



Catalyst 4500 Series Switch Cisco IOS System Message Guide

Cisco IOS Release 12.2(25)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

The following publications are available for the Catalyst 4500 series switches:

- Catalyst 4000 Series Switch Installation Guide
- Catalyst 4500 Series Switch Installation Guide
- Catalyst 4500 Series Switch Module Installation Guide
- Catalyst 4500 Series Switch Cisco IOS Software Configuration Guide
- Catalyst 4500 Series Switch Cisco IOS Command Reference
- Release Notes for Catalyst 4500 Series Switch, Cisco IOS Release 12.2(18)EW
- Installation and Configuration Note for the Catalyst 4000 Family Supervisor Engine III
- Installation and Configuration Note for the Catalyst 4500 Series Supervisor Engine IV
- Cisco IOS Configuration Guides and Command References—Use these
 publications to help you configure the Cisco IOS software that runs on the
 MSFC and on the MSM and ATM modules.
- For information about MIBs, go to the following URL: http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

Conventions

This publication uses the following conventions:

Convention	Description
boldface font	Commands, command options, and keywords are in boldface .
italic font	Command arguments for which you supply values are in <i>italic</i> .
[]	Command elements in square brackets are optional.

Convention	Description
{ 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.
boldface screen font	Information you must enter is in boldface screen font.
italic screen font	Arguments for which you supply values are in <i>italic</i> screen 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.

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 - http://www.cisco.com/en/US/partner/ordering/index.shtml
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

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Cisco Technical Support Website

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http://www.cisco.com/techsupport

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http://tools.cisco.com/RPF/register/register.do

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides

recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55 USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is "down," or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

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- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL: http://www.cisco.com/go/marketplace/
- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

http://cisco.com/univered/cc/td/doc/pcat/

 Cisco Press publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

http://www.ciscopress.com

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delivers coverage of the latest industry trends, technology breakthroughs, and
Cisco products and solutions, as well as network deployment and
troubleshooting tips, configuration examples, customer case studies,
certification and training information, and links to scores of in-depth online
resources. You can access Packet magazine at this URL:

http://www.cisco.com/packet

• *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

http://www.cisco.com/go/iqmagazine

• Internet Protocol Journal is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

http://www.cisco.com/ipj

• World-class networking training is available from Cisco. You can view current offerings at this URL:

http://www.cisco.com/en/US/learning/index.html



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 1-6

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.

Table 1-1 Facility Codes

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

Table 1-1 Facility Codes (continued)

Code	Facility
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
SFF8472	Floating-point subsystem (SFF8472)
SPANTREE	Spanning Tree Protocol
SPANTREE_VLAN_SW	Spanning Tree VLAN switch management
STORM_CONTROL	Broadcast storm control
STORE	Memory
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
TRANSCIEVER	TRANSCEIVER subsystem

Table 1-1 Facility Codes (continued)

Code	Facility
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.

Table 1-2 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

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:

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 in the message indicate which lines of code caused the message to occur.



Messages and Recovery Procedures

This chapter lists and describes the Cisco IOS system error messages by facility for the Catalyst 4500 series switch. 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 Technical Assistance" section on page xv.

ACL Messages

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

Error Message C4K_ACL-4-OUTOFMEMORY:Out of Memory while allocating
[char]

Explanation The software 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 the problem persists, 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 The switch ran 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 persists, 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 Software detected that the pass-through current is disabled. This condition will cause all phones drawing PoE from the switch to be powered off.

Recommended Action If you want PoE, verify that the in-line power switch on the power supply is turned on.

Error Message C4K_CHASSIS-2-INSUFFICIENTFANSDETECTED: Too few working fans in fan tray, the chassis will overheat. If not resolved, in 5 minutes all line cards will be placed into Reset-Mode

Explanation One or more fans in the system fan tray or power supplies is malfunctioning. 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 fan tray failure

Explanation One or more required fans in the fan tray or the power supplies is malfunctioning. Software reset the modules to reduce heat generation.

Recommended Action Replace the broken fans as soon as possible.

Error Message C4K_CHASSIS-2-INSUFFICIENTPOWERDETECTED:Insufficien t power available for the current chassis configuration

Explanation The current chassis configuration exceeds power availability. If this condition persists, software will reset the modules.

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

Error Message C4K_CHASSIS-2-INSUFFICIENTPOWERSHUTDOWN:Holding
module in slot [dec] in reset, due to insufficient power

Explanation The switch was using more power than is available for the allowed time interval. Software reset the modules to reduce power consumption.

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

Error Message C4K_CHASSIS-2-OVERHEATINGSHUTDOWN:Resetting linecards due to critical temperature

Explanation The switch is now warmer than its maximum allowable operating temperature. Software will reset modules 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 A Gigabit Interface Converter (GBIC) with a serial EEPROM was detected in the port specified in the message. Although the serial EEPROM's contents were readable, 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 message appears 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 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 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 A Gigabit Interface Converter (GBIC) was detected in the specified port, but the contents of the GBIC's EEPROM was unreadable. 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 The module type was 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 The system software 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 The supervisor engine identified the type, but the switching module 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 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 problem persists, 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 A write operation to the serial EEPROM 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 problem persists, 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 The software 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 Some preproduction switching modules have interfaces that do not work in half-duplex mode. This module is probably a prototype.

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 The WS-X4448-GB-LX module supports only LX SFPs. 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 The switch ran 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 After writing a module's serial EEPROM in response to a CLI request, the switch tried to read it back in, to ensure that the correct values were written out. What the switch read 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 problem persists, 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 The checksum of the SFP SEEPROM is not valid, indicating a bad or non-Cisco SFP.Only 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-SFPINTEGRITYCHECKFAILED:SFP integrity
check on port [char] failed: bad key

Explanation Only 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 Only 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. If this message aappears you likely have 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 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 The module's serial EEPROM was readable, and that your software image does not recognize this module. A software upgrade is necessary.

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

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CHASSIS-4

Error Message C4K_CHASSIS-4-CANTWRITESUPERVISORSPROM:Writing the
supervisor's SPROM is not supported

Explanation 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 PoE to the switch was 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 The unit's modules were reset to reduce heat generation, because the unit reached a critical temperature. The switch is now cool enough to return to normal operation.

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 The modules were reset to reduce heat generation because there were not enough working fans. Adequate fan cooling is now restored, and the switch will resume normal operation.

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 The module was reset to conserve power because the system had inadequate power available. The switch now has adequate power and is resuming normal operation.

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 The switch reset the modules to conserve power, but it now has adequate power and will resume normal operation.

CHASSIS-7

Error Message C4K_CHASSIS-7-GBICINSERTED:Port [char]: New gbic inserted: vendor: [char], p/n: [char], s/n: [char]

Explanation A Gigabit Interface Converter (GBIC) with a serial EEPROM was detected in the specified interface. The message lists the vendor, part number, and serial number from the GBIC's serial EEPROM.

COMMONHWACLMAN Messages

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

COMMONHWACLMAN-4

Error Message C4K_COMMONHWACLMAN-4-ALLACLINHW:All configured ACLs now fully loaded in hardware TCAM - hardware switching / QoS restored

Explanation All ACL-based features are now successfully loaded. Packets that were previously processed in software due to the prior loading failure will now be processed in hardware.



If the features were policy maps, then QoS will be reenabled on all applicable interfaces.

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

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 The software 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 The software 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-HWPROGSUCCESS: [char] [char] -
now fully loaded in hardware TCAM
```

Explanation ACL-based features are now successfully loaded. Packets that were previously processed in software due to a prior loading failure will now be processed in hardware. If the feature is a policy map, then QOS will be reenabled on the specific interface.

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

```
Error Message C4K_COMMONHWACLMAN-4-OUTOFPATHS: Could not allocate
path for ( [object-info] )
```

Explanation There are too many ports or VLANs using ACLs. The ACLs might not work correctly.

Recommended Action Remove unnecessary ACLs from some interfaces.

Explanation All available 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 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 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 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 The algorithm used for tag sharing has 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.

C4K_COMMONSTUBMAN-4

Error Message C4K_COMMONSTUBMAN-4-DIAGSFAILED: [char] failed diagnostics

Explanation 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 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 attempt to send a loopback packet only three times.

Recommended Action Contact your technical support representative.

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.

C4K_COMMONSTUBMAN-7

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 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 A software sanity check 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.

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Error Message DHCP_SNOOPING-4-AGENT_OPERATION_FAILED: DHCP snooping binding transfer failed. Unable to access URL.

Explanation The DHCP snooping binding transfer 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 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 expired.
- The number of entries exceeded the maximum supported limit.
- An error occurred when reading the remote database.
- An error 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 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 DHCP snooping 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 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 The IP source filter on the primary VLAN automatically propagates to all secondary VLANs if private VLANs are enabled.

Recommended Action Reconfigure the IP source binding to a known functioning VLAN.

Explanation IP source binding was configured on a VLAN that has not yet been configured.

Recommended Action This is an informational message only. No action is required. It may persist unless you define the VLAN in question and then reapply the IP source binding.

Error Message DHCP_SNOOPING-4-QUEUE_FULL: Fail to enqueue DHCP
packet into processing queue: [char]

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

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

Error Message DHCP_SNOOPING-4-SSO_SYNC_ACK_ERROR: Error is encountered in processing acknowledgement for DHCP snooping binding sync

Explanation There is an error in handling of the DHCP snooping binding sync acknowledgement. In most of these cases, the ACK message is ignored.

Error Message DHCP_SNOOPING-4-STANDBY_AGENT_OPERATION_FAILED:
DHCP snooping binding transfer failed on the Standby Supervisor.
[char]

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

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 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 One or more bindings from the database file has a MAC address and VLAN combination for which the switch already holds DHCP snooping bindings.

Error Message DHCP_SNOOPING-6-INTERFACE_NOT_VALID: Interface not valid. [dec] bindings ignored.

Explanation 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 The DHCP lease expired for the given number of bindings from the database file.

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 The database read operation failed for the stated number of bindings.

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 The VLAN is not supported by DHCP snooping.

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 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.

Error Message DOT1X-4-MSG_ERR: Unknown message event received

Explanation Due to an unexpected event the 802.1X process 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 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 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 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_VVID_NOT_SUPPORTED: Dot1x can not be enabled on this port with Voice VLAN configured.

Explanation Dot1x with voice VLAN is not supported on this port on this platform.

Recommended Action Remove the voice VLAN configuration on this port and retry the Dot1x operation.

Error Message DOT1X-5-ERR_DYNAMIC: Dot1x can not be enabled on Dynamic ports

Explanation 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 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 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 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 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 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.

Error Message DOT1X-5-ERR_PER_USR_IP_ACL: Applied per-user IP ACL was unsuccessful on interface [char]

Explanation Dot1x could not successfully apply per-user IP ACL, one possible cause could be an invalid pub from the RADIUS server.

Recommended Action Reconfigure the RADIUS pub.

Error Message DOT1X-5-ERR_PER_USR_MAC_ACL: Applied per-user MAC
ACL was unsuccessful on interface [char]

Explanation 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 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 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 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 The RADIUS server 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 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_SPANDST: Dot1x can not be enabled on [char]. It is configured as a SPAN Dest port.

Explanation The switch was not able to configure Dot1x on a given port because Dot1x and SPAN destination ports are mutually exclusive features.

Recommended Action Disable the SPAN destination port configuration the reconfigure Dot1x on the port.

Error Message DOT1X-5-ERR_TRUNK: Dot1x can not be enabled on Trunk port

Explanation 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 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 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 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 Because this port is configured so that a VLAN cannot be changed, the RADIUS server 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 The RADIUS server tried to assign a VLAN to a client on a port, but the VLAN name was not found in the VTP database.

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 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 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-INVALID_INPUT: Dot1x Interface parameter is
Invalid on interface [char]

Explanation 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 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 The user attempted to configure 802.1X on a non-supported interface. 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 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

Error Message DTP-4-MEM_UNAVAIL: Memory not available to perform the trunk negotiation action

Explanation 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 occasionally a timer 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 The system is unable to negotiate trunks because an internal operation 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 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 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 The encapsulation type of the trunk 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.

Error Message DTP-5-TRUNKPORTON:Port [dec]/[chars] has become
trunk

Explanation 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 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 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 error occurs if you have created a large number of IGMP groups and there is insufficient memory to support additional Internet Group Management Protocol (IGMP) group entries.

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 There is insufficient memory for this internal data structure.

Recommended Action Install additional memory.

Error Message C4K_EBM-3-CANTALLOCATEVLANGROUPENTRY: No vlan group table memory to add entry for addr %ea

Explanation There is insufficient memory 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).

Error Message C4K_EBM-3-CANTALLOCATEVLANHOSTENTRY:No vlan host
table memory to add entry for addr %ea

Explanation There is insufficient memory 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 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 The switch 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-NOMEMORINCOMPAT:Allocation of the [char] failed.

Explanation The system could not obtain the memory it needed or the operation was not allowed.

Recommended Action If this condition occurs in spite of enough memory in the system, unconfigure and reconfigure the Ether Channels to see if memory is freed to allocate EtherChannel. If the problem persists, contact your technical support representative.

Error Message EC-4-SSOINCOMPAT:Routed port channels cannot be created while the switch is configured in the SSO redundancy mode

Explanation Routed port channels are not supported while the switch is configured in the SSO redundancy mode.

Recommended Action Switch to RPR mode or use an SVI in a VLAN where a layer 2 port channel is the only member.

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

Explanation The Port Aggregation Protocol or EtherChannel cannot obtain the memory it needs.

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

Error Message EC-4-NOMEMORINCOMPAT:Allocation of the [char] failed.

Explanation PAgP/LACP could not obtain the memory it needed or that the system would not allow the operation .

Recommended Action Review the configuration and try to free memory resources.

EC-5

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

Explanation The interface has joined the bundle.

Error Message EC-5-CANNOT_ALLOCATE_AGGREGATOR: Aggregator limit
reached

Explanation 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 An interface with EtherChannel configuration cannot be administratively up if its port channel is administratively 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 The interface fell off the bundle.

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

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

Explanation 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.

FLASH Messages

This section contains the Flash memory (C4K_FLASH) messages.

Error Message C4K_FLASH-4-COMPACTFLASHNOTFOUND: Cannot find compact flash

Explanation You may see this message if the compact flash is not inserted properly or if it is removed while the switch is trying to access the flash.

Recommended Action Reinsert the compact flash and retry the operation.

Error Message C4K_FLASH-4-COMPACTFLASHNOTREADY: Compact flash is
not ready

Explanation You may see this message if the compact flash is not inserted properly or if it is removed while the switch is trying to access the flash.

Recommended Action Reinsert the compact flash and retry the operation.

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 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 The switch cannot identify the newly inserted GBIC or SFP.

Recommended Action Remove and reinsert the GBIC or SFP.

Error Message C4K_GBICMAN-3-S2WERROR: S2w bus error while looking
for changed qbics on port [char]: [char]

Explanation There was an internal communication error when the software read the GBIC/SFP control data.

Recommended Action Contact your technical support representative.

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 An unexpected error occurred when the switch accessed the hardware device specified in the message.

Recommended Action Contact your technical support representative.

Error Message C4K_HW-3-X2IDENTIFICATIONFAILURE:Error while trying
to identify serdes type for [char] ([dec]) X2 module

Explanation There was an error when trying to identify the X2 module type.

Recommended Action Contact your technical support representative. You will probably need to replace the supervisor engine.

Error Message C4K_HW-3-X2OUIREGREADFAILURE:Error while reading
Supervisor X2 OUI register Device Addr: [dec]

Explanation There was an unexpected error when accessing a hardware device with the given device address.

Recommended Action Contact your technical support representative. You will probably need to replace the supervisor engine.

Error Message C4K_HW-3-X2LOOPBACKFAILURE: Failed to put [char]
Xaui([dec]) [char] loopback

Explanation Software was unable to put the X2 in or out of loopback, because it was unable to determine the X2 type.

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

HWACLMAN Messages

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

Error Message C4K_HWACLMAN-4-ACLHWPROGERR:[input/output] [char] hardware TCAM limit, [char]

Explanation Some ACL-based features cannot be fully programmed into the hardware. Packets that traverse these features 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 messages list the specific failure that occurred.

Error Message C4K_HWACLMAN-4-ACLHWPROGERRREASON:[input/output]
[object-info] [char] - [char]

Explanation The specific failure that prevented ACL-based features 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: ACl/QOS CAM Health Check:
[input/output] [char] Index: [dec] [char] (Cumulative Error
Count: [dec])

Explanation The background system health monitor detected a potential problem.

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

Error Message C4K_HWACLMAN-4-CAMBLOCKMASKALLOCFAILED: CAM state
memory allocation failure in region [dec]

Explanation The software could not allocate memory to maintain a software copy of the hardware classification TCAM masks that are used for ACL and QoS functionality.

Recommended Action This condition should never occur with the supervisor configurations of the system. If you see this message, copy it exactly and contact your technical support representative..

Error Message C4K_HWACLMAN-4-CLASSIFCAMPARITYERROR: Parity error
detected in [input/output] Classification CAM [char] Cell
[object-info] and corrected

Explanation The system detected and fixed a parity error in the hardware. If you see this error repeatedly, there is a strong likelihood of a hardware fault and the supervisor engine will need to be replaced.

Recommended Action The software fixes the parity error by rewriting the CAM entries to the hardware. If the problem persists, contact your technical support representative.

Error Message C4K_HWACLMAN-4-CLASSIFCAMREPLYPARITYERROR: Parity
error detected in lookup response from [input/output]
Classification CAM, Response Contents: [char]

Explanation The system detected a transient error in the classification TCAM operation. If you see thuis message repeatedly, there is a strong likelihood of a fault in FFE3/TCAM3 ASICs and the supervisor engine will need to be replaced.

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

Error Message C4K_HWACLMAN-4-CLASSIFCAMREQPARITYERROR: Parity
error detected in lookup request to [input/output]
Classification CAM, Data [char] Address [char]

Explanation The system detected a transient error in the Classification TCAM operation. If you see this error repeatedly, there is a strong likelihood of a fault in FFE3/TCAM3 ASICs and the supervisor engine will need to be replaced.

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

Error Message C4K_HWACLMAN-4-QOSFEATUREOUTOFSWRESOURCES: Out of
memory. [char] is inactive on port [char]

Explanation The software could not allocate memory to propagate QoS related configuration to the QoS TCAM hardware. This condition will result in the given QoS policy configuration not being effective for the given port.

Recommended Action This condition might occur under extreme ACL and/or QoS configurations. Some workarounds to attempt are:

- Try reducing the unwanted QoS and ACL configurations from ports and VLANs.
- Try disabling and re-enabling QoS via the qos global configuration command.

If the problem persists, contact your technical support representative.

Error Message C4K HWACLMAN-4-WARNINGSTRING: [char]

Explanation A nonspecific warning message was 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 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, 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 The supervisor engine received too many parity errors from the NetFlow Services Card. The supervisor engine stops all NetFlow-related activities.

HWNETFLOWMAN-4

Error Message C4K_HWNETFLOWMAN-4-HARDWAREUNRESPONSIVE: Netflow Hardware too slow in responding to software requests

Explanation Software tried to access NetFlow hardware but there was no response. Typically this would indicate that the NetFlow related hardware may have gone bad.

Recommended Action Contact your technical support representative.

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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 A fatal NetFlow error 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 The NetFlow Services Card 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.

Error Message C4K_HWNETFLOWMAN-4-FLOWSLOSTERR: Netflow stats lost due to full hw flow table. [char] [dec] packets.

Explanation 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 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-NOFREEFLOWPOLICERS:[dec] flow based policers are in use. All available flow policers are in use. Can't allocate more number of flow policers

Explanation The maximum number of flow policers that can be allocated by the system is 512. This message is displayed when the user tries to exceed that limit.

Recommended Action Free existing flow policers before trying to define new ones.

Error Message C4K_HWNETFLOWMAN-4-SWAGEDENTRYHWINVALIDATIONFAILED:
Invalidation failed for Hw flow (index: [object-info])
associated with sw active-aged flow

Explanation Software tried to access NetFlow hardware, but there was no response. Typically this would indicate that the NetFlow related hardware may have gone bad.

Error Message C4K_HWNETFLOWMAN-4-NONFATALPARITYERRORINTERRUPTSEEN
:Netflow Non Fatal Parity Error interrupt seen

Explanation The supervisor engine 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.

Error Message C4K_HWNETFLOWMAN-4-SEDISABLEDAFTERDELAY: Se is Disabled After a Small Delay

Explanation Software tried to access NetFlow hardware but there was no response. Typically this would indicate that the NetFlow related hardware may have gone bad. Access to the hardware was disabled.

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 for reasons other than "paused." Bad hardware could cause this problem.

Recommended Action Contact your technical support representative.

Error Message C4K_HWPORTMAN-4-CHECKFORDUPLEXMISMATCH:[char]
Tx-Queue could be blocked due to duplex mismatch

Explanation 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.

Error Message C4K_HWPORTMAN-4-GIGAPORTRESETBYRXCONFIGWORD: [char]
has been reset by the received autonegotiation word.

Explanation The port stayed connected during switchover, but the device on the other end of the link lost synchronization and restarted autonegotiation.

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 The supervisor engine 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 Due to an internal error the software is using an invalid aggregate port.

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

Explanation 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 Software is using an invalid bandwidth for an aggregate port.

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

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

Explanation 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 Software is using an invalid VLAN.

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

Explanation 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 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 Each Layer 3 interface has a VLAN that is associated with it. This message appears when some other Layer 3 interface is using the VLAN associated with the 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 Due to a software error, an interface's VLAN was set to a nonrequested value.

IDBMAN-4

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

Explanation Software has mistakenly 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 The given VLAN was mapped to the specified 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-PROTOCOLERROR: Service Module failed S2W
protocol, error [dec], state [dec]

Explanation The Serial 2-Wire (S2W) communication with an intelligent line card deviated from the defined protocol.

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 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 A new MOL ACL was created but there was insufficient memory for a MOL ACL. The ACL was not applied.

Recommended Action Remove all configurations where the ACL is 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 A new MOL ACL was created but there was insufficient memory for a MOL ACL. The ACL was not applied.

Recommended Action Remove all configurations where the MOL ACL is 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 The system has insufficient memory to allocate a new entry for this VLAN map.

Recommended Action Remove all configurations where the ACL is 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 The switch attempted to add a new IP address to the list of permitted IP addresses but 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 The switch 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.

IOSIGMPSNOOPMAN Messages

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

Explanation There is insufficient memory to support additional IGMP group entries, which are added automatically when you run CGMP or 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 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 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-GBICINSERTED: Slot= [dec] Port= [dec]:
GBIC has been inserted

Explanation An approved-vendor GBIC or SFP was inserted.

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

Error Message C4K_IOSINTF-5-GBICREMOVED: Slot= [dec] Port= [dec]:
GBIC has been removed

Explanation An approved-vendor GBIC or SFP was removed.

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

Error Message C4K_IOSINTF-5-NOTXVLAN:Router Port [char] has no internal vlan assigned to transmit packet

Explanation 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-NOTXVLAN:Router Port [char] has no internal vlan assigned to transmit packet

Explanation Occasionally during hot-swapping operations a previously queued packet is transmitted after the module in that slot was 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-OUTPACLDISABLEDUETORACL: Output PACL
[char] is disabled on port [char]

Explanation If the port is configured for an SVI that has output RACL, then the output PACL on the port is disabled. Output RACL and output PACL are mutually exclusive, it is not possible to configure both simultaneously.

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

Error Message C4K_IOSINTF-5-OUTPACLDISABLEDUETOVACL: Output PACL
[char] is disabled on port [char]

Explanation If the port is configured for a VLAN that has output RACL, then the output PACL on the port is disabled. Output RACL and output PACL are mutually exclusive, it is not possible to configure both simultaneously.

Error Message C4K_IOSINTF-5-STALEPHYPORT: Dropping packets to be transmitted out on port [char] (Linecard in Slot [dec] may have been removed)

Explanation During hot-swapping operations a previously queued packet may be transmitted after a switching module is removed. This indicates such packets are being dropped.

Recommended Action If this message appears without any hot swapping, please contact your technical support representative.

Error Message

Error Message C4K_IOSINTF-5-RJ45ACTIVE: Slot= [dec] Port= [dec]:
RJ45 connector has become active

Explanation A dual media port changed from using the SFP connector to using the RJ-45 connector.

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

Error Message C4K_IOSINTF-5-RJ45INACTIVE: Slot= [dec] Port= [dec]:
RJ45 connector has become inactive

Explanation A dual media port changed from using the RJ-45 connector to the SFP connector.

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 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 A packet that should be transmitted out of a port channel was 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 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 The switch does not have sufficient memory to allocate space for this adjacency; the supervisor engine 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 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 The 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 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 The switch does not have sufficient memory to allocate new VLANs, so the new VLAN allocation 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-3

Error Message C4K_IOSMODPORTMAN-3-SSOMODULEREADYTIMEOUT: Internal event: timed out after [dec] iterations waiting for the slot [dec] to become ready.

Explanation There is an internal logic error. The state of this switching module's ports will not be synchronized to the Standby supervisor.

Error Message C4K_IOSMODPORTMAN-3-SPANCONFIGOUTOFMEMORY:
RkiosSpanMan: Out of memory. Unable to process information for
RkiosSpanMan: ID. [dec]

Explanation The system ran 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 An unsupported or unknown power supply was 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 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-CLOCKMODULEFAULTY: Clock module switched to [dec] reason [char] for more info use the cmd:'show environment status clock'

Explanation This is a warning message indicating that the clock module is faulty and may have to be replaced.

Recommended Action Replacing the module would require replacing the switch chassis. Contact your technical support representative to confirm that this is necessary.

Error Message C4K_IOSMODPORTMAN-4-INLINEPOWEROVERMAX:Inline power
exceeds max threshold:Module status changed to 'Pwr Max'

Explanation The measured PoE usage is higher than the module's physical limit. This situation can be caused by misconfiguration or by one or more unauthorized appliances drawing more PoE than allocated. In installations with a 1400 W DC power supply, this warning can be a false positive. Refer to bug id CSCef49715.

Recommended Action Make sure that the right amount of PoE is allocated to each device. If the PoE allocation is correct, remove powered devices one at a time and see if the power usage decreases as expected. (You can use the **show power detail** command to see the PoE allocated to the module and the PoE used.) If the power usage decreases sharply when a device is disconnected, chances are that this device is using more PoE than allocated. Avoiding using this device should solve your problem. If after disconnecting all the devices on the module, the PoE usage is still high, and the system does not use 1400 W DC power, contact you technical support representative.

If you see this this message on a system using a 1400 W DC power supply, check the hardware revision of the switching module. If the module revision is earlier than the following, replace the switching module with a newer hardware revision:

WS-X4248-RJ45V 2.3

WS-X4248-RJ21V 2.3

WS-X4224-RJ45V 2.2

WS-X4548-GB-RJ45V 2.0

WS-X4524-GB-RJ45V 1.2

Error Message C4K_IOSMODPORTMAN-4-SSOMODULEOLDVERSION: Received stale acknowledgement for the linecard in slot [dec]: expected [dec], received [dec].

Explanation This is most probably the result of a linecard being rapidly removed and reinserted.

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

Error Message C4K_IOSMODPORTMAN-4-FANTRAYBAD:Fan tray has failed

Explanation The fan tray failed.

Recommended Action Replace the fan tray as soon as possible.

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.

Error Message C4K_IOSMODPORTMAN-4-FANTRAYREMOVED: Fan tray has been removed

Explanation The fan tray was removed.

Error Message C4K_IOSMODPORTMAN-4-INLINEPOWERSUPPLYBAD: Inline power from power supply [dec] has failed or been turned off

Explanation A PoE source from a power supply failed or was 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 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 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 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 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 A power supply failed or was 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 A power supply fan failed.

Recommended Action Replace the power supply as soon as possible.

Error Message C4K_IOSMODPORTMAN-4-POWERSUPPLYREMOVED:Power supply
[dec] has been removed

Explanation The power supply was removed.

Error Message C4K_IOSMODPORTMAN-4-POWERSUPPLYOUTPUTDECREASED: Power supply [dec] output has decreased

Explanation The power supply output decreased. This could be due to switching it off, power failure, or some failure in the power supply.

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 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 and environment to determine the cause of the rise in temperature. 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 The chassis temperature is now below the critical threshold. The chassis is still operating above the normal temperature.

Recommended Action Inspect the chassis to determine the cause of the temperature problem. Cool the system.

IOSMODPORTMAN-6

Error Message C4K_IOSMODPORTMAN-6-CLOCKSWITCHOVER: Chassis Clock
Module switched to Clock: [dec]

Explanation This indicates that the clock module switched over to another clock.

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

Error Message C4K_IOSMODPORTMAN-6-INLINEPOWERSUPPLYGOOD: Inline
power from power supply [dec] is Ok

Explanation The PoE power supply just inserted in [dec] is functioning normally.

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

Error Message C4K_IOSMODPORTMAN-6-POWERSUPPLYOUTPUTINCREASED:
Power supply [dec] output has increased

Explanation The indicated power supply output increased.

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

Error Message C4K_IOSMODPORTMAN-6-FANTRAYGOOD:Fan tray is okay

Explanation The fan tray passed all tests and is operating normally.

Error Message C4K_IOSMODPORTMAN-6-FANTRAYINSERTED:Fan tray has been inserted

Explanation The fan tray was inserted.

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

Error Message C4K_IOSMODPORTMAN-6-FANTRAYINSERTEDDETAILED: Fan tray ([char] S/N: [char] Hw: [dec].[dec]) has been insertedT

Explanation The fan tray was inserted.

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

Error Message C4K_IOSMODPORTMAN-6-INLINEPOWEROK:Inline power
within limits:Module status changed to 'Ok'

Explanation 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-MODULEINSERTED: Module [dec] is inserted

Explanation A module was inserted into slot [dec].

Error Message C4K_IOSMODPORTMAN-6-MODULEOFFLINE: Module [dec] is offline

Explanation The specified module is offline.

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

Error Message C4K_IOSMODPORTMAN-6-MODULEONLINE:Module [dec]
([char] S/N:[char] Hw:[dec].[dec]) is online

Explanation The specified module is online.

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

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.

Error Message C4K_IOSMODPORTMAN-6-PACKETMEMORYERRORPOWERCYCLE:Supervisor power cycled due to packet memory errors

Explanation This supervisor was power cycled to get rid of SRAM errors detected in the packet memory. It is expected that the transient SRAM errors in packet memory are cleared by a power cycle of a supervisor.

Error Message C4K_IOSMODPORTMAN-6-PACKETMEMORYERRORSOFTRESET:Supervisor soft reset due to packet memory errors

Explanation This supervisor was reset because it encountered SRAM errors in the packet memory. It was soft reset either because it does not have self power cycle capability or the switch is operating in SSO mode.

Recommended Action Contact your technical support representative.

Error Message C4K_IOSMODPORTMAN-6-PEMGOOD: Power Entry Module has been restored to working condition

Explanation The external power supply source providing PoE 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 A failed power supply was 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 A failed power supply was fixed.

Error Message C4K_IOSMODPORTMAN-6-POWERSUPPLYINSERTED:Power
supply [dec] has been inserted

Explanation The specified power supply was inserted.

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

Error Message C4K_IOSMODPORTMAN-6-POWERSUPPLYINSERTEDDETAILED:
Power supply [dec] ([char] S/N: [char] Hw: [dec].[dec]) has been
inserted

Explanation A power supply was 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 The chassis temperature is now normal.

C4K_IOSREDUNDANCYMAN Messages

This section contains the Catalyst 4500 series Cisco IOS module Redundancy Manager (IOSREDUNDANCYMAN) messages.

Error Message C4K_IOSREDUNDANCYMAN-3-BUFFERALLOCATIONFAILED:Rkios
CheckpointMan:Buffer allocation error (client:[char],
error:[dec])

Explanation There was an internal error when allocating resources for the checkpoint facility.

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

Error Message C4K_IOSREDUNDANCYMAN-3-CHECKPOINTMESSAGESENDFAILURE
:RkiosCheckpointMan:Message send failure (client:[char])

Explanation There was an internal error when allocating resources for the checkpoint facility.

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

Error Message C4K_IOSREDUNDANCYMAN-3-NEWCHECKPOINTCLIENTFAILED:Rk
iosCheckpointMan:Error adding new client (client:[char],
error:[dec])

Explanation There was an internal error when allocating resources for the checkpoint facility.

Error Message C4K_IOSREDUNDANCYMAN-3-NEWCLIENTREGISTRATIONFAILED:
RkiosRedundancyMan:Error adding new client (client:[char],
error:[dec])

Explanation There was an internal error when allocating resources for the redundancy facility.

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 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 startup file for the next reboot. If the problem persists, contact your technical support representative.

Error Message C4K_IOSSYS-3-SAVEPOSTRESULTFAILED: Failed to save POST results to [char]. [char].

Explanation 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.

IOSSYS-7

Error 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 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 The systemis unusable due to software 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 The environment variable name is too long.

Recommended Action Enter the **unset** command to shorten the name.

Error Message C4K_IOSSYSMAN-3-OUTOFPACKETHEADERS:Cannot allocate buffer for a packet header

Explanation 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 The software writes certain configuration values to the NVRAM. The variable name is too long (greater than 4096 bytes) for the available storage space.

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 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 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 does not have sufficient memory to hold 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 A request was made to add a duplicate adjacency to the Forwarding Information Base (FIB) adjacency database.

Error Message C4K_IPROUTEMAN-3-FIBADJMANINUSEDELETION:FIB
Adjacency Manager:Attempted to delete FIB Adjacency Id [dec]
which is in use

Explanation 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 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 A request to add a duplicate routing table entry to the Forwarding Information Base (FIB) database was detected.

Error Message C4K_IPROUTEMAN-3-FIBENTRYNOSUCHADJTODELETE:FIB Entry:Couldn't delete adj [ip-addr] from FIB Entry [ip-addr], no such adj.

Explanation 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 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.

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

Error Message C4K_IPROUTEMAN-3-FIBNONEXISTENTDELETION:FIB:Attempt
ed to delete FIB Entry Id [dec] which does not exist

Explanation A request was made to delete a nonexistent routing table entry from the platform Forwarding Information Base (FIB).

Error Message C4K_IPROUTEMAN-3-NOMOREK2FIBADJS:K2FibUnicast:no
more K2FibAdjs available, using punt adj instead for [ip-addr]
route.

Explanation 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 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 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 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 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 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 There was a consistency check failure. If this error occurs frequently, it could indicate faulty hardware.

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

Error Message C4K_L3HWFORWARDING-3-FWDCAMCONSISTENCYCHECKFAILED:
FwdCam Consistency Check Failed: index [dec]

Explanation There is a FwdCam Consistency Check Failure. If this error occurs frequently, it could indicate faulty hardware.

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

Error Message C4K_L3HWFORWARDING-3-FWDMEMPARITYERROR: Parity error
in Forwarding Memory

Explanation 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-MASKTABLECONSISTENCYCHECKFAILE
D: MaskTable Consistency Check Failed: block [dec]

Explanation 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-MASKTABLEREGIONCONSISTENCYCHEC
KFAILED: MaskTable Consistency Check Failed: region
[object-info]

Explanation 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 informational message only. No action is required.

Error Message C4K_L3HWFORWARDING-3-NOMOREK2FIBADJS:No hardware
adjacency resource available for route [ip-addr]

Explanation The hardware adjacency table has insufficient memory to allocate the adjacency set for this route. Forwarding will take place in the software instead.

Error Message C4K_L3HWFORWARDING-3-PBRBLOCKFAILEDTOADDFLATACE:K2F
ibPbrBlock:failed to add FlatAce [object-info] to block [dec]

Explanation The policy-routing data structures are corrupted. This memory corruption will probably crash the switch soon.

Recommended Action Contact your technical support representative.

Error Message C4K_L3HWFORWARDING-3-PBRBLOCKFAILEDTODELETEFLATACE:
K2FibPbrBlock: failed to remove FlatAce [object-info] from
block [dec]

Explanation The policy-routing data structures are corrupted. This memory corruption will probably crash the switch soon.

Recommended Action Contact your technical support representative.

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 The switch has insufficient memory to process the access list for a route map.

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

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 There is insufficient 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 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-FLOWCACHEOUTOFSPACEFORFLOWCACH EENTRY: K2FibFlowCache: insufficient space to store flow of type [object-info] with label [packet-info]

Explanation 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 The hardware policy-based routing forwarding engine now has sufficient resources to handle the route map for the specified interface and can now do hardware forwarding of unicast IP traffic.

LINECARDMGMTPROTOCOL Messages

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

Error Message C4K_LINECARDMGMTPROTOCOL-4-INITIALTIMEOUTWARNING:
[char] - management request timed out.

Explanation 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 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] [12-header] Vlan [dec]
TagType [object-info]

Explanation The hardware sent a packet to the CPU, but the receiving VLAN was incorrect. There is probably 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 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 Transmit packets are probably stuck in a queue, so new packets cannot be queued.

Error Message C4K_PKTPROCESSING-3-REPLICATEDINVALIDVLAN:
Replicated packet received on Vlan 0, CRC32 is valid. PortId
[dec] [12-header] Vlan [dec] TagType [object-info] count
[object-info]

Explanation A replicated packet was 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 [12-header] Port char] Vlan [dec]

Explanation A n inconsistent hardware state might exist. A packet was sent to the CPU due to input ACL processing by the hardware. The packet unexpectedly 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 The hardware sent a packet to the CPU, but the software did not recognize the event that triggered the packet to be sent.

PKTPROCESSING-4

Error Message C4K PKTPROCESSING-4-ERRORPACKET: [char]

Explanation The software is unable to process a packet; the packets have been forwarded to the CPU instead and the packet will be dropped.

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

Error Message C4K_PKTPROCESSING-4-IGNOREDPKTINRSPANVLAN: Unable to handle replicated packet received on RSPAN vlan. Address: src [mac-addr] dst [mac-addr] RSPAN Vlan [dec]

Explanation The spervisor engine received a replicated packet on an RSPAN VLAN as an output ACL event. The packet will be dropped.

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

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 There is insufficient memory to create a list of actions to perform on the packet. As a result, the packet was dropped.

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 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 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 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.

PKTPROCESSING-5

Error Message C4K_PKTPROCESSING-5-NOTAPPLYINGACL:Not applying
[input/output] Acl for packet [packet-info]

Explanation The software is unable to 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 the software could process it, 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 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.

Pluggable Messages

This section contains the SFP management (C4K_PLUGGABLEMAN) messages.

Error Message C4K_PLUGGABLEMAN-3-BADX2: Port [char]: X2's seeprom
is bad, try reinserting: vendor: [char], p/n: [char], s/n: [char]

Explanation The X2 SEEPROM data may be corrupted.

Recommended Action Reinsert the X2 module.

Error Message C4K_PLUGGABLEMAN-3-ETHHOLEERROR:
EthHolePluggableMan reviewing port [char], EthHoleError [char]

Explanation The software is unable to read the SEEPROM on this X2.

Recommended Action Contact your technical support representative. You will probably have to replace the X2 module.

Error Message C4K_PLUGGABLEMAN-3-X2SEEPROMREADFAILED: Failed to read x2 serial eeprom on port [char], try reinserting

Explanation The system could not identify the newly inserted X2.

Recommended Action Re-insert the X2 module.

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 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 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 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 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 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 The Port Manager 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 The Port Manager detected an invalid request. The first [*char*] is the invalid request, and the second [*char*] is the application making the request.

Recommended Action Reset the VLAN assignments to remove the conflict.

Error Message PM-4-BAD_CARD_COOKIE:an invalid card cookie was
detected

Explanation The Port Manager 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 The Port Manager 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 The Port Manager 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 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 The Port Manager 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 The Port Manager 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 The Port Manager 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 The Port Manager 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 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.

Error Message PM-4-ERR_RECOVER:Attempting to recover from [char]
err-disable state on [char]

Explanation 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 The Port Manager 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 The Port Manager 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 The Port Manager was 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 The Port Manager 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 The Port Manager 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 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 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 overture port and VLAN port count is below the recommended limit.

Error Message PM-4-NO SUBBLOCK: No PM subblock found for [char]

Explanation 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-PORT BOUNCED: Port [char] was bounced by [char].

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 reactivation event returned the active ports in the link-down state to the link-up state.

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

Error Message PM-4-PORT_CONSISTENT:Port [char] consistency has been restored

Explanation The port manager on the standby supervisor engine discovered that port state became consistent again.

Error Message PM-4-PORT_INCONSISTENT: Port [char] is inconsistent:
IDB state [char] (set %TE ago)

Explanation The port manager on the standby supervisor engine discovered that the port state was inconsistent for more that one second. Inconsistent ports are reactivated on switchover (you will see the PORT_BOUNCED message).

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

Error Message PM-4-PVLAN_TYPE_CFG_ERR: Failed to set VLAN [dec] to
a [char] VLAN

Explanation The platform 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 EC-4-SSOINCOMPAT:Routed port channels cannot be created while the switch is configured in the SSO redundancy mode

Explanation Routed port channels are not supported while the switch is configured in the SSO redundancy mode.

Recommended Action Switch to RPR mode or use an SVI in a VLAN where a layer 2 port channel is the only member.

Error Message PM-4-TOO_MANY_APP:application `[char]' exceeded
registration limit

Explanation The Port Manager detected an invalid request. [char] in 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 A n invalid host access value was sent to the host access table.

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 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.

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 The module ASIC that is identified by [char] failed diagnostics.

Recommended Action Contact your technical support representative.

Error Message C4K_PORTFANOUTASIC4X1000MAN-4-FAILEDTOSENDLOOPBACKT RIES:[char] port [dec] failed to send packet in [dec] tries

Explanation The module ASIC [char] was unable to send a loopback packet on a module ASIC port for the [dec]th time. 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 The module ASIC diagnostics for [char] 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 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 $\langle asic\text{-}code\rangle(x)$ 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 The module ASIC identified by [char] failed diagnostics.

Recommended Action Contact your technical support representative.

Error Message C4K_PORTFANOUTASIC8X1000MAN-4-FAILEDTOSENDLOOPBACKT
RIES: [char] port [dec] failed to send packet in [dec] tries

Explanation 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 The module ASIC diagnostics for [char] sent a loopback packet out interface [dec] and it came 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 The module ASIC that is identified by [char] failed diagnostics.

Recommended Action Contact your technical support representative.

Error Message C4K_PORTFANOUTASIC8X100MAN-4-FAILEDTOSENDLOOPBACKTR
IES:[char] port [dec] failed to send packet in [dec] tries

Explanation The module ASIC [char] was unable to send a loopback packet on the module ASIC port [dec] for the decth time. 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 The module ASIC diagnostics for [char] sent the loopback packet out port [dec] and it came 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 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 The software failed to allocate memory for a policer while processing the QoS configuration, possibly because the policer configuration exceeded its maximum supported limit.

Recommended Action Remove policies 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-POSTFAIL_RESET:POST failure on ACTIVE supervisor detected. [char]

Explanation The active supervisor failed POST but detected the standby supervisor at bootup. It is attempting to reset itself so that the standby supervisor can takeover as the new active supervisor engine.

Recommended Action You may need to replace the supervisor engine that failed POST. Contact your technical support representative.

Error Message C4K_REDUNDANCY-2-INCOMPATIBLE_SUPERVISORS: [char]

Explanation For proper operation of redundancy, the supervisor engines must be of the same model. In this condition redundancy operations are not available and the standby supervisor is disabled because the supervisors present are of different models.

Recommended Action Configure the hardware so that the active and standby supervisors are of the same model.

Error Message C4K_REDUNDANCY-2-IOS_VERSION_CHECK_FAIL: [char]

Explanation 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 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 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. [char]

Explanation The active supervisor engine failed POST. The current standby supervisor engine resets the current active supervisor engine to standby and attempts to become the active supervisor engine. If the standby supervisor failed POST, then it will suspend at bootup and stay there. During this time if the active supervisor fails, then the standby supervisor will also reboot because it is not a fully functional standby supervisor at this point.

Recommended Action Run offline diagnostics on the failed supervisor engine to isolate the problem.

Error Message C4K_REDUNDANCY-2-POSTFAIL_RESET:POST failure on ACTIVE supervisor detected. [char]

Explanation The active supervisor engine failed POST but detected the standby supervisor engine at bootup. The active supervisor engine will reset itself so that the standby supervisor engine can take over as the new active supervisor engine.

Recommended Action Run offline diagnostics on the failed supervisor engine to isolate the failure. Immediate action is not needed for the switch to operate, but redundancy will not be available until there is a second functional supervisor engine.

REDUNDANCY-3

Error Message C4K_REDUNDANCY-3-COMMUNICATION: Communication with
the peer Supervisor has been [char]

Explanation The status of the peer supervisor engine communication path changed.

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

Error Message C4K_REDUNDANCY-3-NOT_READY_FOR_SWITCHOVER: The active Supervisor failed but standby supervisor cannot initiate Switchover activity. Resetting standby Supervisor.

Explanation The standby supervisor engine is currently in an intermediate state and cannot take over for the primary supervisor engine.

Error Message C4K_REDUNDANCY-3-PEER_RELOAD: The peer Supervisor is being reset because [char]

Explanation 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 The peer supervisor engine is absent, and the switch shifted to nonredundant mode.

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

REDUNDANCY-4

Error Message C4K_REDUNDANCY-4-CONFIGSYNCFAIL:Persistent-config Sync to Standby supervisor failed.

Explanation The active supervisor engine 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 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

Error Message C4K_REDUNDANCY-5-CALENDAR_RATELIMIT: The calendar has been successfully synchronized to the standby supervisor [dec] times since last calendar syslog

Explanation The calendar was successfully synchronized to the standby supervisor the specified number of times.

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

Error Message C4K_REDUNDANCY-5-CALENDAR: The calendar has been successfully synchronized to the standby supervisor for the first time

Explanation The calendar was successfully synchronized to the standby supervisor for the first time.

Error Message C4K_REDUNDANCY-5-CONFIGSYNC:The [char] has been successfully synchronized to the standby supervisor

Explanation The configuration was 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 The configuration was 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.

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-DUPLEX_MODE: The peer Supervisor
has been detected

Explanation A peer supervisor engine was detected, and the switch shifted to duplex mode.

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

Error Message C4K_REDUNDANCY-6-INIT:Initializing as [char]
supervisor

Explanation 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 The supervisor engine that you are not directly connected to is currently initializing as either the active or standby supervisor engine in RPR mode.

Error Message C4K_REDUNDANCY-6-SWITCHOVER:Switchover activity
detected

Explanation The standby supervisor engine detected switchover activity.

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

S2W Messages

This section contains the Calendar (SERVICECARDMAN) messages.

Error Message C4K_S2W-4-READCALENDARERR: Calendar read operation Failed

Explanation The calendar read operation failed.

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

 ${\bf Error\; Message}$ C4K_S2W-4-STARTCALENDAROSCILLATORERR: Failed to start the calendar

Explanation The calendar operation failed to start.

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

Error Message C4K_S2W-4-WRITECALENDARERR: Calendar write operation Failed

Explanation The system was unable to write to the calendar.

Service Module Messages

This section contains the service module (C4K SERVICEMODULEHW) message.

Error Message C4K_SERVICEMODULEHW-3-OUTOFMEMORY: Out of memory cannot allocate internal buffers for module [dec]

Explanation The switch ran out of temporary buffers.

Recommended Action If this message persists, try resetting the switch.

Error Message C4K_SERVICEMODULEHW-6-RUNREADY: Run ready
notification message received for module [dec]

Explanation Switching module [dec] is connected to the switch and started up successfully.

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

Error Message C4K_SERVICEMODULEHW-6-EVENTTIMEOUT: Bringup
Handshake timed out for module [dec]

Explanation The supervisor engine did not receive an expected response from the switching module.

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

Error Message C4K_SERVICEMODULEHW-6-RESETNOTIFY: Reset
notification message received for module [dec]

Explanation Received reset notification for this switching module.

SFF8472 Messages

This section contains the floating-point subsystem (SFF8472) messages.

SFF8472-2

Error Message SFF8472-2-NOMEM: Not enough memory available for [char]

Explanation The SFF8472 subsystem could not obtain the memory that it needed.

Recommended Action Contact your technical support representative.

SFF8472-3

Error Message SFF8472-3-INTERNAL_ERROR: [char]

Explanation 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-UNEXPECTEDEVENT: Process received unknown
event (maj [hex] min [hex]).

Explanation 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.

SFF8472-5

```
Error Message SFF8472-5-THRESHOLD_VIOLATION: [char]: [char];
Operating value: [char]
```

Explanation There was a threshold violation as specified in the message.

Recommended Action Contact your technical support representative.

SFF8472_FLOAT

```
Error Message SFF8472_FLOAT-3-INTERNAL_ERROR: [char]
```

Explanation 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 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 you resolve the conflict, 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 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 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 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 The spanning tree message age timer 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 There was a change in the spanning tree loop guard configuration for the listed interface. When 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 The listed interface 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 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 802.10 trunk [char] [char].

Explanation 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 The listed interface 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 The listed interface received an SSTP BPDU that is tagged with a VLAN ID that does not match the VLAN ID on which the BPDU was received. This 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 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 There was a change in the spanning tree root guard configuration for the listed interface. 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 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 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 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 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]

Explanation 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 The extended system ID feature was 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.

Error Message SPANTREE-5-ROOTCHANGE: Root Changed for [char]
[dec]: New Root Port is [char]. New Root Mac Address is
[mac-addr]

Explanation The root changed for an instance of spanning tree.

Error Message SPANTREE-5-TOPOTRAP: Topology Change Trap for [char]
[dec]

Explanation A trap was generated to indicate the change in topology.

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 The spanning tree port 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 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 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-7-PORTDEL_SUCCESS: [char] deleted from Vlan
[dec]

Explanation The interface was deleted from the specified VLAN.

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

SPANTREE_FAST

Error Message SPANTREE_FAST-7-PORT_FWD_UPLINK: [char] [char] moved
to Forwarding (UplinkFast).

Explanation The listed interface was 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 The number of currently active VLAN spanning tree instances 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.

Supervisor Messages

This section contains the supervisor specific (C4K SUPERVISOR) messages.

Error Message C4K_SUPERVISOR-3-SUPOCTALPHYMDIOREADERR: Failed to perform read operation on Octal Serdes at address [dec] for the register at address [dec]

Explanation Unable to read the Octal Serdes on the supervisor.

Recommended Action If this continues to happen, please contact your technical support representative to replace the supervisor.

Error Message C4K_SUPERVISOR-3-POWERSUPPLYSTATUSREADFAILED:
Failed to read power supply [dec]'s status register

Explanation Reading the power supply status register failed.

Recommended Action Try reinserting the power supply. If the problem persists, hot swap it with a new power supply.

Error Message C4K_SUPERVISOR-3-SUPOCTALPHYMDIOREADERR: Failed to perform read operation on Octal Serdes at address [dec] for the register at address [dec]

Explanation There was an error with the Octal Serdes on the supervisor.

Recommended Action If this continues to happen, please contact your technical support representative to replace the supervisor.

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 The amount of traffic detected on the interface exceeded the configured threshold values. The system filters excess traffic when a packet is received. The system is not forwarding packet traffic.

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 The amount of traffic detected on the interface exceeded the configured threshold values. Because the interface was configured to be shut down if a packet storm event is detected, it was 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 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 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 problem persists, contact your technical 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 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 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 A failure occurred when reading the backplane serial EEPROM.

Recommended Action Power cycle the switch. If the problem persists, 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 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 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 A failure 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-FANTRAYREADFAILED: Failed to read
system fan tray status register from hardware

Explanation 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.

Error Message C4K_SUPERVISOR-3-FANTRAYSEEPROMREADFAILED: Failed to read fan tray's seeprom

Explanation A failure 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 The fan tray serial EEPROM cannot be read or was not 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 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 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 The serial-to-wire write operation to put the line card mux buffers in loopback 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 The serial-to-wire write operation to put the line card mux buffers in loopback 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 The mux buffer serial EEPROM cannot be read or was not 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 A failure 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.

 $\textbf{Error Message} \quad \texttt{C4K_SUPERVISOR-3-NETFLOWCARDSEEPROMINVALID: Invalid} \\ \textbf{Netflow Services Card seeprom data}$

Explanation The serial EEPROM on the NetFlow Services Card cannot be read or wasnot 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 A reading of the serial EEPROM on the NetFlow Services Card 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 The serial EEPROM on the NetFlow Services Card has 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 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-POWERSUPPLYSTATUSREADFAILED:Failed
to read power supply [dec]'s status register

Explanation Reading the power supply status register failed.

Recommended Action Try reinserting the power supply. If the message persists, hot swap it with a new power supply.

Error Message C4K_SUPERVISOR-3-POWERSUPPLYSEEPROMREADFAILED:
Failed to read power supply [dec]'s serial eeprom

Explanation A failure 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 The power supply serial EEPROM cannot be read or was not 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 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 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 A reading of the supervisor engine's serial EEPROM 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 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.

SUPERVISOR-4

Error Message C4K_SUPERVISOR-4-OTHERSUPERVISORACTIVEDEBOUNCE:Othe r supervisor is still holding hardware lock

Explanation 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 An error 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 The writing of the backplane serial EEPROM failed.

Recommended Action Power cycle the switch.

Error Message C4K_SUPERVISOR-7-SEEPROMWRITEFAILED: Failed to write supervisor's serial eeprom

Explanation The software was unable to write to the supervisor engine serial EEPROM.

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 Software detected that a device matching the trusted device boundary setting for the interface and changed the trust state for the interface to trusted.

Error Message SWITCH_QOS_TB-5-TRUST_DEVICE_LOST: [char] no longer
detected on port [char], port set to untrusted

Explanation The system lost contact with a trusted device and changed the trust state for the interface to untrusted.

 $\begin{tabular}{ll} \textbf{Recommended Action} & This is an informational message only. No action is required. \end{tabular}$

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 The switch 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 packets 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" attacks 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 The switch 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 The switch 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. A packet was denied because the source MAC address, destination MAC address, or IP validation 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 The switch 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 The switch 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.

Error Message SW_DAI-4-SPECIAL_LOG_ENTRY: [dec] Invalid ARP
packets [%CC]

Explanation The switch received [dec] number of ARP packets that the ARP inspection considers invalid. 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 The switch 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 The switch 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 Due to a lack of ready pool space, the VLAN Manager dropped a notification from the Port Manager.

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 The VTP protocol code 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 The VLAN Manager received an upcall from the Port Manager containing a VLAN cookie that translated to a bad VLAN number.

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 The VLAN software failed to use the VLAN configuration from a startup-config file. The software will use the binary VLAN configuration file in nonvolatile memory.

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

Error Message SW_VLAN-4-BAD_VLAN_CONFIGURATION_FILE: VLAN
configuration file contained incorrect verification word: [hex]

Explanation The VLAN configuration file begins with an unrecognized value and might not be a valid VLAN configuration file. The file was 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 When the VLAN Manager read the VLAN configuration file it 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 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.

Error Message SW_VLAN-4-EXT_VLAN_INTERNAL_ERROR: Extended VLAN manager received an internal error [dec] from [char]: [char]

Explanation The VLAN Manager received an unexpected error code 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 The extended VLAN Manager received invalid data 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 The VLAN Manager received an unexpected error return from a Cisco IOS file system call.

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

Error Message SW_VLAN-4-NO_PM_COOKIE_RETURNED: VLAN manager unexpectedly received a null [char] type cookie from the Port Manager

Explanation The VLAN Manager queried the Port Manager for a reference cookie but received a NULL pointer instead.

Error Message SW_VLAN-4-STARTUP_EXT_VLAN_CONFIG_FILE_FAILED:
Failed to configure extended range VLAN from startup-config.
Error [char]

Explanation The VLAN software 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-VLAN_CREATE_FAIL: Failed to create VLANs
[char]: [char]

Explanation 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_INTERNAL_ERROR: VLAN manager received
an internal error [dec] from vtp function [char]: [char]

Explanation The VLAN Manager received an unexpected error code from the VTP configuration software.

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 The VLAN Manager received invalid data 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 The VLAN Manager received invalid data 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 The VTP protocol code encountered an unusual diagnostic condition.

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

Error Message SW_VLAN-4-VTP_SEM_BUSY: VTP semaphore is unavailable
for function [char]. Semaphore locked by [char]

Explanation 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 problem persists, 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 The VLAN software 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 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. Such a spontaneous conversion 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 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 The software expected a delimiter pattern of successive packets but received some other pattern. This condition might be due to a loss of synchronization between the hardware and the software.

Error Message C4K_SWITCHINGENGINEMAN-3-BADLENGTH:Recived CPU packet with bad length

Explanation The switch 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 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 The hardware detected an error condition and 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 The switch received a packet that is larger than 2032 bytes. This large packet is called a jumbo packet.

Error Message C4K_SWITCHINGENGINEMAN-3-NOMEMORYFORRXRING: Not enough memory to initialize CPU packets

Explanation The system ran out of memory while trying to initialize the CPU packet driver.

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 the packet engine logic became unstable for unknown reasons.

Recommended Action Reboot the switch.

Error Message C4K_SWITCHINGENGINEMAN-3-PACKETMEMORYERROR2:
Multiple Errors in Packet Memory [dec]

Explanation 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] , total errors=
[dec]

Explanation 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 The packet memory diagnostic bootup test 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-PACKETMEMORYTESTPARTIALFAI LURE:Packet Memory buffer test detected errors with [dec] % of the packet buffers. Switch operation will continue, with potentially reduced performance. Use 'show diagnostic result module all detail' command to see test results.

Explanation The packet memory diagnostic bootup test detected failures, but there are still a sufficient number of working buffers to enable switch operation.

Recommended Action Use the **show diagnostic result module all detail** command to see the test results. 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] , total errors=
[dec]

Explanation 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 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 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 The software 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.

Catalyst 4500 Series Switch Cisco IOS System Message Guide

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.

Error Message C4K_SWITCHMANAGER-3-SSOACTIVEPORTACKTIMEOUT: Internal Event: timed out after [dec] iterations waiting for Standby to acknowledge port status change for [char]

Explanation This is an internal error.

Error Message C4K_SWITCHMANAGER-3-SSOHARDWAREACKTIMEOUT: Internal Event: timed out after [dec] iterations waiting for the [char] hardware to be programmed

Explanation The active supervisor engine is taking more time than usual to program the hardware. This should not affect normal behavior or SSO functionality. In the worst case you may see link flaps when the supervisor enginess switch over.

Recommended Action This is an informational message only. No action is required. If the problem persists, contact your technical support representative.

SWITCHMANAGER-4

Error Message C4K_SWITCHMANAGER-4-CANTPOWEROFF:Internal Error:
PimEthAutoNegotiator - Can't power off port [char]

Explanation 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 is an internal software error in an inline-power state machine.

Error Message C4K_SWITCHMANAGER-4-HARDWAREERROR: Power management hardware for port [char] bad.

Explanation 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 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 A read/write error occurred on the specified port.

Recommended Action Refer to the release notes to verify whether you can see all the symptoms described for CSCef87815. If not and you do not see any adverse effect on the functionality of the PoE linecards (WS-X4248-RJ45V, WS-X4248-RJ21V, WS-X4548-RJ45V, WS-X4224-RJ45V or WS-X4524-RJ45V), then treat this message an informational message only and no action is required.

Error Message C4K_SWITCHMANAGER-4-SSOEANWARNPORTRESET: The state of the port [char] is unknown after switchover, resetting its link.

Explanation A new switching module was inserted, and the active supervisor engine crashed unexpectedly before it could communicate the state of ports on the new module to the standby supervisor engine. The standby supervisor engine will assume that the port's link is down.

SWITCHMANAGER-5

Error Message C4K_SWITCHMANAGER-5-FLAPSHUTDOWN:Temporarily
disabling port [char] due to flap

Explanation 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 will 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 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.

Error Message C4K_SWNETFLOWMAN-4-NETFLOWCACHEFULL: Netflow hardware-software map cache full. Could not create a map.

Explanation 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 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 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 A module 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 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:Canno
t execute '[char]' right now, please try again later

Explanation More than one Telnet session 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 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 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 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 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

Explanation An error 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.

Error Message VQPCLIENT-2-DENY: Host [enet] denied on interface
[chars]

Explanation The VLAN Membership Policy Server (VMPS) 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 This is an informational message only. 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 An error 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 An error 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 An error 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 The VMPS directed that an interface be shut down. [chars] is the interface name.

Recommended Action This is an informational message only. 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 The system 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

Explanation The VMPS 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 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 This is an informational message only. 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 VMPS 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 The system lost connectivity with the current VMPS and is changing to the next server in its list.

Error Message VQPCLIENT-7-PROBE: Probing primary server
[IP_address]

Explanation The system is trying to reestablish connectivity with the primary VMPS at the given IP address.

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

Error Message VQPCLIENT-7-RECONF: Reconfirming VMPS responses

Explanation The switch is reconfirming all responses with the VMPS.

Recommended Action This is an informational 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 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.

WATCHDOG Messages



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