\_SUPERVISOR-7-SEEPROMWRITEFAILED:Failed to write supervisor's serial eeprom

**Explanation** This message indicates that the writing of the supervisor engine serial EEPROM has failed.

**Recommended Action** Remove and reinsert the module. If this message reappears, reboot the switch. If the switch is still unable to write to the EEPROM, contact your technical support representative.

## SWITCH-QOS-TB Messages

This section contains the Switch QoS Manager (SWITCH-QOS-TB) messages.

**Error Message** SWITCH\_QOS\_TB-5-TRUST\_DEVICE\_DETECTED: [char] detected on port [char], port set to trusted

**Explanation** This message indicates that the trusted boundary has detected a device matching the trusted device setting for the interface and has changed the trust state for the interface to trusted.

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

**Error Message** SWITCH\_QOS\_TB-5-TRUST\_DEVICE\_LOST: [char] no longer detected on port [char], port set to untrusted

**Explanation** This message indicates that the trusted boundary has lost contact with a trusted device and has changed the trust state for the interface to untrusted.

## SW\_DAI Messages

This section contains the dynamic ARP inspection (DAIMAN) messages.

## SW\_DAI-4

Error Message SW\_DAI-4-ACL\_DENY: [dec]Invalid ARPs (Req) on [chars], vlan [dec].

**Explanation** This message indicates that the switch has received ARP packets that are considered invalid by ARP inspection. The packets are invalid, and their presence indicates that administratively denied packets are in the network. This log message generates when packet(s) have been denied by ACLs either explicitly or implicitly (with static ACL configuration). The presence of these packets indicates a possible "man-in-the-middle" attack(s) in the network.

**Recommended Action** To stop these messages from generating, find the source host of these packets and stop the host from sending them.

Error Message SW\_DAI-4-DHCP\_SNOOPING\_DENY: [dec] Invalid ARPs (Req) on [chars], vlan
[chars].

**Explanation** This message indicates that the switch has received ARP packets that are considered invalid by ARP inspection. The packets are invalid, and their presence may be an indication of "man-in-the-middle" attacks that are attempted in the network. This message is logged when the IP address and MAC address binding for the sender on the received VLAN is not listed in the DHCP snooping database.

**Recommended Action** To stop these messages from generating, find the source host of these packets and stop the host from sending them.

Error Message SW\_DAI-4-INVALID\_ARP: [dec] Invalid ARPs (Req) on [chars], vlan
[chars].

**Explanation** This message indicates that the switch has received ARP packets that are considered invalid by ARP inspection. The packets are invalid and do not pass one or more of the source MAC address, destination MAC address, or IP address validation checks. This message indicates that a packet was denied because the source MAC address, destination MAC address, or IP validation has failed.

**Recommended Action** To stop these messages from generating, find the source host of these packets and stop the host from sending them.

**Error Message** SW\_DAI-4-PACKET\_BURST\_RATE\_EXCEEDED: [dec] packets received in [dec] seconds on [char].

**Explanation** This message indicates that the switch has received [*dec*] number of ARP packets in the specified burst interval. The interface was in the errdisabled state and the switch received the packets at a rate higher than the configured packet rate for every second over the configured burst interval. The message is logged just before the interface entered the errdisabled state and if the configured burst interval is more than one second.

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

**Error Message** SW\_DAI-4-PACKET\_RATE\_EXCEEDED: [dec] packets received in [dec] milliseconds on [char].

**Explanation** This message indicates that the switch has received [*dec*] number of ARP packets in the specified duration on the given interface above the exceeded packet rate. This message is logged just before the interface entered the errdisabled state and when the burst interval is set to one second.

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

Error Message SW\_DAI-4-SPECIAL\_LOG\_ENTRY: [dec] Invalid ARP packets [%CC]

**Explanation** This message indicates that the switch has received [*dec*] number of ARP packets that are considered invalid by the ARP inspection. The packets are invalid, and their presence may be an indication of "man-in-the-middle" attacks attempted on the network. This message displays when the rate of incoming packets exceed the DAI logging rate.

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

#### SW\_DAI-6

Error Message SW\_DAI-6-ACL\_PERMIT: [dec] ARPs (Req) on [chars], vlan [chars].

**Explanation** This message indicates that the switch has received ARP packets that have been permitted because of an ACL match.

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

**Error Message** SW\_DAI-6-DHCP\_SNOOPING\_PERMIT: [dec] ARPs (Req) on [chars], vlan [chars]

**Explanation** This message indicates that the switch has received ARP packets that have been permitted because the IP and MAC address for the sender match against the DHCP snooping database for the received VLAN.

## **SW-VLAN Messages**

This section contains the Switch 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 [char]

**Explanation** This message indicates that due to a lack of ready pool space, the VLAN Manager has dropped a notification from the Port Manager, as indicated by the message.

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

Error Message SW\_VLAN-3-VTP\_PROTOCOL\_ERROR: VTP protocol code internal error: [char]

**Explanation** This message indicates that the VTP protocol code has encountered an unexpected error while processing a configuration request, packet, or timer expiration.

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

#### 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

**Explanation** This message indicates that the VLAN Manager has received an upcall from the Port Manager containing a VLAN cookie that translated to a bad VLAN number.

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

**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 has failed to use the VLAN configuration from a startup-config file. The software will use the binary VLAN configuration file in nonvolatile memory.

**Error Message** SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE: VLAN configuration file contained incorrect verification word: [hex]

**Explanation** This message indicates that the VLAN configuration file that was read by the VLAN Manager begins with an unrecognized value and might not be a valid VLAN configuration file. The file has been rejected.

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

**Error Message** SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE\_VERSION: VLAN configuration file contained unknown file version: [dec]

**Explanation** This message indicates that the VLAN configuration file that was read by the VLAN Manager contained an unrecognized file version number. This could indicate an attempt to regress to an older version of the VLAN Manager software.

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

**Error Message** SW\_VLAN-4-BAD\_VLAN\_TIMER\_ACTIVE\_VALUE: Encountered incorrect VLAN timer active value: [char]

**Explanation** This message indicates that due to a software error, a VLAN timer was detected as being active when it should have been inactive or inactive when it should have been detected as being active.

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

**Error Message** SW\_VLAN-4-EXT\_VLAN\_INTERNAL\_ERROR: Extended VLAN manager received an internal error [dec] from [char]: [char]

**Explanation** This message indicates that an unexpected error code was received by the VLAN Manager from the extended VLAN configuration software.

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

**Error Message** SW\_VLAN-4-EXT\_VLAN\_INVALID\_DATABASE\_DATA: Extended VLAN manager received bad data of type [char]: value [dec] from function [char]

**Explanation** This message indicates that invalid data was received by the extended VLAN Manager from an extended VLAN configuration database routine.

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

Error Message SW\_VLAN-4-IFS\_FAILURE: VLAN manager encountered file operation error: call = [char] / file = [char] / code = [dec] ([char]) / bytes transferred = [dec]

**Explanation** This message indicates that the VLAN Manager has received an unexpected error return from a Cisco IOS file system call.

**Error Message** SW\_VLAN-4-NO\_PM\_COOKIE\_RETURNED: VLAN manager unexpectedly received a null [char] type cookie from the Port Manager

**Explanation** This message indicates that the VLAN Manager has queried the Port Manager for a reference cookie but has received a NULL pointer instead.

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

**Error Message** SW\_VLAN-4-STARTUP\_EXT\_VLAN\_CONFIG\_FILE\_FAILED: Failed to configure extended range VLAN from startup-config. Error [char]

**Explanation** This message indicates that the VLAN software has failed to use extended VLAN configuration in the startup-config file. Configuration information for all extended-range VLANs will be lost when the system boots.

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

**Error Message** SW\_VLAN-4-VTP\_INTERNAL\_ERROR: VLAN manager received an internal error [dec] from vtp function [char]: [char]

**Explanation** This message indicates that an unexpected error code was received by the VLAN Manager from the VTP configuration software.

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

**Error Message** SW\_VLAN-4-VTP\_INVALID\_DATABASE\_DATA: VLAN manager received bad data of type [char]: value [dec] from vtp database function [char]

**Explanation** This message indicates that invalid data was received by the VLAN Manager from a VTP configuration database routine.

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

**Error Message** SW\_VLAN-4-VTP\_INVALID\_EVENT\_DATA: VLAN manager received bad data of type [char]: value [dec] while being called to handle a [char] event

**Explanation** This message indicates that invalid data was received by the VLAN Manager from the VTP configuration software.

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

**Error Message** SW\_VLAN-4-VTP\_USER\_NOTIFICATION: VTP protocol user notification: [char]

**Explanation** This message indicates that the VTP protocol code has encountered an unusual diagnostic condition.

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

Error Message SW\_VLAN-4-VLAN\_CREATE\_FAIL: Failed to create VLANs [char]: [char]

**Explanation** This message indicates that the VLANs specified in the error message could not be created. The VLAN manager called a VLAN database routine to create one or more VLANs, but the Port Manager could not complete the VLAN creation requests. A possible cause of this error is that the VLANs already exist in the Port Manager as internal VLANs.

Recommended Action Contact your technical support representative.

**Error Message** SW\_VLAN-4-VTP\_SEM\_BUSY: VTP semaphore is unavailable for function [char]. Semaphore locked by [char]

**Explanation** This message indicates that the VTP database is currently locked by another task and is not available. Retry the operation later.

**Recommended Action** Retry the operation later. If the message frequently reoccurs, contact your technical support representative.

#### 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 has detected an old version of the VLAN configuration file format. The VLAN software was able to interpret the file with no problems, but it will create files using the new format in the future.

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

**Error Message** SW\_VLAN-6-VTP\_MODE\_CHANGE: VLAN manager changing device mode from [char] to [char].

**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.

# **SWITCHINGENGINEMAN Messages**

This section contains the switching engine management (SWITCHINGENGINEMAN) messages.

## SWITCHINGENGINEMAN-2

**Error Message** C4K\_SWITCHINGENGINEMAN-2-PACKETMEMORYERROR3: Persistent Errors in Packet Memory [dec]

**Explanation** This message indicates that there is a high rate of persistent errors in packet memory. This condition might indicate a persistent hardware problem.

**Recommended Action** If this message persists, use the **show platform** commands to show results, contact your technical support representative, and provide the representative with the gathered information.

### SWITCHINGENGINEMAN-3

**Error Message** C4K\_SWITCHINGENGINEMAN-3-BADDELIMITER:Recived CPU packet with bad delimiter

**Explanation** This message indicates that the software has expected a delimiter pattern of successive packets but has received some other pattern. This condition might be due to a loss of synchronization between the hardware and the software.

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

Error Message C4K\_SWITCHINGENGINEMAN-3-BADLENGTH:Recived CPU packet with bad length

**Explanation** This message indicates that the switch has received a CPU packet that was either too long or too short.

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

**Error Message** C4K\_SWITCHINGENGINEMAN-3-CIMPKTBUFPARITYERROR: Parity error in Cim Packet Buffer at offset [dec]

**Explanation** This message indicates that there is a parity error in queue memory. This condition might indicate a transient hardware problem or a more permanent problem. After 128 packet memory and queue memory errors, the switch reboots.

**Recommended Action** If you see this message often, reboot the switch.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-ERRORINTERRUPT: Error condition detected by hardware. Interrupt Status [hex]

**Explanation** This message indicates that the hardware has detected an error condition and has raised an interrupt to the software. The interrupt status value indicates the type of error.

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

Error Message C4K\_SWITCHINGENGINEMAN-3-JUMBOPACKET:Recieved a Jumbo CPU packet

**Explanation** This message indicates that the switch has received a packet that is larger than 2032 bytes. This large packet is called a jumbo packet.

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

**Error Message** C4K\_SWITCHINGENGINEMAN-3-NOMEMORYFORRXRING: Not enough memory to initialize CPU packets

**Explanation** This message indicates that while trying to initialize the CPU packet driver, the system ran out of memory.

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

**Error Message** C4K\_SWITCHINGENGINEMAN-3-PACKETENGINERESTARTED: An error happened in the Packet Engine logic

**Explanation** This message indicates that for unknown reasons, the packet engine logic became unstable.

Recommended Action Reboot the switch.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-PACKETMEMORYERROR2: Multiple Errors in Packet Memory [dec]

**Explanation** This message indicates that multiple errors in packet memory were detected. If this message persists, it might indicate a hardware problem.

**Recommended Action** If this message persists, use the **show platform** commands to show results, contact your technical support representative, and provide the representative with the gathered information.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-PACKETMEMORYPARITYERROR: Parity error in Packet Memory at address [dec]

**Explanation** This message indicates that there is a parity error in packet memory. This condition might indicate a transient hardware problem or a more permanent problem. After 128 packet memory and queue memory errors, the switch reloads.

**Recommended Action** If this message reoccurs, reboot the switch.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-PACKETMEMORYTESTFAILURE: Packet Memory buffer test failed!!! Insufficient packet buffers are available to continue booting.

**Explanation** This message indicates that the packet memory diagnostic bootup test has detected too many failures for switch operation to continue.

**Recommended Action** Refer to the Release Note attachment in the DDTS for CSCdz57255.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-PACKETMEMORYTESTPARTIALFAILURE: Packet Memory buffer test detected errors with [dec] % of the packet buffers. Switch operation will continue, with potentially reduced performance

**Explanation** This message indicates that the packet memory diagnostic bootup test has detected failures, but there are still a sufficient number of working buffers to enable switch operation.

Recommended Action Refer to the Release Note attachment in the DDTS for CSCdz57255.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-QUEUEMEMORYPARITYERROR: Parity error in Queue Memory at address [dec]

**Explanation** This message indicates that there is a parity error in queue memory. This condition might indicate a transient hardware problem or a more permanent problem. After 128 packet memory and queue memory errors, the switch reloads.

**Recommended Action** If this message reoccurs, reboot the switch.

**Error Message** C4K\_SWITCHINGENGINEMAN-3-RXDELIMITERERROR: Invalid packet delimiter received. Expected [hex] Received [hex]

**Explanation** This message indicates that successive packets that are sent by the hardware to the CPU have a specific delimiter pattern. The software expected a delimiter pattern but received some other pattern. This condition might be caused by the synchronization loss between the hardware and the software.

Recommended Action Reboot the switch.

## SWITCHINGENGINEMAN-4

**Error Message** C4K\_SWITCHINGENGINEMAN-4-PACKETMEMORYERROR: Error in Packet Memory [dec]

**Explanation** An error in packet memory was detected. If this message persists, it might indicate a hardware problem.

**Recommended Action** If this message persists, use the **show platform** commands to show results, contact your technical support representative, and provide the representative with the gathered information.

**Error Message** C4K\_SWITCHINGENGINEMAN-4-SYSTEMNOTRESET: System has already been reset [dec] times due to Packet Memory errors. System will not be reset anymore

**Explanation** This message indicates that the software has detected a large number of errors in the packet memory and reset the switch. This condition indicates a hardware problem. However, the system only reset [*dec*] times by software to prevent an auto-boot followed by a reset loop.

**Recommended Action** Replace the switch. If you do not replace the switch, errors may persist and the system will reset again.

## SWITCHMANAGER Messages

This section contains the Switching Manager (SWITCHMANAGER) messages.

## SWITCHMANAGER-3

**Error Message** C4K\_SWITCHMANAGER-3-DUPLICATESWPHYPORT: Internal Event: Tried to create new sw PimPhyport [char], but it already exists

**Explanation** This message is a debug message that is used by developers only and should not occur during operation.

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

**Error Message** C4K\_SWITCHMANAGER-3-DUPLICATESWPORT: Internal Event: Tried to create new sw PimPort [char], but it already exists

**Explanation** This message is a debug message that is used by developers only and should not occur during operation.

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

## **SWITCHMANAGER-4**

**Error Message** C4K\_SWITCHMANAGER-4-CANTPOWEROFF: Internal Error: PimEthAutoNegotiator - Can't power off port [char]

**Explanation** This message indicates that this is an internal software error in an inline-power state machine.

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

**Error Message** C4K\_SWITCHMANAGER-4-CANTPOWERON:Internal Error: PimEthAutoNegotiator - Can't power on port [char]

**Explanation** This message indicates that this is an internal software error in an inline-power state machine.

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

**Error Message** C4K\_SWITCHMANAGER-4-HARDWAREERROR:Power management hardware for port [char] bad.

Explanation This message indicates that the switch cannot change the inline-power state for this port.

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

**Error Message** C4K\_SWITCHMANAGER-4-S2WERROR:Power control to port [char] bad. Possibly power is turned on.

**Explanation** This message indicates that this is a communication error in an inline-power management.

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

**Error Message** C4K\_SWITCHMANAGER-4-S2WERRORREPORT: PimEthAutoNeg: S2w Read/Write Error for port [char].

**Explanation** This message indicates that a read/write error has occurred on the specified port.

**Recommended Action** Verify whether you can see all the symptoms described in the release notes for CSCef87815. If not and you do not see any adverse effect on the functionality of the PoE linecards (WS-X4248-RJ45V, WS-X4248-RJ45V, WS-X4548-RJ45V, WS-X4524-RJ45V or WS-X4524-RJ45V), treat this message an informational only. No action is required.

### SWITCHMANAGER-5

**Error Message** C4K\_SWITCHMANAGER-5-FLAPSHUTDOWN: Temporarily disabling port [char] due to flap

**Explanation** This message indicates that the specified port is going up and down (link up/down) in rapid succession. This condition is usually caused by a bad connection or problems with the link-level hardware. The switch has temporarily shut down the problem port. Every 5 seconds, the switch reenables the port to see if the problem has gone away. If not, the port will remain shut down indefinitely.

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

# **SWNETFLOWMAN Messages**

This section contains the Software NetFlow Manager (SWNETFLOWMAN) messages.

## **SWNETFLOWMAN-4**

**Error Message** C4K\_SWNETFLOWMAN-4-FLOWSTATISTICSLOST: Flow rate too high. [dec] packet byte count statistics update lost [object-info]

**Explanation** This message indicates that the Cisco IOS flow uses 32-bit counters to store bytes per flow. The NetFlow Services Card engine uses 39-bit counters. When the switch reports a flow byte count that is greater than 32 bits, it stores the first 32 bits and logs a warning message.

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

**Error Message** C4K\_SWNETFLOWMAN-4-NETFLOWCACHEFULL: Netflow hardware-software map cache full. Could not create a map.

**Explanation** This message indicates that the switch uses a map to correlate flow in the software with corresponding flows in the hardware. This map is full and the switch cannot create any more mappings. This is a very rare condition. The switch is running at full capacity.

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

## **SWNETFLOWMAN-6**

**Error Message** C4K\_SWNETFLOWMAN-6-FIXEDCREATIONTIME:Fixed creation time of [dec] flows.

**Explanation** This message indicates that the system did not record the creation time of a flow. In this case, the system determined a creation time, which is usually the same time that was used for the last flow.

**Recommended Action** If this message reoccurs frequently, and you see that the system is fixing a lot of flows, contact your technical support representative.

## **SYSMAN Messages**

This section contains the System Manager (SYSMAN) messages.

## SYSMAN-2

**Error Message** C4K\_SYSMAN-2-POWERONSELFTESTFAIL:Supervisor module in slot [dec] failed Power-On-Self-Test(POST). Line cards are \*\*NOT\*\* initialized. Please use 'show diagnostics result module [dec]test <tid> detail' command for details.

**Explanation** This message indicates that a power-on self test (POST) failure is detected on the supervisor engine. When this occurs, the modules are not initialized.

**Recommended Action** Use the **show diagnostics result module [dec]test <tid> detail** command to isolate the problem. Reset the switch after you have resolved the supervisor engine failure.

## SYSMAN-3

**Error Message** C4K\_SYSMAN-3-LINECARDDIAGSFAILED:Module in slot [dec] failed online diagnostics. Please use 'show diagnostics result module [dec]test <tid> detail' command for details.

**Explanation** This message indicates that a module has failed online diagnostics. When this occurs, all the module's ports are flagged as faulty and cannot be used until the problem is resolved.

**Recommended Action** Remove and reinsert the module. If the problem persists, copy the message exactly as it appears on the console or in the system log, contact your technical support representative, and provide the representative with the gathered information.

**Error Message** C4K\_SYSMAN-3-LINECARDDIAGSPARTIALFAILURE:Partial failure on module [dec]. Please use 'show diagnostics result module [dec]test <tid> detail' command for details.

**Explanation** This message indicates that some of the module's ports have failed online diagnostics.

**Recommended Action** Remove and reinsert the switch. If the problem persists, copy the message exactly as it appears on the console or in the system log, contact your technical support representative, and provide the representative with the gathered information.

## SYSMAN-4

**Error Message** C4K\_SYSMAN-4-MORETHANONEDEBUGCOMMANDEXECUTING:Cannot execute '[char]' right now, please try again later

**Explanation** This message indicates that more than one Telnet session has issued a debugging command at the same time. Only one Telnet session can issue a debugging command at the same time. All Telnet sessions receive this message, except the Telnet session that issued the command first.

**Recommended Action** Try the command when other Telnet sessions are not issuing debugging commands.

# **TRANSCIEVER Messages**

This section contains the TRANSCEIVER subsystem messages.

Error Message TRANSCEIVER-3-INTERNAL\_ERROR: [char]

**Explanation** This message indicates that the TRANSCEIVER subsystem encountered an internal software error. The error message contains text that can be used to help identify the cause of the problem.

**Recommended Action** Contact your technical support representative.

Error Message TRANSCEIVER-3-LAYER\_CHANGE\_ERROR: Error changing layer for port [char]

**Explanation** This message indicates that the TRANSCEIVER subsystem encountered an internal software error while changing the layer for this port.

Recommended Action Contact your technical support representative.

# UFAST\_MCAST\_SW Messages

This section contains the UplinkFast (UFAST\_MCAST\_SW) messages.

## **UFAST-3**

**Error Message** UFAST\_MCAST\_SW-3-PROC\_START\_ERROR:UplinkFast packets will not be transmitted as the process could not be created.

**Explanation** This message indicates that the UplinkFast packets will not be transmitted as the process cannot be created.

**Recommended Action** Reload UplinkFast. If this problem persists even after the reload, copy the message exactly as it appears on the console or in the system log, contact your technical support representative, and provide the representative with the gathered information.

## **UFAST-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 are not transmitted on VLAN [*dec*] due to a lack of memory.

**Recommended Action** Reduce other system activity to ease memory demands. Contact your technical support representative to determine whether you need to upgrade to a larger memory configuration.

# **VQPCLIENT Messages**

This section contains VLAN Query Protocol (VQP) Client messages.

## **VOPCLIENT-2**

Error Message VQPCLIENT-2-CHUNKFAIL: Could not allocate memory for VQP

**Explanation** This message indicates that an error has occurred when the system tried to allocate memory for the VQP client.

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

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Error Message VQPCLIENT-2-DENY: Host [enet] denied on interface [chars]

**Explanation** This message indicates that the VLAN Membership Policy Server (VMPS) has denied access for the given host MAC address to an interface. [*enet*] is the host MAC address, and [*chars*] is the interface name.

**Recommended Action** No action is required. If you think that the host should have been allowed access, verify the configuration on the VMPS.

**Error Message** VQPCLIENT-2-INITFAIL: Platform-specific VQP initialization failed. Quitting

**Explanation** This message indicates that an error has occurred during initialization of the VQP client platform-specific code.

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

Error Message VQPCLIENT-2-IPSOCK: Could not obtain IP socket

**Explanation** This message indicates that an error has occurred when the system attempted to open an IP socket to the VMPS.

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

Error Message VQPCLIENT-2-PROCFAIL: Could not create process for VQP. Quitting

**Explanation** This message indicates that an error has occurred while creating a process for the VQP client.

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

Error Message VQPCLIENT-2-SHUTDOWN: Interface [chars] shutdown by VMPS

**Explanation** This message indicates that the VMPS has directed that an interface be shut down. [*chars*] is the interface name.

**Recommended Action** No action is required. If you think that the port should not have been shut down, then verify the configuration on the VMPS.

Error Message VQPCLIENT-2-TOOMANY: Interface [chars] shutdown by active host limit

**Explanation** This message indicates that the system has shut down an interface because too many hosts have requested access to that port. [*chars*] is the interface name.

**Recommended Action** To reactivate the port, remove the excess hosts, and enter the **no shutdown** interface configuration command on the interface.

## **VOPCLIENT-3**

Error Message VQPCLIENT-3-IFNAME: Invalid interface ([char]) in response

**Explanation** This message indicates that the VMPS has sent an unsolicited response with an unknown interface name. [*chars*] is the name of the unknown interface.

**Recommended Action** Verify the VMPS configuration.

Error Message VQPCLIENT-3-THROTTLE: Throttling VLAN change on [chars]

**Explanation** This message indicates that an attempt was made to change the VLAN assignment for an interface more often than once every 10 seconds. The VLAN change is denied. [*chars*] is the name of the interface.

**Recommended Action** No action is required. If this message reoccurs, verify the VMPS configuration and that unexpected hosts are not connected to the port.

Error Message VQPCLIENT-3-VLANNAME: Invalid VLAN ([chars]) in response

**Explanation** This message indicates that the VMPS has specified a VLAN name that is unknown to the switch. [*chars*] is the invalid VLAN name.

**Recommended Action** Make sure that the VLAN exists on the switch. Verify the VMPS configuration.

## **VOPCLIENT-7**

Error Message VQPCLIENT-7-NEXTSERV: Trying next VMPS

**Explanation** This message indicates that the system has lost connectivity with the current VMPS and is changing to the next server in its list.

Recommended Action This is a debug message only. No action is required.

Error Message VQPCLIENT-7-PROBE: Probing primary server [IP\_address]

**Explanation** This message indicates that the system is trying to reestablish connectivity with the primary VMPS at the given IP address.

Recommended Action This is a debug message only. No action is required.

Error Message VQPCLIENT-7-RECONF: Reconfirming VMPS responses

**Explanation** This message indicates that the switch is reconfirming all responses with the VMPS.

Recommended Action This is a debug message only. No action is required.

# WATCHDOG Messages

This section contains the watchdog (WATCHDOG) message.

Error Message C4K\_WATCHDOG-3-CHILDFAILURE:Watchdog failure ([char]) - system may
reset

**Explanation** This message indicates that the job [*char*] was unscheduled and not started soon enough to start its watchdog timer.

**Recommended Action** Determine what other activity is utilizing the supervisor engine.



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