



Cisco Systems Intelligent Gigabit Ethernet Switch  
Modules for the IBM @server BladeCenter

## System Message Guide

Cisco IOS Release 12.1(22)EA6

**Note:** Before using this information and the product it supports, read the general information in Appendix B, “Getting Help and Technical Assistance” and Appendix C, “Notices.”

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# Preface

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## Audience

This guide is for the networking professional managing the Cisco Systems Intelligent Gigabit Ethernet Switch Modules, hereafter referred to as *the switch*. Before using this guide, you should have experience working with the Cisco IOS and the switch software features.

## Purpose

This guide describes only the Cisco Systems Intelligent Gigabit Ethernet Switch Module-specific system messages that you might encounter.

This guide does not describe how to install your switch or how to configure software features on your switch. It also does not provide detailed information about commands that have been created or changed for use by the switch. For hardware installation information, see the hardware installation guide that shipped with your switch. For software information, see the software configuration guide and the command reference for this release.

For documentation updates, see the release notes for this release.

## Conventions

This publication uses these conventions to convey instructions and information:

Command descriptions use these conventions:

- Commands and keywords are in **boldface** text.
- Arguments for which you supply values are in *italic*.
- Square brackets ([ ]) mean optional elements.
- Braces ({ }) group required choices, and vertical bars (|) separate the alternative elements.
- Braces and vertical bars within square brackets ({ { | } }) mean a required choice within an optional element.

Interactive examples use these conventions:

- Terminal sessions and system displays are in `screen` font.
- Information you enter is in **boldface screen** font.
- Nonprinting characters, such as passwords or tabs, are in angle brackets (<>).

Notes use this convention and symbol:



**Note**

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Means *reader take note*. Notes contain helpful suggestions or references to materials not in this manual.

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## Related Publications

In addition to this document, the following related documentation comes with the switch modules:

- *Cisco Systems Intelligent Gigabit Ethernet Switch Modules for the IBM eServer BladeCenter System Release Notes*



**Note**

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Switch requirements and procedures for initial configurations and software upgrades tend to change and therefore appear only in the release notes. Before installing, configuring, or upgrading the switch, see the release notes for the latest information.

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- *Cisco Systems Intelligent Gigabit Ethernet Switch Modules for the IBM eServer BladeCenter System Command Reference*

This document is in PDF format on the *IBM BladeCenter Documentation CD*. It includes:

- Command-line interface (CLI) modes
- CLI commands and examples
- Syntax description
- Defaults
- Command history
- Usage guidelines
- Related commands

- *Cisco Systems Intelligent Gigabit Ethernet Switch Modules for the IBM eServer BladeCenter Software Configuration Guide*

This Cisco document is in PDF format on the *IBM BladeCenter Documentation CD*. It includes:

- Configuration instructions
- Information about features
- Information about getting help
- Guidance for planning, implementing, and administering LAN operating system software
- Usage examples
- Troubleshooting information

- *Cisco Intelligent Gigabit Ethernet Switch Module for the IBM eServer BladeCenter Installation Guide*

- *Cisco Intelligent Gb Fiber Ethernet Switch Module for the IBM eServer BladeCenter Installation Guide*

These documents contain installation and configuration instructions for the modules. They also provide general information about your module, including warranty information, and how to get help. These documents are on the IBM BladeCenter Documentation CD.

- *eServer BladeCenter Type 8677 Installation and User's Guide*

This document is in PDF format on the *IBM BladeCenter Documentation CD*. It contains general information about your BladeCenter unit, including:

- Information about features
- How to set up, cable, and start the BladeCenter unit
- How to install options on the BladeCenter unit
- How to configure the BladeCenter unit
- How to perform basic troubleshooting of the BladeCenter unit
- How to get help

- *BladeCenter Management Module User's Guide*

This document is in PDF format on the *IBM BladeCenter Documentation CD*. It provides general information about the management module, including:

- Information about features
- How to start the management module
- How to install the management module
- How to configure and use the management module

- *BladeCenter HS20 Installation and User's Guide* (for each blade server type)

These documents are in PDF format on the *IBM BladeCenter Documentation CD*. Each provides general information about a blade server, including:

- Information about features
- How to set up and start your blade server
- How to install options on your blade server
- How to configure your blade server
- How to install an operating system on your blade server
- How to perform basic troubleshooting on your blade server
- How to get help

- Cisco IOS Release 12.1 documentation at

<http://www.cisco.com/en/US/products/sw/iosswrel/ps1831/index.html>

- Cisco IOS Release 12.2 documentation at

<http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/index.html>





## System Message Overview

This guide describes the Cisco Systems Intelligent Gigabit Ethernet Switch Module-specific system messages. During operation, the system software sends these messages to the console (and, optionally, to a logging server on another system). Not all system messages indicate problems with your system. Some messages are purely informational, whereas others can help diagnose problems with communications lines, internal hardware, or the system software. This guide also includes error messages that appear when the system fails.


**Note**

The Catalyst 2950 switch messages listed in this guide also apply to the Cisco Systems Intelligent Gigabit Ethernet Switch Modules.

This chapter contains these sections:

- [How to Read System Messages, page 1-1](#)
- [Error Message Traceback Reports, page 1-3](#)

## How to Read System Messages

System messages begin with a percent sign (%) and are structured as follows:

%FACILITY-SEVERITY-MNEMONIC: Message-text

- FACILITY is a code consisting of two or more uppercase letters that show 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**

Facility Code	Description	Location
CIGESM	Cisco Systems Intelligent Gigabit Ethernet Switch Modules (CIGESM) BladeCenter Switch Messages	<a href="#">“CIGESM Messages (BladeCenter Switch Messages)” section on page 2-2</a>
DHCP_SNOOPING	DHCP snooping	<a href="#">“DHCP_SNOOPING Messages” section on page 2-5</a>
DOT1X	IEEE 802.1x	<a href="#">“DOT1X Messages” section on page 2-5</a>

**Table 1-1 Facility Codes (continued)**

Facility Code	Description	Location
DTP	Dynamic Trunking Protocol	“DTP Messages” section on page 2-10
EC	EtherChannel	“EC Messages” section on page 2-12
ETHCNTR	Ethernet controller	“ETHCNTR Messages” section on page 2-15
HWMATM_MOD	Hardware MAC address table manager	“HWMATM_MOD Messages” section on page 2-17
PHY	PHY	“PHY Messages” section on page 2-19
PLATFORM_CAT2950	Application-specific Integrated Circuit (ASIC) for the switches	“PLATFORM_CAT2950 Messages” section on page 2-19
PLATFORM_CATALYST2950	Low-level platform messages	“PLATFORM_CAT2950 Messages” section on page 2-19
PM	Port manager	“PM Messages” section on page 2-23
PORT_SECURITY	Port security	“PORT_SECURITY Messages” section on page 2-30
SPAN	Switch Port Analyzer (SPAN)	“SPAN Messages” section on page 2-30
SPANTREE	Spanning tree	“SPANTREE Messages” section on page 2-31
SPANTREE_FAST	Spanning-tree fast convergence	“SPANTREE_FAST Messages” section on page 2-37
SPANTREE_VLAN_SWITCH	Spanning-tree VLAN switch	“SPANTREE_VLAN_SWITCH Messages” section on page 2-38
STORM_CONTROL	Storm control	“STORM_CONTROL Messages” section on page 2-38
SW_VLAN	VLAN manager	“SW_VLAN Messages” section on page 2-38
UDLD	Unidirectional Link Detection (UDLD)	“UDLD Messages” section on page 2-43
UFAST_MCAST_SW	UplinkFast multicast software	“UFAST_MCAST_SW Messages” section on page 2-45

- SEVERITY 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.
- MNEMONIC is a code that uniquely identifies the message.

**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.

- Message-text is a text string describing the condition. This portion of the message sometimes contains detailed information about the event, including terminal port numbers, network addresses, or addresses that correspond to locations in the system memory address space. Because the information in these variable fields changes from message to message, it is represented here by short strings 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 integer
[char]	Single character
[chars]	Character string
[enet]	Ethernet address (for example, 0000.FEED.00C0)
[hex]	Hexadecimal integer
[inet]	Internet address

This is a sample system message:

```
%EC-5-UNBUNDLE:Interface Gi0/17 left the port-channel Po2
```

The messages in [Chapter 2, “Message and Recovery Procedures,”](#) are described in alphabetical order by facility code with the most severe (lowest number) errors described first.

## Error Message Traceback Reports

Some messages describe internal errors and contain traceback information. This information is very important and should be included when you report a problem to your technical support representative.

This message example includes traceback information:

```
-Process= "Exec", level= 0, pid= 17
-Traceback= 1A82 1AB4 6378 A072 1054 1860
```

Some system messages ask you to copy the error messages and take further action. These online tools also provide more information about system error messages.

If, after using these tools, you still cannot determine the nature of the error, provide the information you have gathered to your technical support representative.

## Output Interpreter

The Output Interpreter provides additional information and suggested fixes based on the output of many CLI commands, such as the **show tech-support** privileged EXEC command. You can access the Output Interpreter at this URL:

<https://www.cisco.com/cgi-bin/Support/OutputInterpreter/home.pl>

## Bug Toolkit

The Bug Toolkit provides information on open and closed caveats, and you can search for all known bugs in a specific Cisco IOS Release. You can access the Bug Toolkit at this URL:

<http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl>

## Message and Recovery Procedures

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



**Note**

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

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**Note**

The Catalyst 2950 switch messages listed in this chapter also apply to the Cisco Systems Intelligent Gigabit Ethernet Switch Modules.

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This chapter contains these message categories:

- [CIGESM Messages \(BladeCenter Switch Messages\), page 2-2](#)
- [DHCP\\_SNOOPING Messages, page 2-5](#)
- [DOT1X Messages, page 2-5](#)
- [DTP Messages, page 2-10](#)
- [EC Messages, page 2-12](#)
- [ETHCNTR Messages, page 2-15](#)
- [HWMATM\\_MOD Messages, page 2-17](#)
- [LINK Messages, page 2-17](#)
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- [SW\\_VLAN Messages, page 2-38](#)

- [UDLD Messages, page 2-43](#)
- [UFAST\\_MCAST\\_SW Messages, page 2-45](#)

## CIGESM Messages (BladeCenter Switch Messages)

This section contains the Cisco Systems Intelligent Gigabit Ethernet Switch Modules (CIGESM) messages.

**Error Message** PLATFORM\_CIGESM-2-OVER\_THERMAL\_THRESH2: The Switch Module has exceeded its second thermal threshold.

**Explanation** This message means that the switch temperature has exceeded the second thermal threshold 185°F (85°C) and that the switch is operating in an environment that can damage the hardware. The BladeCenter chassis will shut down the switch soon after this condition is detected.

**Recommended Action** Verify that environmental conditions of the BladeCenter chassis are adequate. Do not restart the switch until the overtemperature condition has been resolved.

**Error Message** PLATFORM\_CIGESM-3-IMAGEUPGRADEFAIL: PIC microcontroller image upgrade failed.

**Explanation** This message means that the PIC microcontroller-image upgrade failed, because the new PIC-microcontroller image failed the sanity check or failed the readback verification.

**Recommended Action** Perform the PIC microcontroller image upgrade again.

**Error Message** PLATFORM\_CIGESM-4-OVER\_THERMAL\_THRESH1: The Switch Module has exceeded its first thermal threshold.

**Explanation** This message means that the switch temperature has exceeded the first thermal threshold and that the switch is still operating normally. The first thermal threshold is 167°F (75°C). Monitor the temperature inside the BladeCenter chassis.

**Recommended Action** No action is required.

**Error Message** IPLATFORM\_CIGESM-4-SWITCHRESETPIC: Keepalive ECHO failed, PIC microcontroller has been reset.

**Explanation** This message means that the PIC microcontroller has not responded to three consecutive keepalive messages. The switch re-set the PIC microcontroller to reestablish communication.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-4-UNDR\_THERMAL\_THRESH2: The Switch Module has recovered from second thermal threshold.

**Explanation** This message means that the switch temperature no longer exceeds the second thermal threshold of 185°F (85°C). The switch might still be operating above the first thermal threshold of 167°F (75°C). Monitor the temperature inside the chassis.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-DISABLE\_EXTERN: Request from Management Module: disable all external ethernet ports gi0/17 - 20.

**Explanation** This message means that the switch received a request from the management module to shut down ports 17 to 20.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-DISABLE\_EXTERNMGMT: Request from Management Module: Switch can be managed from mgmt module ports only gi0/15 - 16.

**Explanation** This message means that the switch can only be managed through ports 15 and 16 through the management module. HTTP, SNMP, and Telnet data paths must go through the management module.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-ENABLE\_EXTERN: Request from Management Module: enable external ethernet ports gi0/17 - 20.

**Explanation** This message means that the switch performed a **no shutdown** interface configuration command on ports 17 to 20 because of a request from the management module to enable these ports.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-ENABLE\_EXTERNMGMT: Request from Management Module: Switch can be managed from all ports.

**Explanation** This message means that the switch can be managed through ports 17 to 20, as well as through the management module ports 15 and 16.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-MM\_NEITHER: The Switch Module cannot detect either Management Module as active.

**Explanation** This message means that the switch cannot determine which management module is the active primary. This does not affect the operation of the switch.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-MM\_SWITCHOVER: The active Management Module is now in slot *[dec]*.

**Explanation** This message means that the switch recognizes that the management module in the specified slot is the active primary. *[dec]* is the chassis slot number.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-5-UNDR\_THERMAL\_THRESH1: The Switch Module has recovered from first thermal threshold.

**Explanation** This message means that the switch temperature no longer exceeds the first thermal threshold of 167°F (75°C). Monitor the temperature inside the chassis.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-6-ACQUIRE\_IP: Request from Management Module: acquire IP Address from EEPROM.

**Explanation** This message means that the switch should use the IP address, netmask, and default IP gateway from EEPROM memory. You can configure this information through the CLI or through the BladeCenter Management Module web page.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-6-PICREADFAIL: Read request to PIC microcontroller failed.

**Explanation** This message means that the PIC microcontroller failed to respond to a Read request. The PIC microcontroller might be too busy to respond and thus the Read request timed out, or a checksum error in the communication exists.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-6-PICWRITEFAIL: Write request to PIC microcontroller failed.

**Explanation** This message means that the PIC microcontroller failed to respond to a Write request. The PIC microcontroller might be too busy to respond and thus the Write request timed out, or a checksum error in the communication exists.

**Recommended Action** No action is required.

**Error Message** PLATFORM\_CIGESM-6-RESETMGMT1: Request from Management Module received: reset ethernet port Gi0/15.

**Explanation** This message means that the switch had reset port 15 because of a request from the management module to reset the port.

**Recommended Action** No action is required.



**Error Message** PLATFORM\_CIGESM-6-RESETMGMT2: Request from Management Module received: reset ethernet port Gi0/16.

**Explanation** This message means that the switch had reset port 16 because of a request from the management module to reset the port.

**Recommended Action** No action is required.

## DHCP\_SNOOPING Messages

This section contains the DHCP snooping messages.

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

**Explanation** This message means that a software check failed in the DHCP snooping process. [chars] is the error message.

**Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error by using the Output Interpreter. Use the Bug Toolkit to look for similar reported problems. If you still require assistance, contact your technical support representative, and provide the representative with the gathered information.

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

**Explanation** This message means that if private VLANs are configured, the DHCP snooping configuration on the primary VLAN automatically propagates to all the secondary VLANs. [dec] is the VLAN IDs of the secondary VLANs, and [chars] is the warning.

**Recommended Action** No action is required.

## DOT1X Messages

This section contains the IEEE 802.1x authorization messages.

**Error Message** DOT1X\_MOD-3-NULLPTR: Unexpected null pointer in [chars] at [dec].

**Explanation** This message means that an internal software error occurred. [chars] is the software filename, and [dec] is the line number in the file.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools and about contacting Cisco, see the [“Error Message Traceback Reports”](#) section on page 1-3 for more information.

**Error Message** DOT1X-3-VLANINVALID: Received invalid vlan ([dec]) from RADIUS for [chars].

**Explanation** This message means that during IEEE 802.1x authorization, the RADIUS server provided a VLAN ID that is not configured on the switch.

**Recommended Action** Change the VLAN ID in the RADIUS configuration, or configure the VLAN on the switch.

**Error Message** DOT1X-3-VLANMALFORMED: Received malformed vlan from RADIUS for [chars].

**Explanation** This message means that during IEEE 802.1x authorization, the RADIUS server provided an invalid VLAN ID.

**Recommended Action** Correct the VLAN ID in the RADIUS configuration.

**Error Message** DOT1X-3-VOICEVLAN: Received voice vlan ([dec]) from RADIUS for [chars].

**Explanation** This message means that during IEEE 802.1x authorization, the RADIUS server provided a VLAN ID that conflicts with the voice VLAN ID on the port.

**Recommended Action** Change the VLAN ID in the RADIUS configuration, or change the voice VLAN on the switch port.

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

**Explanation** This message means that the system memory is not sufficient to perform the IEEE 802.1x authentication.

**Recommended Action** Reduce other system activity to reduce memory demands.

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

**Explanation** This message means that the IEEE 802.1x process received an unknown message event.

**Recommended Action** Restart the IEEE 802.1x process by entering the **dot1x system-auth-control** global configuration command. If this message recurs, reload the device.

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

**Explanation** This message means that the IEEE 802.1x process cannot operate because of an internal system error.

**Recommended Action** No action is required.

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

**Explanation** This message means that IEEE 802.1x could not be enabled on the channeling port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a channeling port, which is not allowed, causes this condition.

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

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

**Explanation** This message means that IEEE 802.1x could not be enabled on the dynamic mode port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a dynamic mode port, which is not allowed, causes this condition.

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

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

**Explanation** This message means that IEEE 802.1x could not be enabled on the dynamic VLAN port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a dynamic VLAN port, which is not allowed, causes this condition.

**Recommended Action** Disable dynamic VLAN configuration on the interface, and enable IEEE 802.1x.

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

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

**Recommended Action** Change the settings to valid values.

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

**Explanation** This message means that IEEE 802.1x could not be enabled on a voice VLAN-configured port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a voice VLAN-configured port, which is not allowed, causes this condition.

**Recommended Action** Disable the voice VLAN on the interface, and enable IEEE 802.1x.

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

**Explanation** This message means that the RADIUS server attempted to assign a VLAN to a client on a port with a voice VLAN that is equal to the access VLAN.

**Recommended Action** Either update the RADIUS configuration to not assign the VLAN equal to the voice VLAN, or change the voice VLAN on this port.

**Error Message** DOT1X-5-ERR\_RSPAN\_VLAN: Dot1x can not be enabled on ports configured in Remote SPAN vlan.

**Explanation** This message means that IEEE 802.1x could not be enabled on the remote SPAN VLAN port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a port that is in a remote SPAN VLAN, which is not allowed, causes this condition.

**Recommended Action** Disable the remote SPAN on the VLAN, and enable IEEE 802.1x.

**Error Message** DOT1X-5-ERR\_SPANDST: Dot1x can not be enabled on [chars]. It is configured as a SPAN Dest port.

**Explanation** This message means that IEEE 802.1x and SPAN destination ports are mutually exclusive features. [chars] is the port.

**Recommended Action** Disable the SPAN destination port configuration before reconfiguring IEEE 802.1x on the port.

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

**Explanation** This message means that IEEE 802.1x could not be enabled on the trunk port. Attempting to set IEEE 802.1x port-control to *auto* or *force-unauthorized* (*force\_unauth*) mode on a trunk port, which is not allowed, causes this condition.

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

**Error Message** DOT1X-5-ERR\_VLAN\_INVALID: The VLAN [dec] is invalid and cannot be assigned for use on the 802.1X port [chars] Vlan

**Explanation** This message means that the specified VLAN is out of range and cannot be assigned again for use 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 [chars] whose VLAN cannot be assigned

**Explanation** This message means that the RADIUS server tried to assign a VLAN to a client on a port whose VLAN cannot be changed, such as a routed port.

**Recommended Action** There is no recommended action.

**Error Message** DOT1X-5-ERR\_VLAN\_NOT\_FOUND: Attempt to assign non-existent [chars] VLAN [chars] to dot1x port [chars]

**Explanation** This message means that an attempt to assign a VLAN to a client on a port fails because the VLAN was not found in the VTP database.

**Recommended Action** Verify that the VLAN exists, or use another VLAN.

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

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

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

**Error Message** DOT1X-5-ERR\_VLAN\_RSPAN\_CONFIGURED: VLAN [dec] is configured as a Remote SPAN VLAN, which has Dot1x enabled interface(s) configured. Please disable Dot1x on all ports in this VLAN or do not enable RSPAN on this VLAN.

**Explanation** This message means that you should not enable RSPAN on a VLAN whose ports are configured with IEEE 802.1x enabled.

**Recommended Action** Either disable the RSPAN configuration on the VLAN, or disable IEEE 802.1x on all of the ports in this VLAN.

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

**Explanation** This message means that the IEEE 802.1x interface parameter is out of the specified range or is invalid.

**Recommended Action** See the CLI help by entering a ? after the command to see the valid range.

**Error Message** DOT1X-5-INVALID\_MAC: Invalid MAC address (drop, zero, broadcast or multicast mac address) [enet] is trying to authenticate.

**Explanation** This message means that a MAC address that was either a zero, broadcast, or multicast address attempted authentication by using IEEE 802.1x. However, IEEE 802.1x authentication is allowed only for valid nonzero, nonbroadcast, or nonmulticast source MAC addresses.

**Recommended Action** Connect a host that has a valid IEEE 802.1x address to the IEEE 802.1x-enabled port.

**Error Message** DOT1X-5-NO\_UNIDIR\_EDGE: Unidirectional port-control is configured on interface [chars], but will not be activated. Port is not configured for portfast.

**Explanation** This message means that the unidirectional port-control feature is configured but not activated because the specified interface is not configured as a PortFast port.

**Recommended Action** To activate the unidirectional port-control feature, enter the **spanning-tree portfast** interface configuration command.

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

**Explanation** This message means that you can enable IEEE 802.1x authentication only on Ethernet interfaces.

**Recommended Action** Enable IEEE 802.1x authentication only on Ethernet interfaces.

**Error Message** DOT1X-5-SECURITY\_VIOLATION: Security violation on interface [chars], New MAC address [enet] is seen on the interface in [chars] mode.

**Explanation** This message means that the port on the specified interface is configured in single-host mode. Any new host that is detected on the interface is perceived as a security violation. The port has been disabled.

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

## DTP Messages

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

**Error Message** DTP-4-MEM\_UNAVAIL: Memory was not available to perform the trunk negotiation action.

**Explanation** This message means that the system is unable to negotiate trunks because of a lack of memory.

**Recommended Action** Reduce other system activity to ease the memory demands.

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

**Explanation** This message means that a timer used by the trunking protocol unexpectedly expired. [chars] is the trunked interface.

**Recommended Action** This error is internally corrected, and no long-term ramifications exist. However, if more problems with trunking occur, reload the switch by using the **reload** privileged EXEC command.

**Error Message** DTP-4-UNKN\_ERR: An unknown operational error occurred.

**Explanation** This message means that the system is unable to negotiate trunks because an internal operation generated an unexpected error.

**Recommended Action** Reload the switch by using the **reload** privileged EXEC command.

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

**Explanation** This message means that the two ports involved in trunk negotiation belong to different VTP domains. Trunking is possible only when the ports involved belong to the same VTP domain. [chars] is the name of the interface.

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

**Error Message** DTP-5-ILGLCFG: Illegal config (on, isl--on, dot1q) on [chars].

**Explanation** This message means that one end of the trunk is configured as *on*, *ISL*, and the other end is configured as *on*, *802.1Q*. [chars] is the interface.

**Recommended Action** This configuration is illegal and will not establish a trunk between two switches. You must change the encapsulation type so that both ends of the trunk match.

**Error Message** DTP-5-NONTRUNKPORTON: Port [chars] has become non-trunk.

**Explanation** This message means that the interface changed from trunk to access. [chars] is the interface that changed.

**Recommended Action** This message is provided for information only.

**Error Message** DTP-5-TRUNKPORTCHG: Port [chars] has changed from [chars] trunk to [chars] trunk.

**Explanation** This message means that the encapsulation type of the trunk has changed. The first [chars] is the interface, the second [chars] is the original encapsulation type, and the third [chars] is the new encapsulation type.

**Recommended Action** This message is provided for information only.

**Error Message** DTP-5-TRUNKPORTON: Port [chars] has become [chars] trunk.

**Explanation** This message means that the interface changed from an access to a trunk. The first [chars] is the interface, and the second [chars] is the encapsulation.

**Recommended Action** This message is provided for information only.

# EC Messages

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

**Error Message** EC-4-NOMEM: Not enough memory available for [chars].

**Explanation** This message means that either the LACP or the PAgP EtherChannel could not obtain the memory it needed to initialize the required data structures. [chars] is the name of the data structure.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** EC-5-BUNDLE: Interface [chars] joined port-channel [chars].

**Explanation** This message means that the listed interface joined the specified EtherChannel. The first [chars] is the physical interface, and the second [chars] is the EtherChannel interface.

**Recommended Action** No action is required.

**Error Message** EC-5-CANNOT\_ALLOCATE\_AGGREGATOR: Aggregator limit reached, cannot allocate aggregator for group [dec].

**Explanation** This message means that the 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\_BUNDLE\_LACP: [chars] is not compatible with aggregators in channel [dec] and cannot attach to them ([chars]).

**Explanation** This message means that the port has port attributes that are different from the port channel or ports within the port channel.

**Recommended Action** Change the port attributes so that they match the other ports in the EtherChannel.

**Error Message** EC-5-CANNOT\_BUNDLE1: Port-channel [chars] is admin-down, port [chars] will remain stand-alone.

**Explanation** This message means that the EtherChannel is administratively shut down. The first [chars] is the EtherChannel interface, and the second [chars] is the physical interface.

**Recommended Action** Enable the EtherChannel by using the **no shutdown** interface configuration command.



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

**Explanation** This message means that the interface has different interface attributes than other ports in the port channel. For the interface to join the bundle (EtherChannel), change the interface attributes to match the EtherChannel attributes. The first [chars] is the interface to be bundled, the second [chars] is the physical interface that is already in the bundle, and the third [chars] is the reason for the incompatibility.

**Recommended Action** Change the interface attributes to match the EtherChannel attributes.

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

**Explanation** This message means that a port was not operational because its attributes were different from those of the port channel or ports within the port channel. The system has detected that the attributes of the port now match the port-channel attributes. [chars] is the affected port.

**Recommended Action** No action is required.

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

**Explanation** This message means that the configuration of the partner port differs from the configuration of other ports in the bundle. A port can only join the bundle when its global configuration and the configuration of the partner port are the same as other ports in the bundle.

**Recommended Action** Verify 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 [chars] in group [dec]: the interface cannot be added to the channel group.

**Explanation** This message means that the interface cannot be added to the channel group by using the specified mode.

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

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

**Explanation** This message means that the interface cannot be selected for the specified protocol because it is already part of an EtherChannel group with a different protocol enabled.

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

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

**Explanation** This message means that the interface cannot be unselected for the specified protocol because it is already part of an EtherChannel group.

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

**Error Message** EC-5-NOLACP: Invalid EC mode. LACP not enabled.

**Explanation** This message means that LACP is not included in the image on your switch. An EtherChannel cannot be set into any LACP mode.

**Recommended Action** Upgrade your switch with an image that supports LACP.

**Error Message** EC-5-NOPAGP: Invalid EC mode. PAgP not enabled.

**Explanation** This message means that PAgP is not included in the Cisco IOS image and that the EtherChannel mode cannot be set to **desirable** or **auto**.

**Recommended Action** Obtain an image with PAgP included, or set the mode to **on** by using the **channel-group** *channel-group-number* **mode on** interface configuration command.

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

**Explanation** This message means that the administrative state of the port is down because its EtherChannel interface, which controls the state of the port, is down.

**Recommended Action** Enter the **no shutdown** interface configuration command on the aggregate port.

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

**Explanation** This message means that an interface with an EtherChannel configuration cannot be enabled by using the **no shutdown** interface configuration command. It is a member of an EtherChannel group, and that EtherChannel group has been administratively shut down. The interface has an EtherChannel configuration, but no information is available yet about its port channel.

**Recommended Action** No action is required. Wait until the interface is online to determine the port-channel setting of the EtherChannel.

**Error Message** EC-5-STAYDOWN: [chars] will remain down as its port-channel [chars] is admin-down.

**Explanation** This message means that the administrative state of the aggregation port overrides that of the affected port. If the aggregation port is administratively down, all ports in the aggregation port are forced to be administratively down.

**Recommended Action** Enter the **no shutdown** interface configuration command on the EtherChannel interface to bring up the aggregation port.

**Error Message** EC-5-UNBUNDLE: Interface [chars] left the port-channel [chars].

**Explanation** This message means that the listed interface left the specified EtherChannel. The first [chars] is the physical interface, and the second [chars] is the EtherChannel.

**Recommended Action** No action is required.

**Error Message** EC-5-UNSUITABLE: [chars] will not join any port-channel, [chars].

**Explanation** This message means that one of the interfaces cannot join the EtherChannel because it is configured for PortFast, as a VLAN Membership Policy Server (VMPS), for IEEE 802.1x, as a voice VLAN, or as a Switched Port Analyzer (SPAN) destination port. All of these are unsuitable configurations for EtherChannels. The first [chars] is the interface name, and the second [chars] describes the details of the unsuitable configuration.

**Recommended Action** Reconfigure the port; remove the unsuitable configuration.

## ETHCNTR Messages

This section contains the Ethernet controller messages. These messages are a result of a failure of the switch software when trying to program the hardware. Most of these errors lead to incorrect switch behavior.

**Error Message** ETHCNTR-3-HALF\_DUX\_COLISION\_EXCEED\_THRESHOLD: Collision at [chars] exceed threshold. Consider as loop-back.

**Explanation** This message means that the collision at a half-duplex port exceeded the threshold, and the port is considered to be in the loop-back state. [chars] is the port where the threshold was exceeded.

**Recommended Action** No action is required on non-PoE switches. The port goes into error-disabled mode until the problem is resolved.

**Error Message** ETHCNTR-3-INVALIDMAP: Invalid map [dec] for address [enet].

**Explanation** This message means that an attempt to bridge a packet in software obtained an invalid result. [dec] is the map number, and [enet] is the Ethernet address.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** ETHCNTR-3-LOOP\_BACK\_DETECTED:, Loop-back detected on [chars]. The port is forced to linkdown.

**Explanation** This message means that a loopback condition might be the result of a balun cable incorrectly connected into a port. [chars] is the port.

**Recommended Action** On non-PoE switches, check the cables. If a balun cable is connected and the loopback condition is desired, no action is required. Otherwise, connect the correct cable, and then enable the port up by entering the **no shutdown** interface configuration command.

**Error Message** ETHCNTR-3-RA\_ALLOC\_ERROR:RAM Access [chars] [chars] memory allocation failure.

**Explanation** This message means that a request to read from or write to the RAM access failed its memory allocation. The first [chars] is the RAM access command that failed, and the second [chars] describes whether processor memory allocation or I/O memory allocation failed.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** ETHCNTR-3-RA\_REPLY\_ERROR: Invalid reply to RAM Access [chars] request ([hex]) from satellite [dec].

**Explanation** This message means that a request to read from or write to the satellite RAM produced an unexpected reply. [chars] is the request type (*read* or *write*), [hex] is the address, and [dec] is the satellite number.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** ETHCNTR-3-UNEXPECTED\_EVENT: Request [hex] encountered event [dec] in state [dec].

**Explanation** This message means that an unexpected event occurred during a RAM-access request. [hex] is a request identifier. The first [dec] is an event number, and the second [dec] is a state number.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

## HWMATM\_MOD Messages

This section contains the hardware MAC address table manager (HW MATM) messages.

**Error Message** HWMATM\_MOD-3-NULLPTR: Unexpected null pointer in [chars] at [dec].

**Explanation** This message means that an internal software error occurred. [chars] is the software filename, and [dec] is the line number in the file.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the nature of the error from the error message or from the **show tech-support** command display, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

## LINK Messages

This section contains the Fast Ethernet link-specific messages.

**Error Message** LINK-3\_FCS\_ERROR:ASSERT [chars] [chars] FCS Error.

**Explanation** This message means that the frame check sequence (FCS) error rate exceeds the configured FCS error rate threshold. An associated alarm is raised. The first [chars] is the user configured alarm for this fault condition. The second [chars] is the interface.

**Recommended Action** Verify that there is not a loose connection between the cabling and the switch. If the problem persists, copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the nature of the error from the error message or from the **show tech-support** command display, call your technical support representative, and provide the representative with the gathered information.

**Error Message** LINK-3\_FCS\_ERROR:CLEAR [chars] [chars] FCS Error.

**Explanation** This message means that the frame check sequence (FCS) error rate is below the configured FCS error rate threshold. An associated alarm is cleared. The first [chars] is the user-configured alarm for this fault condition. The second [chars] is the interface.

**Recommended Action** No action is required.

**Error Message** LINK-3\_LINK\_FAULT:ASSERT [chars] [chars] Link Fault.

**Explanation** This message means that there is a physical link problem. An associated alarm is raised. The first [chars] is the user-configured alarm for this fault condition. The second [chars] is the interface.

**Recommended Action** Verify that there is not a loose connection between the cabling and the switch. If the problem persists, copy the error message exactly as it appears on the console or in the system log. Enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the nature of the error from the error message or from the **show tech-support** command display, call your technical support representative, and provide the representative with the gathered information.

**Error Message** LINK-3\_LINK\_FAULT:CLEAR [chars] [chars] Link Fault.

**Explanation** This message means that the previous physical link problem has been corrected. The associated alarm is cleared. The first [chars] is the user-configured alarm for this fault condition. The second [chars] is the interface.

**Recommended Action** No action is required.

# PHY Messages

This section contains the PHY message.

**Error Message** PHY-4-MODULE\_DUP: SFPs in [chars] and in [chars] have duplicate vendor-id and serial numbers.

**Explanation** This message means that the small form-factor pluggable (SFP) module was identified as a Cisco SFP, but its vendor ID and serial number match that of another SFP in the system. The first [chars] is the interface in which the SFP is installed, and the second [chars] is the interface where the duplicate SFP is installed.

**Recommended Action** Cisco SFP modules are assigned unique serial numbers. Verify that the module was obtained from Cisco or a supported vendor. Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error by using the Output Interpreter. Use the Bug Toolkit to look for similar reported problems. If you still require assistance, contact your technical support representative, and provide the representative with the gathered information. For more information about these online tools, see the [“Error Message Traceback Reports”](#) section on page 1-3.

# PLATFORM\_CAT2950 Messages

This section contains the ASIC-driver-related messages.



Note

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Although the error message text refers to PLATFORM\_CAT2950 messages, they also apply to the Cisco Systems Intelligent Gigabit Ethernet Switch Modules.

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**Error Message** PLATFORM\_CAT2950-3-ASIC\_BIST\_FAILURE: C2950 BIST failed for memory [chars] count [dec].

**Explanation** This message means that, during power-on self-test (POST), the built-in memory test on the ASIC failed, which might occur because the ASIC has a defect. [chars] is the name of the ASIC memory table, and [dec] is the number of address failures in the built-in memory test.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-ASIC\_INIT\_FAILURE: ASIC driver initialization has failed.

**Explanation** This message means that one of the steps in the ASIC initialization sequence failed. This might occur because of a failure in the peripheral component interconnect (PCI) configuration setup, the Inter-IC (I2C) initialization, the built-in self-test on the ASIC, or another initialization sequence. This failure might also occur because of an ASIC defect.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-MEM\_COPY\_FAILURE: Invalid copy [dec] for table [chars].

**Explanation** This message means that there was an attempt to read or write an invalid copy of the switch internal memory. [dec] is the invalid copy number for the table, and [chars] is the name of the ASIC memory table.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-MEM\_INDEX\_FAILURE: Invalid index [dec] for table [chars].

**Explanation** This message means that there was an attempt to access an invalid index of the switch internal memory. [dec] is the index number, and [chars] is the name of the ASIC memory table.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-MEM\_INIT\_FAILURE: The switch memory resources could not be allocated for [chars], initialization failed.

**Explanation** This message means that, during the switch driver initialization, driver-related memory resources could not be allocated, which might occur because of an ASIC defect. [chars] can be *asic instance*, *switch ports*, *fast-ethernet queues*, or *gigabit queues*.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.



**Error Message** PLATFORM\_CAT2950-3-MEM\_READ\_FAILURE: Read memory failed for memory [chars] at index [dec].

**Explanation** This message means that an attempt to read a valid location in the internal chip memory failed, which might occur because of an ASIC defect. [chars] is the name of the ASIC memory table, and [dec] is the table index.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-MEM\_WRITE\_FAILURE: Write memory failed for memory [chars] at index [dec].

**Explanation** This message means that an attempt to write to a location in the internal chip memory failed, which might occur because of an invalid memory location or an ASIC defect. [chars] is the name of the ASIC memory table, and [dec] is the table index.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-MIIM\_OP\_FAILURE: Unable to read PHY register at addr [hex] for phy id [hex].

**Explanation** This message means that there was a failure to read from or write to a PHY register on the switch, which might occur because of a defect in the media independent interface (MII)/Gigabit media independent interface (GMII) switch interface. The first [hex] is the register address, and the second [hex] is the PHY ID.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-PCI\_FIND\_FAILURE: The number of asics expected were [dec], PCI bus scan found [dec].

**Explanation** This message means that, during the switch driver initialization, the switch found an incorrect number of ASICs on the PCI bus or did not find any ASICs with a correct PCI value. This might occur because of a system PCI bus defect or an incompatible software version running on the switch. The first [dec] is the number of ASICs that the switch should find, and the second [dec] is the actual number of ASICs that the switch found.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-PCI\_INIT\_FAILURE: The PCI address space initialization failed.

**Explanation** This message means that, during the switch driver initialization, the PCI address space for the ASIC could not be initialized, which might occur because of a system PCI-bus problem.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-PCI\_TEST\_FAILURE: PCI address space test failed, Wrote [hex], read [hex], re-read [hex].

**Explanation** This message means that, during POST, the PCI address space for the ASIC was not mapped correctly. This might occur because of a system PCI-bus problem. The first [hex], the second [hex], and the third [hex] are test data.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-REG\_READ\_FAILURE: Register read failed for [chars] in [chars]

**Explanation** This message means that the register read failed for register [chars] in [chars]. An attempt to read a valid location in the internal chip register failed. This could be due to a hardware defect.

**Recommended Action** Copy the message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-REG\_WRITE\_FAILURE: Register write failed for register [chars] in [chars]

**Explanation** This message means that an attempt to write to a location in the internal chip register failed. This might be caused by writing to an invalid register location or by a defect in the hardware.

**Recommended Action** Copy the message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-SCHAN\_OP\_FAILURE: S-channel operation timeout for opcode [chars].

**Explanation** This message means that there was a failure to read or write to an ASIC register or a memory location because of an ASIC internal bus failure. [chars] is the operation code.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-SCHAN\_READ\_REG\_FAILURE: S-channel operation read register failure at addr [hex].

**Explanation** This message means that there was a failure to read the ASIC registers, which might occur because of an invalid register address or internal bus failure. [hex] is the register address.

**Recommended Action** If the message recurs, copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

**Error Message** PLATFORM\_CAT2950-3-SYSTEM\_INFO\_FAILURE: The board information could not be read correctly, initialization failed.

**Explanation** This message means that, during switch driver initialization, there was a failure to read the system board information, which might occur because of an ASIC problem.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your technical support representative, and provide the representative with the gathered information.

## PM Messages

This section contains the port manager messages. The port manager is a state machine that controls all the logical and physical interfaces. All features, such as VLANs, UDLD, and so forth, work with the port manager to provide switch functions.

**Error Message** PM-2-NOMEM: Not enough memory available for [chars].

**Explanation** This message means that the port manager subsystem could not obtain the memory it needed to initialize the specified operation. [chars] is the port manager operation.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-2-VLAN\_ADD: Failed to add VLAN [dec] - [chars].

**Explanation** This message means that the software failed to add the VLAN to the VLAN Trunking Protocol (VTP) database. [dec] is the VLAN ID, and [chars] specifies the reason for the failure.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-3-INTERNALERROR: Port Manager Internal Software Error ([chars]: [chars]: [dec]: [chars])

**Explanation** This message means that there was an internal software error encountered in the Cisco IOS Port Manager. The first [chars] is the failure that occurred. The second [chars] is the source file where the failure occurred. [dec] is the line number in the file. The fourth [chars] is the name of the function in which the failure occurred.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-3-INTERNALERROR: Port Manager Internal Software Error [chars]: [chars]: [dec]: [chars]

**Explanation** This message means an internal software error occurred in the Cisco IOS Port Manager. The arguments provide details about the failure that Cisco technical support can analyze.

**Recommended Action** Copy the error message exactly as it appears on the console or in the system log, call your Cisco technical support representative, and provide the representative with the gathered information.

**Error Message** PM-4-BAD\_APP\_ID: An invalid application id [dec] was detected.

**Explanation** This message means that the port manager detected an invalid request. [dec] is the application ID.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_APP\_REQ: An invalid [chars] request by the '[chars]' application was detected.

**Explanation** This message means that the port manager detected an invalid request. The first [chars] is the invalid request, and the second [chars] is the application making the request.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_CARD\_COOKIE: An invalid card cookie was detected.

**Explanation** This message means that the port manager detected an invalid request.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_CARD\_SLOT: An invalid card slot ([dec]) was detected.

**Explanation** This message means that the port manager detected an invalid request. [dec] is the slot number.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_COOKIE: [chars] was detected.

**Explanation** This message means that the port manager detected an invalid request. [chars] is the invalid request.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_HA\_ENTRY\_EVENT: Invalid Host access entry event ([dec]) is received.

**Explanation** This message means that an invalid host access entry event was received; the host access table entry event should be an add, delete, or update event. [dec] is the event that is received.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_PORT\_COOKIE: An invalid port cookie was detected.

**Explanation** This message means that the port manager detected an invalid request.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_PORT\_NUMBER: An invalid port number ([dec]) was detected.

**Explanation** This message means that the port manager detected an invalid request. [dec] is the port number.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_VLAN\_COOKIE: An invalid vlan cookie was detected.

**Explanation** This message means that the port manager detected an invalid request.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-BAD\_VLAN\_ID: An invalid vlan id ([dec]) was detected.

**Explanation** This message means that the port manager detected an invalid request. [dec] is the VLAN ID.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-ERR\_DISABLE: [chars] error detected on [chars], putting [chars] in err-disable state.

**Explanation** This message means that the port manager detected a misconfiguration or misbehavior and placed the interface in an error-disabled state. A recovery is attempted after the configured retry time (the default is 5 minutes). [chars] is the port where the threshold was exceeded. The first [chars] is the error, and the second and third [chars] are the affected interfaces.

**Recommended Action** the error message exactly as it appears on the console or in the system log. Research and attempt to resolve the error by using the Output Interpreter. Enter the **show tech-support** user EXEC command to gather data that might help identify the nature of the error. Use the Bug Toolkit to look for similar reported problems. For more information about the online tools, see the [“Error Message Traceback Reports” section on page 1-3](#).

**Error Message** PM-4-ERR\_RECOVER: Attempting to recover from [chars] err-disable state on [chars].

**Explanation** This message means that the port manager is attempting to bring the interface up after taking it down to the error-disabled state. The first [chars] is the error, and the second [chars] is the affected interface.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-EXT\_VLAN\_INUSE: VLAN [dec] currently in use by [chars].

**Explanation** This message means that the port manager failed to allocate the VLAN for external use because the VLAN is being used by another feature. [dec] is the VLAN that is being used, and [chars] is the feature that is using it.

**Recommended Action** Reconfigure the feature (for example, the routed port) to use another internal VLAN or to request another available VLAN.

**Error Message** PM-4-EXT\_VLAN\_NOTAVAIL: VLAN [dec] not available in Port Manager.

**Explanation** This message means that the port manager failed to allocate the requested VLAN. The VLAN is probably being used as an internal VLAN by other features. [dec] is the requested VLAN.

**Recommended Action** Try to configure a different VLAN on the device.

**Error Message** PM-4-INACTIVE: putting [chars] in inactive state because [chars].

**Explanation** This message means that the port manager has been blocked from creating a virtual port for the switch port and VLAN, causing the port to be in an inactive state. The first [chars] is the interface name. The second [chars] specifies the reason for the error message.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-INT\_FAILUP: [chars] failed to come up. No internal VLAN available.

**Explanation** This message means that the port manager failed to allocate an internal VLAN, and the interface cannot come up. [chars] is the interface name.

**Recommended Action** Remove the extended-range VLAN by using the **no vlan** *vlan-id* global configuration command to make resources available.

**Error Message** PM-4-INT\_VLAN\_NOTAVAIL: Failed to allocate internal VLAN in Port Manager.

**Explanation** This message means that the port manager failed to find any available internal VLAN.

**Recommended Action** Delete some extended-range VLANs created by users, or remove some features (such as routed ports) that require internal VLAN allocation. To delete extended-range VLANs, use the **no vlan** *vlan-id* global configuration command. To delete a routed port, use the **no switchport** interface configuration command.

**Error Message** PM-4-INVALID\_HOST\_ACCESS\_ENTRY: Invalid Host access entry type ([dec]) is received.

**Explanation** This message means that an invalid host access entry type was received; the host access entry should be a configured or dynamic type. [dec] is the entry type that is received.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-LIMITS: The number of vlan-port instances on [chars] exceeded the recommended limit of [dec].

**Explanation** This message means that the total number of individual VLAN ports, counted in the specified module or switch, has exceeded the module or switch limit specified in the error message. VLANs can be counted more than once; if VLAN 1 is carried on ten interfaces, it will count as ten VLAN ports. For some platforms, such as the Catalyst 6000, bundling is also ignored for purposes



of this count; if eight interfaces on the same module are in one bundle, and the port channel is carrying VLAN 1, it will count as eight VLAN ports. [chars] is the module name (for example, switch or the module number), and [dec] is the recommended limit.

**Recommended Action** Reduce the number of trunks and VLANs configured in the specified module or switch. Keep the VLAN port count below the recommended limit specified in the software configuration guide. Use the **show interface trunk** privileged EXEC command to see the total number of trunks and VLANs.

**Error Message** PM-4-NO\_SUBBLOCK: No PM subblock found for [chars].

**Explanation** This message means that the port manager failed to find the subblock for this interface. [chars] is the interface name.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-TOO\_MANY\_APP: Application '[chars]' exceeded registration limit.

**Explanation** This message means that the port manager detected an invalid request. [chars] is the application.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-UNKNOWN\_HOST\_ACCESS: Invalid Host access value ([dec]) is received.

**Explanation** This message means that the host access table is being accessed with an invalid host access value. [dec] is the value that is received.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** PM-4-VMPS\_CFG: Dynamic access VLAN [dec] same as voice vlan on [chars].

**Explanation** This message means that the access VLAN ID on the VMPS server is the same as the voice VLAN ID on the interface. [dec] is the access VLAN ID, and [chars] is the physical interface.

**Recommended Action** Assign the access VLAN on the VMPS server to a different VLAN ID from the voice VLAN ID.

## PORT\_SECURITY Messages

This section contains the port security messages.

**Error Message** PORT\_SECURITY-2-PSECURE\_VIOLATION: Security violation occurred caused by MAC [enet] on port [chars].

**Explanation** This message means that an unauthorized device attempted to connect on a secure port. MAC [enet] is the MAC address of the unauthorized device, and port [chars] is the secure port.

**Recommended Action** Identify the device that attempted to connect on the secure port. Notify your network system administrator of this condition.

**Error Message** PORT\_SECURITY-6-VLAN\_FULL: Vlan [dec] on port [chars] has reached its limit. Address [enet] has been removed.

**Explanation** This message means that the voice VLAN is the same as the access VLAN and that the number of MAC addresses reached the maximum allowed on the access VLAN. The address is deleted. [dec] is the VLAN ID, [chars] is the port assigned to the voice VLAN and the access VLAN, and [enet] is the MAC address that is deleted.

**Recommended Action** No action is required.

## SPAN Messages

This section contains the Switched Port Analyzer (SPAN) messages.

**Error Message** SPAN-3-MEM\_UNAVAIL: Memory was not available to perform the SPAN operation.

**Explanation** This message means that the system was unable to perform a SPAN operation because of a lack of memory.

**Recommended Action** Reduce other system activity to ease the memory demands.

**Error Message** SPAN-3-UNKN\_ERR: An internal error occurred during a SPAN operation.

**Explanation** This message means that SPAN detected an error in its internal operation.

**Recommended Action** The error might be transient. Try the SPAN operation again. If a second attempt also fails, reload the switch by using the **reload** privileged EXEC command to complete the operation.

**Error Message** SPAN-3-UNKN\_ERR\_PORT: An internal error occurred when configuring SPAN on port [chars].

**Explanation** This message means that SPAN detected an error in its internal operation. [chars] is the interface.

**Recommended Action** The error might be transient. Try the SPAN operation again. If the second attempt also fails, reload the switch by using the **reload** privileged EXEC command to complete the operation.

## SPANTREE Messages

This section contains the spanning-tree messages.

**Error Message** SPANTREE-2-BLOCK\_BPDUGUARD: Received BPDU on port [chars] with BPDU Guard enabled. Disabling port.

**Explanation** This message means that a bridge protocol data unit (BPDU) was received on the interface specified in the error message that has the spanning-tree BPDU guard feature enabled. As a result, the interface was administratively shut down. [chars] is the interface.

**Recommended Action** Either remove the device sending BPDUs, or disable the BPDU guard feature. The BPDU guard feature can be locally configured on the interface or globally configured on all ports that have Port Fast enabled. After the conflict has been resolved, re-enable the interface by entering the **no shutdown** interface configuration command.

**Error Message** SPANTREE-2-BLOCK-PVID-LOCAL: Blocking [chars] on [chars] Inconsistent local vlan.

**Explanation** This message means that the spanning-tree port associated with the listed spanning-tree instance and interface will be held in the spanning-tree blocking state until the per-VLAN-ID (PVID) inconsistency is resolved. The listed spanning-tree instance is that of the native VLAN ID of the listed interface. The first [chars] is the interface, and the second [chars] is the spanning-tree instance.

**Recommended Action** Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the IEEE 802.1Q trunk connection. When corrected, spanning tree automatically unblocks the interfaces, as appropriate.

**Error Message** SPANTREE-2-BLOCK-PVID-PEER: Blocking on [chars] [chars]. Inconsistent peer vlan.

**Explanation** This message means that the spanning-tree port associated with the listed spanning-tree instance and interface will be held in the 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 interface on the peer switch to which the listed interface is connected. The first [chars] is the interface, and the second [chars] is the spanning-tree instance.

**Recommended Action** Verify that the configuration of the native VLAN ID is consistent on the interfaces on each end of the IEEE 802.1Q trunk connection. When it is corrected, spanning tree automatically unblocks the interfaces, as appropriate.

**Error Message** SPANTREE-2-LOOPGUARD\_BLOCK: Loop guard blocking port [chars] on [chars].

**Explanation** This message means that the spanning-tree message age timer has expired because no bridge protocol data units (BPDUs) were received from the designated bridge. Because this condition could be caused by a unidirectional-link failure, the interface is put into the blocking state and marked as loop-guard-inconsistent to prevent possible loops from being created. The first [chars] is the name of this port, and the second [chars] is the spanning-tree mode displayed in the **show spanning-tree** privileged EXEC command.

**Recommended Action** Enter the **show spanning-tree inconsistentports** privileged EXEC command to review the list of interfaces with loop-guard inconsistencies. Determine why devices connected to the listed ports are not sending BPDUs. One reason might be that they are not running the Spanning Tree Protocol (STP). If so, you should disable loop guard on the inconsistent interfaces by using the **spanning-tree guard none** interface configuration command or by starting STP on the remote side of the links.

**Error Message** SPANTREE-2-LOOPGUARD\_CONFIG\_CHANGE: Loop guard [chars] on port [chars] on [chars].

**Explanation** This message means that the spanning-tree loop-guard configuration for the listed interface has been changed. If enabled, the interface is placed into the blocking state. It is marked as loop-guard-inconsistent when the message-age timer expires because no BPDUs were received from the designated bridge. This feature is mainly used to detect unidirectional links. The first [chars] is the loop-guard state (*enable* or *disable*), the second [chars] is the interface name, and the third [chars] is the spanning-tree instance.

**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 [chars] on [chars].

**Explanation** This message means that the listed interface has received a BPDU, and, therefore, if the inconsistency was caused by a unidirectional link failure, the problem no longer exists. The loop-guard-inconsistency is cleared for the interface, which is taken out of the blocking state, if appropriate. The first [chars] is the name of this port, and the second [chars] is the spanning-tree mode displayed in the **show spanning-tree** privileged EXEC command.

**Recommended Action** No action is required.

**Error Message** SPANTREE-2-PVSTSIM\_FAIL: Superior PVST BPDU received on VLAN [dec] port [chars], claiming root [dec]:[enet]. Invoking root guard to block the port.

**Explanation** This message means that when a per-VLAN spanning-tree plus (PVST+) switch is connected to a Multiple Spanning Tree Protocol (MSTP) switch, the internal spanning-tree (IST) root (MST00) becomes the root for all PVST+ spanning trees. A loop might be created if any of the PVST+ spanning trees have a better root than the IST. To prevent the loop, the port on the MSTP switch that receives the superior message from the PVST+ side is blocked by root guard. The first [dec] is the VLAN number, [chars] is the port name, and [dec]:[enet] is the priority and MAC address.

**Recommended Action** When STP is converging after a new switch or switch port is added to the topology, this condition might happen transiently, and the port automatically unblocks in these cases. If the port remains blocked, identify the root bridge as reported in the message, and configure a priority for the VLAN spanning tree so that it is not selected as the root. There could be other superior PVST+ roots (lower bridge ID, lower path cost, and so forth) than the message shows, and the port does not recover until all such roots are cleared. If you are unsure, disable and re-enable the port.

**Error Message** SPANTREE-2-RECV-1Q-NON-1QTRUNK: Received 802.1Q BPDU on non 802.1Q trunk [chars] [chars].

**Explanation** This message means that the listed interface on which a Shared Spanning Tree Protocol (SSTP) BPDU was received was in trunk mode but was not using IEEE 802.1Q encapsulation. The first [chars] is the port, and the second [chars] is the VLAN.

**Recommended Action** Verify that the configuration and operational state of the listed interface and that of the interface to which it is connected are in the same mode (*access* or *trunk*). If the mode is trunk, verify that both interfaces have the same encapsulation (*ISL* or *802.1Q*). If the encapsulation types are different, use the **switchport trunk encapsulation** interface configuration command to make them consistent. When the encapsulation is consistent, spanning tree automatically unblocks the interface.

**Error Message** SPANTREE-2-RECV-BAD-TLV: Received SSTP BPDU with bad TLV on [chars] [chars].

**Explanation** This message means that the listed interface received a Shared Spanning Tree Protocol (SSTP) bridge protocol data unit (BPDU) without the VLAN ID tag. The BPDU is discarded. The first [chars] is the port, and the second [chars] is the VLAN that received the SSTP BPDU.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SPANTREE-2-RECV-PVID-ERR: Received BPDU with inconsistent peer vlan id [dec] on [chars] [chars].

**Explanation** This message means that the listed interface received an SSTP BPDU that is tagged with a VLAN ID that does not match the VLAN ID on which the BPDU was received. This occurs when the native VLAN is not consistently configured on both ends of an IEEE 802.1Q trunk. [dec] is the VLAN ID, the first [chars] is the port, and the second [chars] is the VLAN.

**Recommended Action** Verify that the configurations of the native VLAN ID are consistent on the interfaces on each end of the IEEE 802.1Q trunk connection. When the configurations are consistent, spanning tree automatically unblocks the interfaces.

**Error Message** SPANTREE-2-ROOTGUARD\_BLOCK: Root guard blocking port [chars] on [chars].

**Explanation** This message means that on the listed interface a BPDU was received that advertises a superior spanning-tree root bridge (lower bridge ID, lower path cost, and so forth) than that in use. The interface is put into blocking state and marked as *root-guard inconsistent* to prevent a suboptimal spanning-tree topology from forming. The first [chars] is the name of this port, and the second [chars] is the spanning-tree instance on which this port was blocked.

**Recommended Action** Enter the **show spanning-tree inconsistentports** privileged EXEC command to review the list of interfaces with root-guard inconsistencies. Determine why devices connected to the listed ports are sending BPDUs with a superior root bridge, and take action to prevent more occurrences. When the inaccurate BPDUs have been stopped, the interfaces automatically recover and resume normal operation. Make sure that it is appropriate to have root guard enabled on the interface.

**Error Message** SPANTREE-2-ROOTGUARD\_CONFIG\_CHANGE: Root guard [chars] on port [chars] on [chars].

**Explanation** This message means that the spanning-tree root guard configuration for the listed interface has changed. If enabled, any BPDU received on this interface that advertises a superior spanning-tree root bridge (lower bridge ID, lower path cost, and so forth) to that already in use causes the interface to be put into the blocking state and marked as *root-guard inconsistent*. The first [chars] is the root-guard state (*enable* or *disable*), the second [chars] is the interface, and the third [chars] is the spanning-tree instance.

**Recommended Action** Verify that this is the desired configuration for the listed interface. Correct it if it is not the desired configuration; otherwise, no action is required.

**Error Message** SPANTREE-2-ROOTGUARD\_UNBLOCK: Root guard unblocking port [chars] on [chars].

**Explanation** This message means that the listed interface is no longer receiving BPDUs advertising a superior root bridge (lower bridge ID, lower path cost, and so forth). The root-guard inconsistency is cleared for the interface, and the blocking state is removed from the interface. The first [chars] is the name of this port, and the second [chars] is the spanning-tree instance on which this port was blocked.

**Recommended Action** No action is required.

**Error Message** SPANTREE-2-UNBLOCK-CONSIST-PORT: Unblocking [chars] on [chars]. Port consistency restored.

**Explanation** This message means that the port VLAN ID or port type inconsistencies have been resolved and that spanning tree will unblock the listed interface of the listed spanning-tree instance as appropriate. The first [chars] is the interface, and the second [chars] is the spanning-tree instance.

**Recommended Action** No action is required.

**Error Message** SPANTREE-3-BAD\_PORTNUM\_SIZE: Rejected an attempt to set the port number field size to [dec] bits (valid range is [dec] to [dec] bits).

**Explanation** This message means that an error caused the platform-specific code to request more or fewer bits than are allowed. The spanning-tree port identifier is a 16-bit field. That is divided evenly between the port priority and port number, with each subfield being 8 bits. This allows the port number field to represent port numbers between 1 and 255. However, on systems with more than 255 ports, the size of the port number portion of the port ID must be increased to support the number of ports. This is performed by the STP subsystem at system initialization because the maximum number of ports on a particular platform does not change. The first [dec] is the number of bits for the port number, and the second and third [dec] describe the valid range.

**Recommended Action** Copy the message exactly as it appears on the console or in the system log. Research and attempt to resolve the error by using the Output Interpreter. Use the Bug Toolkit to look for similar reported problems. If you still require assistance, contact your technical support representative, and provide the representative with the gathered information. For more information about these online tools, see the [“Error Message Traceback Reports”](#) section on page 1-3.

**Error Message** SPANTREE-3-PORT\_SELF\_LOOPED: [chars] disabled.- received BPDU src mac [enet] same as that of interface.

**Explanation** This message means that a BPDU was received on the listed interface with a source MAC address that matches the one assigned to the listed interface. This means that a port might be looped back to itself, possibly because of an installed diagnostic cable. The interface will be administratively shut down. [chars] is the interface that received the BPDU, and [enet] is the source MAC address.

**Recommended Action** Check the interface configuration and any cable connected to the interface. When the problem is resolved, re-enable the interface by entering the **no shutdown** interface configuration command.

**Error Message** SPANTREE-4-PORT\_NOT\_FORWARDING: [chars] [chars] [chars] [chars]

**Explanation** This message means that the port is not forwarding packets; that is, it is not in a forwarding state. The first [chars] is the error severity. The second [chars] is the port. The third [chars] is the interface. The fourth [chars] is the status of the interface.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SPANTREE-5-EXTENDED\_SYSID: Extended SysId [chars] for type [chars].

**Explanation** This message means that the extended system ID feature is either enabled or disabled for the given type of spanning tree. If enabled, the spanning-tree instance identifier is stored in the lower portion of the bridge ID priority field and limits the allowed values for the bridge priority from 0 to 61440, in increments of 4096. If disabled, the bridge ID priority field consists only of the configured priority, but some spanning-tree features might not be available on a given platform (for example, support for 4096 VLANs). On some platforms, the extended system ID feature might be mandatory. The first [chars] is the extended system ID state (*enable* or *disable*), and the second [chars] is the spanning-tree instance.

**Recommended Action** No action is required.

**Error Message** SPANTREE-6-PORT\_STATE: Port [chars] instance [dec] moving from [chars] to [chars].

**Explanation** This message means that the state of the port changed.

**Recommended Action** No action is required.



**Error Message** SPANTREE-7-BLOCK-PORT-TYPE: Blocking [chars] on [chars]. Inconsistent port type.

**Explanation** This message means that the listed interface is being held in the spanning-tree blocking state until the port-type inconsistency is resolved. The first [chars] is the interface, and the second [chars] is the spanning-tree instance.

**Recommended Action** Verify that the configuration and operational states of the listed interface and those of the interface to which it is connected are in the same mode (*access* or *trunk*). If the mode is trunk, verify that both interfaces have the same encapsulation (*ISL* or *802.1Q*). 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 [chars] [chars].

**Explanation** This message means that an SSTP bridge protocol data units (BPDU) was received on the listed interface, which is not an operational trunking interface. The first [chars] is the port name, and the second [chars] is the VLAN name.

**Recommended Action** Verify that the configuration and operational state of the listed interface and that of the interface to which it is connected are in the same mode (*access* or *trunk*). If the mode is trunk, verify that both interfaces have the same encapsulation (*none*, *ISL*, or *802.1Q*). When these parameters are consistent, spanning tree automatically unblocks the interface.

## SPANTREE\_FAST Messages

This section contains the spanning-tree fast-convergence message.

**Error Message** SPANTREE\_FAST-7-PORT\_FWD\_UPLINK: [chars] [chars] moved to Forwarding (UplinkFast).

**Explanation** This message means that the listed interface has been selected as the new path to the root switch for the listed spanning-tree instance. The first [chars] is the spanning-tree instance, and the second [chars] is the interface.

**Recommended Action** No action is required.

## SPANTREE\_VLAN\_SWITCH Messages

The section contains the per-VLAN spanning-tree-specific message.

**Error Message** SPANTREE\_VLAN\_SW-2-MAX\_INSTANCE: Platform limit of [dec] STP instances exceeded. No instance created for [chars] (port [chars]).

**Explanation** This message means that the number of currently active VLAN spanning-tree instances has reached a platform-specific limit. No additional VLAN instances will be created until the number of existing instances drops below the platform limit. [dec] is the spanning-tree instance limit, and the first [chars] is the lowest VLAN number of those VLANs that are unable to have STP instances created.

**Recommended Action** Reduce the number of currently active spanning-tree instances by either disabling some of the currently active spanning-tree instances or deleting the VLANs associated with them. You must manually enable the spanning trees that generate this message.

## STORM\_CONTROL Messages

This section contains the storm control messages.

**Error Message** STORM\_CONTROL-2-SHUTDOWN: Storm control shut down [chars].

**Explanation** This message means that excessive traffic has been detected on a port that has been configured to be shut down if a storm event is detected. [chars] is the physical interface.

**Recommended Action** When the source of the packet storm has been fixed, re-enable the port by using the **no shutdown** interface configuration command.

## SW\_VLAN Messages

This section contains the VLAN manager messages. The VLAN manager receives information from the VTP and enables the proper VLAN membership on all interfaces through the port manager.

**Error Message** SW\_VLAN-3-VLAN\_PM\_NOTIFICATION\_FAILURE: VLAN Manager synchronization failure with Port Manager over [chars].

**Explanation** This message means that the VLAN manager dropped a notification from the port manager because of a lack of ready pool space. [chars] is the type of port manager notification.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-3-VTP\_PROTOCOL\_ERROR: VTP protocol code internal error: [chars].

**Explanation** This message means that the VTP code encountered an unexpected error while processing a configuration request, a packet, or a timer expiration. [chars] is the internal error.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-BAD\_PM\_VLAN\_COOKIE\_RETURNED: VLAN manager unexpectedly received a bad PM VLAN cookie from the Port Manager, VLAN indicated:[dec].

**Explanation** This message means that the VLAN manager received an upcall and a VLAN cookie from the port manager, which translated to a bad VLAN number. [dec] is the VLAN ID.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-BAD\_STARTUP\_VLAN\_CONFIG\_FILE: Failed to configure VLAN from startup-config. Fallback to use VLAN configuration file from non-volatile memory.

**Explanation** This message means that the VLAN software did not use the VLAN configuration from the startup-configuration file. It will use the binary VLAN configuration file in NVRAM.

**Recommended Action** No action is required.

**Error Message** SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE: VLAN configuration file contained incorrect verification word:[hex].

**Explanation** This message means that the VLAN configuration file read by the VLAN manager did not begin with the correct value. The VLAN configuration file is invalid, and it has been rejected. [hex] is the incorrect verification value.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-BAD\_VLAN\_CONFIGURATION\_FILE\_VERSION: VLAN configuration file contained unknown file version:[dec].

**Explanation** This message means that the VLAN configuration file read by the VLAN manager contained an unrecognized file version number, which might mean an attempt to regress to an older version of the VLAN manager software. [dec] is the file version number.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-BAD\_VLAN\_TIMER\_ACTIVE\_VALUE: Encountered incorrect VLAN timer active value:[chars].

**Explanation** This message means that, because of a software error, a VLAN timer was detected as active when it should have been inactive or is inactive when it should have been active. [chars] is the VLAN timer active value.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-EXT\_VLAN\_CREATE\_FAIL: Failed to create VLANs [chars]: [chars].

**Explanation** This message means that the software failed to create VLANs. The first [chars] is the Layer 2 VLAN list, and the second [chars] describes the reason for the failure.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-EXT\_VLAN\_INTERNAL\_ERROR: Extended VLAN manager received an internal error [dec] from [chars]: [chars].

**Explanation** This message means that an unexpected error code was received by the VLAN manager from the extended-range VLAN configuration software. [dec] is the error code. The first [chars] is the function, and the second [chars] describes the error code.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-EXT\_VLAN\_INVALID\_DATABASE\_DATA: Extended VLAN manager received bad data of type [chars]: value [dec] from function [chars].

**Explanation** This message means that invalid data was received by the extended-range VLAN manager from an extended-range VLAN configuration database routine. The first [chars] is the data type, [dec] is the number received, and the second [chars] is the function name.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-IFS\_FAILURE: VLAN manager encountered file operation error: call = [chars] / file = [chars] / code = [dec] ([chars]) / bytes transferred = [dec].

**Explanation** This message means that the VLAN manager received an unexpected error return from a Cisco IOS file system (IFS) call while reading the VLAN database. The first [chars] is the name of the function call, and the second [chars] is the file name. [dec] is the error code, the third [chars] is the textual interpretation of the error code, and the second [dec] is the number of bytes transferred.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-NO\_PM\_COOKIE\_RETURNED: VLAN manager unexpectedly received a null [chars] type cookie from the Port Manager, data reference:[chars].

**Explanation** This message means that the VLAN manager queried the port manager for a reference cookie but received a NULL pointer instead. The first [chars] is the type of port manager cookie, and the second [chars] is the interface or VLAN that is the source of the problem.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-STARTUP\_EXT\_VLAN\_CONFIG\_FILE\_FAILED: Failed to configure extended range VLAN from startup-config. Error [chars].

**Explanation** This message means that the VLAN software failed to use an extended-range VLAN configuration from the startup configuration file. All extended-range VLAN configurations are lost after the system boots up. [chars] is a description of the error code.

**Recommended Action** No action is required.

**Error Message** SW\_VLAN-4-VTP\_INTERNAL\_ERROR: VLAN manager received an internal error [dec] from vtp function [chars]:[chars].

**Explanation** This message means that the VLAN manager received an unexpected error code from the VTP configuration software. [dec] is the error code, the first [chars] is the VTP function, and the second [chars] is the error-code description.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-VTP\_INVALID\_DATABASE\_DATA: VLAN manager received bad data of type [chars]:value [dec] from vtp database function [chars].

**Explanation** This message means that the VLAN manager received invalid data from a VTP configuration database routine. The first [chars] is the data type, [dec] is the inappropriate value that was received, and the second [chars] is the VTP database function.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-VTP\_INVALID\_EVENT\_DATA: VLAN manager received bad data of type [chars]:value [dec] while being called to handle a [chars] event.

**Explanation** This message means that the VLAN manager received invalid data from the VTP configuration software. The first [chars] is the data type, [dec] is the value of that data, and the second [chars] is the VTP event.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-VTP\_SEM\_BUSY: VTP semaphore is unavailable for function [chars]. Semaphore locked by [chars].

**Explanation** This message means that the VTP database is currently locked by another task and is not available. Retry the operation later. [chars] is the name of the function that has locked the VTP database.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-4-VTP\_USER\_NOTIFICATION: VTP protocol user notification: [chars].

**Explanation** This message means that the VTP code encountered an unusual diagnostic situation. [chars] is a description of the situation.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** SW\_VLAN-6-OLD\_CONFIG\_FILE\_READ: Old version [dec] VLAN configuration file detected and read OK. Version [dec] files will be written in the future.

**Explanation** This message means that the VLAN software detected an old version of the VLAN configuration file format. It interpreted the file without a problem, but it will create files using the new format in the future. The first [dec] is the old version number, and the second [dec] is the new version number.

**Recommended Action** No action is required.

**Error Message** SW\_VLAN-6-VTP\_MODE\_CHANGE: VLAN manager changing device mode from [chars] to [chars].

**Explanation** This message means that an automatic VTP mode device change occurred upon receipt of a VLAN configuration database message containing more than a set number of VLANs. The first [chars] is the previous mode, and the second [chars] is the current mode.

**Recommended Action** No action is required.

## UDLD Messages

This section contains UniDirectional Link Detection (UDLD) messages.

**Error Message** UDLD-0-STOPPED: UDLD process stopped: [chars]

**Explanation** This message means that the UDLD process stopped because it cannot read the unique system identifier that UDLD uses. The system identifier identifies the device that is sending the UDLD packets. [chars] is the system identifier.

**Recommended Action** Reload the switch by using the **reload** privileged EXEC command. If the problem persists, enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error and call your technical support representative.

**Error Message** UDLD-3-UDLD\_IDB\_ERROR: UDLD error handling [chars] interface:[chars].

**Explanation** This message means that a software error occurred in UDLD processing associated with a specific interface. The first [chars] is the event, and the second [chars] is the interface.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** UDLD-3-UDLD\_INTERNAL\_ERROR: UDLD internal error:[chars].

**Explanation** This message means that a software check failed during UDLD processing. [chars] describes the internal error.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** UDLD-3-UDLD\_INTERNAL\_IF\_ERROR: UDLD internal error, interface [chars]: [chars].

**Explanation** This message means that a software check failed during UDLD processing. The first [chars] is the interface, and the second [chars] is a description of the error.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** UDLD-4-UDLD\_PORT\_DISABLED: UDLD disabled interface [chars], [chars] detected.

**Explanation** This message means that the UDLD Protocol disabled an interface because it detected connections between neighbors that were functioning only in one direction, which might potentially cause spanning-tree loops or interfere with connectivity. The cause is likely to be hardware-related, either due to a bad port, a bad cable, or a misconfigured cable. The first [chars] is the interface, and the second [chars] is the error detected.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.



**Error Message** UDLD-6-UDLD\_PORT\_RESET: UDLD reset interface [chars].

**Explanation** This message means that the UDLD Protocol detected a unidirectional connection between neighbors. Reset the port that was disabled by UDLD by using the **udld reset** privileged EXEC command or through a hardware action such as a link-state change. [chars] is the interface.

**Recommended Action** Find out more about the error by using the **show tech-support** privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

## UFAST\_MCAST\_SW Messages

This section contains the UplinkFast multicast software (UFAST\_MCAST\_SW) messages. The switch sends these messages when UplinkFast is enabled, a new root port takes over, and fast relearn multicast packets are not sent.

**Error Message** UFAST\_MCAST\_SW-3-PROC\_START\_ERROR: No process available for transmitting UplinkFast packets.

**Explanation** This message means that no process is available for sending UplinkFast packets.

**Recommended Action** Reload the switch by using the **reload** privileged EXEC command. If this problem continues after you reload the switch, enter the **show tech-support** privileged EXEC command to gather data that might provide information about the error. If you cannot determine the nature of the error from the error message or from the **show tech-support** command display, see the [“Error Message Traceback Reports” section on page 1-3](#) for more information.

**Error Message** UFAST\_MCAST\_SW-4-MEM\_NOT\_AVAILABLE: No memory is available for transmitting UplinkFast packets on Vlan [dec].

**Explanation** This message means that no memory is available for sending UplinkFast packets on VLAN [dec]. [dec] is the VLAN number.

**Recommended Action** Reduce other system activity to reduce memory demands.



## Security and QoS Configuration Messages

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This appendix describes the error messages for configuring network security with access control lists (ACLs) and for configuring quality of service (QoS). In [Table A-1](#), access control parameters (ACPs) are referred to as masks. For more information about ACPs, see the software configuration guide for this release.

**Table A-1 Common ACL Error Messages**

Error Message	Explanation and Suggested Solution
<code>%Error:Class-map [class-map name] has a different mask than the Policymap [policy-map name]</code>	<p>This error message means that the policy map has a different mask than the class map.</p> <p>Use the same mask in both the class map and the policy map.</p>
<code>%Error:Class-maps have a mix of System Defined and User Defined masks within the Policymap [policy-map name]</code>	<p>This error message means that a combination of system-defined and user-defined masks has been used in the multiple class maps that are part of a policy map.</p> <p>Class maps that are in a policy map cannot have ACLs that use both system-defined masks and user-defined masks.</p>
<code>%Error:System Defined ACEs of TCP/UDP and IP cannot exist together in a policy-map. Check policy-map :[policy-map name]</code>	<p>This error message means that a combination of Layer 3 system-defined access control entries (ACEs) and Layer 4 system-defined ACEs is in the same policy map.</p> <p>A policy map cannot have both Layer 3 system-defined ACEs and Layer 4 system-defined ACEs.</p> <p><b>Note</b> You cannot have masks such as <b>permit tcp any any</b>, <b>permit udp any any</b>, and <b>permit ip any any</b> within the same policy map.</p>
<code>%Error:Service-Policy is not supported on VLAN interface</code>	<p>This error message means that you have tried to attach a policy map to a VLAN interface.</p> <p>A policy map can be attached only to a physical interface.</p>
<code>%Error:Invalid policy-map</code>	<p>This error message means that the policy map is invalid.</p> <p>This message is normally preceded by a more explicit error message that gives details about the reasons for the invalidity of the policy map.</p>
<code>%Error:Match Numbered Attach Filter :ONLY one ACL allowed in a class-map</code>	<p>This error message means that there was an attempt to add another numbered ACL in the class map.</p> <p>Only one ACL is allowed in a class map.</p>

Table A-1 Common ACL Error Messages (continued)

Error Message	Explanation and Suggested Solution
%Error:Deny ACE not supported in access-group within a class-map. Check class-map : [class-map name]	This error message means that a deny ACE has been entered in an access group within a class map.  A deny ACE is not supported in an access group within a class map.
%Error:System Defined and User Defined ACEs cannot exist together in access-group within a class-map. Check class-map : [class-map name]	This error message means that a combination of system-defined and user-defined masks has been used in an access group within a class map.  The access group in a class map cannot have ACLs that use both system-defined masks and user-defined masks.
%Error:System Defined ACEs of TCP/UDP and IP cannot exist together in access-group within a class-map. Check class-map : [class-map name]	This error message means that a combination of Layer 3 system-defined access control entries (ACEs) and Layer 4 system-defined ACEs has been configured in the same access group.  The access group in a class map cannot have both Layer 3 and Layer 4 system-defined ACEs.
%Error:Match Named Attach Filter :ONLY one ACL allowed in a class-map	This error message means that an attempt was made to add another ACL in the class map.  Only one ACL is allowed in a class map.
%Error:The ACL has a different mask than the Policy-map [policy-map name]	This error message means that an attempt was made to create an ACL with a different mask within a policy map.  All ACLs within the same class maps of a policy map must have the same mask.
%Error:Service policy cannot be configured	This error message means that the policy map cannot be configured. The exact causes are provided in separate error messages that precede this error message.  The switches support the <b>policy-map</b> global configuration command with certain restrictions. For more information, see the command reference for this release.
%Error:Service policy cannot be supported - Policers required exceed Maximum Allowed on this interface	This error message means that the policy map cannot be supported because the required number of policers on this interface are more than permitted.  A Gigabit Ethernet port supports 60 policers.
%Error:Service policy cannot be supported - Rules required exceed available resources in ASIC.	This error message means that the policy map cannot be supported because the required number of resources to support this policy map is not available in the hardware.  Reduce the number of resources on this policy map.
%Error:Removing service-policy <i>policy-map name</i> from interface <i>interface_number</i>	This error message means that a policy map was invalid and was removed from an interface.  If a policy map is attached to an interface and you modify the policy map so that it becomes invalid, the system removes the policy map from the interface.

Table A-1 Common ACL Error Messages (continued)

Error Message	Explanation and Suggested Solution
<code>%Error:ASIC memory read write issues</code>	<p>This error message means that the switch hardware is having problems.</p> <p>Find out more about the error by using the <b>show tech-support</b> privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the <a href="#">“Error Message Traceback Reports”</a> section on page 1-3 for more information.</p>
<code>%Error:ASIC Resources unavailable</code>	<p>This error message means that the hardware does not have sufficient resources to support the user policies.</p>
<code>%Error:Invalid mask</code>	<p>This error message means that the user-defined mask is not entered correctly in the hardware.</p> <p>Remove the mask, and re-enter it.</p>
<code>%Error:Invalid rule</code>	<p>This error message means that the hardware had a problem programming the resource.</p> <p>Re-enter the command that you had entered before receiving the error message.</p> <p>Find out more about the error by using the <b>show tech-support</b> privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the <a href="#">“Error Message Traceback Reports”</a> section on page 1-3 for more information.</p>
<code>%Error:Invalid ingress port</code>	<p>This error message means that an invalid ingress port was detected by the hardware.</p> <p>Re-enter the command that you had entered before receiving the error message.</p> <p>Find out more about the error by using the <b>show tech-support</b> privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools see the <a href="#">“Error Message Traceback Reports”</a> section on page 1-3 for more information.</p>
<code>%Error:Another security mask on this interface</code>	<p>This error message means that there is another security mask present on the interface.</p> <p>Only one security mask is allowed on any interface.</p> <p>Remove all the security access groups on this interface, and attach the security access group that is required.</p>

Table A-1 Common ACL Error Messages (continued)

Error Message	Explanation and Suggested Solution
<code>%Error:Another qos mask on this interface</code>	This error message means that there is more than one quality of service (QoS) mask on the interface.  Only one QoS mask is allowed on any interface.  Remove all the QoS policy maps on this interface, and attach the policy map that is required.
<code>%Error:No sec mask on this interface</code>	This error message means that no security mask has been applied on this interface.
<code>%Error:No qos mask on this interface</code>	This error message means that no QoS mask has been applied on this interface.
<code>%Error:No sec rules on this interface</code>	This error message means that there are no security resources on this interface.
<code>%Error:No qos rules on this interface</code>	This error message means that there are no QoS resources on this interface.
<code>%Error:No free masks available</code>	This error message means that there are no free masks available for the user.  You must use one of the user-defined masks that is already configured. As an alternative, you can free up one of the masks by removing all the policies that use that mask.
<code>%Error:Invalid sequence - IP protocol ACE not allowed after TCP/UDP protocol ACE</code>	This error message means that a Layer 4 (TCP or UDP protocol) ACE preceded a Layer 3 (IP protocol) ACE.
<code>%Error: Service-Policy is not supported on EtherChannel interface</code>	This error message means that an access group is applied on an EtherChannel interface.  Access groups can be applied only to Layer 2 physical interfaces or management VLANs.
<code>%Error:A MAC Access Group exists on this interface</code>	This error message means that a MAC access group was previously configured on this interface.  Delete the MAC access group by using the <b>no mac access-group</b> interface configuration command, and re-enter the <b>ip access-group</b> interface configuration command.
<code>%Error:An IP Access Group exists on this interface</code>	This error message means that an IP access group was previously configured on this interface.  Delete the IP access group by using the <b>no ip access-group</b> interface configuration command, and re-enter the <b>mac access-group</b> interface configuration command.
<code>%Error:Out of Rule Resources</code>	This error message means that the hardware has run out of resources.  Re-enter the command with fewer ACEs.
<code>%Error:No free rules on this interface</code>	This error message means that the hardware has run out of resources.  Re-enter the command with fewer ACEs.
<code>%Error:ASIC error</code>	This error message means that the hardware has returned an error and that the command cannot be completed.

Table A-1 Common ACL Error Messages (continued)

Error Message	Explanation and Suggested Solution
%Error:ASIC out of resources	This error message means that the hardware does not have sufficient resources to support the user policies.
%Error:Mask/rule entry failure, errcode=XX	This error message means that the hardware displays an unknown error with the specified error code.
%Error:FAILURE to reinsert old ACL	This error message means a hardware failure has occurred. Delete the access group, and re-enter the command.
%Error:Max limit reached for number of ACEs in ACL :<acl_name>	This error message means that the maximum number of ACEs in an ACL has been reached. The ACE cannot be added to the ACL.
%Error:access-list too large to support on this interface. Check class-map : [class-map name] and access-list : [acl name]	This error message means that the access list cannot be applied on this interface because the interface does not have sufficient resources to meet the requirement of this access list. Re-enter the command with fewer ACEs.
%Error:FAILURE to reinsert old ACL, errcode=XX	This error message means that a hardware failure has occurred. Delete the access group, and re-enter the command that you had entered before receiving the error message. Find out more about the error by using the <b>show tech-support</b> privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the <a href="#">“Error Message Traceback Reports”</a> section on page 1-3 for more information.
%Error:Egress port invalid	This error message means that an invalid egress port was detected by the hardware. Re-enter the command that you had entered before receiving the error message. Find out more about the error by using the <b>show tech-support</b> privileged EXEC command and by copying the error message exactly as it appears on the console or system log and entering it in the Output Interpreter tool. Use the Bug Toolkit to look for similar reported problems. For more information about these online tools, see the <a href="#">“Error Message Traceback Reports”</a> section on page 1-3 for more information.
%Error:The field sets of all the ACEs in an ACL on Ethernet interface should match. Please refer to the Software Configuration Guide to understand one mask restriction for ACLs on Ethernet interface	This error message means that one or more of the ACEs in an ACL must have the same mask. Change the ACEs to have the same mask as the other ACEs in the ACL.
%Error:Access-list with '[keyword]' keyword is not supported on Ethernet Interface. The ACL '[acl name]' is either used as a Security ACL or QoS ACL. Please refer to the Software Configuration Guide for all the supported keywords	This error message means that the new ACE added to the ACL contains one or more keywords that are not supported on the Ethernet interface. Remove any nonsupported keywords from ACL.

Table A-1 Common ACL Error Messages (continued)

Error Message	Explanation and Suggested Solution
%Error:Access-list with '[keyword]' keyword is not supported on Ethernet Interface. Please refer to the Software Configuration Guide for all the supported keywords	<p>This error message means that the ACL to be applied to a Layer 2 interface or class-map contains one or more keywords that are not supported.</p> <p>Remove any nonsupported keywords from ACL.</p>
%Error:Policer Configuration Incorrect for this interface. Check the policer rate in policy-map :[policy-map name], class-map :[class-map name]. Please choose either [lower rate] or [upper rate] (bits per second) as the policer rate	<p>This error message means that the granularity of the policer rate in the policy map is 1 Mbps.</p> <p>Change the policer rate to either of the suggested values.</p>
%Error:The name '[aclname]' has been used for ACL of another type	<p>This error message means that the name on the MAC extended ACL might have been used in another named ACL that is not a MAC extended ACL.</p>



## Getting Help and Technical Assistance

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If you need help, service, or technical assistance or just want more information about IBM products, you will find a wide variety of sources available from IBM to assist you. This appendix contains information about where to go for additional information about IBM and IBM products, what to do if you experience a problem with your BladeCenter system, and whom to call for service, if it is necessary.

### Before You Call

Before you call, make sure that you have taken these steps to try to solve the problem yourself:

- Check all cables to make sure that they are connected.
- Check the power switches to make sure that the system is turned on.
- Use the troubleshooting information in your system documentation, and use the diagnostic tools that come with your system. Information about diagnostic tools is in the *Hardware Maintenance Manual and Troubleshooting Guide* on the *IBM BladeCenter Documentation CD* or at the IBM Support Web site.
- Go to the IBM Support Web site at <http://www.ibm.com/pc/support/> to check for technical information, hints, tips, and new device drivers.

You can solve many problems without outside assistance by following the troubleshooting procedures that IBM provides in the online help or in the publications that are provided with your system and software. The information that comes with your system also describes the diagnostic tests that you can perform. Most xSeries and IntelliStation® systems, operating systems, and programs come with information that contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, see the information for the operating system or program.

### Using the Documentation

Information about your IBM BladeCenter, xSeries, or IntelliStation system and preinstalled software, if any, is available in the documentation that comes with your system. That documentation includes printed books, online books, readme files, and help files. See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. IBM maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to

<http://www.ibm.com/pc/support/> and follow the instructions. Also, you can order publications through the IBM Publications Ordering System at <http://www.elink.ibm.link.ibm.com/public/applications/publications/cgibin/pbi.cgi>.

## Getting Help and Information from the World Wide Web

On the World Wide Web, the IBM Web site has up-to-date information about IBM BladeCenter, xSeries, and IntelliStation products, services, and support. The address for IBM BladeCenter and xSeries information is <http://www.ibm.com/eserver/xseries/>. The address for IBM IntelliStation information is <http://www.ibm.com/pc/intellistation/>.

You can find service information for your IBM products, including supported options, at <http://www.ibm.com/pc/support/>.

## Software Service and Support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with BladeCenter and xSeries servers, IntelliStation workstations, and appliances. For information about which products are supported by Support Line in your country or region, go to <http://www.ibm.com/services/sl/products/>.

For more information about Support Line and other IBM services, go to <http://www.ibm.com/services/>, or go to <http://www.ibm.com/planetwide/> for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

## Hardware Service and Support

You can receive hardware service through IBM Integrated Technology Services or through your IBM reseller, if your reseller is authorized by IBM to provide warranty service. Go to <http://www.ibm.com/planetwide/> for support telephone numbers, or in the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

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