IBM

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

System Message Guide

Cisco IOS Release 12.1(14)AY

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”.

First Edition (June 2004)

Contents

Preface

Audience

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

Purpose

This guide describes only the switch-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, refer to the hardware installation guide that shipped with your switch. For software information, refer to the software configuration guide and the command reference 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:

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

Related Publications

In addition to this document, the following related documentation comes with the Gigabit Ethernet switch module:

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

  Note: 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, refer to the release notes for the latest information.

- *Cisco Systems Intelligent Gigabit Ethernet Switch Module for the IBM eServer BladeCenter System Command Reference* (order number TBD)

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

  — Command line interface (CLI) modes

  — Command line interface commands and examples

  — Syntax description

  — Defaults

  — Command history

  — Usage guidelines

  — Related commands

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

  This Cisco document is in PDF on the IBM *BladeCenter Documentation* CD. It contains software configuration information for the Gigabit Ethernet switch module. It provides:

  — Configuration instructions for your Gigabit Ethernet switch module

  — Information about features

  — Information about getting help

  — Guidance for planning, implementing, and administering LAN operating system software

  — Usage examples

  — Troubleshooting information for your Gigabit Ethernet switch module

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

  This document contains installation and configuration instructions for the Gigabit Ethernet switch module. This document also provides general information about your Gigabit Ethernet switch module, including warranty information, and how to get help. This document is also on the IBM *BladeCenter Documentation* CD.

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

  This document is in PDF 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 in 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 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 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 in your blade server
  - How to configure your blade server
  - How to install an operating system on your blade server
  - How to perform basic troubleshooting of 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

Chapter 1. System Message Overview

This guide describes the switch-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 Module.

This chapter contains these sections:

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 lists the system facility codes.

Table 1. Facility Codes .

Facility Code	Description	Location
CIGESM	Cisco Systems Intelligent Gigabit Ethernet Switch Module (CIGESM)	“CIGESM Messages” section on page 12
CMP	Cluster Membership Protocol	“CMP Messages” section on page 15
DOT1X	802.1X	“DOT1X Messages” section on page 16
DTP	Dynamic Trunking Protocol	“DTP Messages” section on page 17
EC	EtherChannel	“EC Messages” section on page 18
ETHCNTR	Ethernet controller	“ETHCNTR Messages” section on page 21
HWMATM_MOD	Hardware MAC address table manager	“HWMATM_MOD Messages” section on page 22
PLATFORM_CAT2950	Application-specific Integrated Circuit (ASIC) for the switch	“PLATFORM_CAT2950 Messages” section on page 22
PLATFORM_CATALYST2950	Low-level platform messages	“PLATFORM_CAT2950 Messages” section on page 22
PM	Port manager	“PM Messages” section on page 26
PORT_SECURITY	Port security	“PORT SECURITY Messages” section on page 31
SPAN	Switch Port Analyzer (SPAN)	“SPAN Messages” section on page 31

Table 1. Facility Codes (Continued).

Facility Code	Description	Location
SPANTREE	Spanning tree	"SPANTREE Messages" section on page 32
SPANTREE_FAST	Spanning-tree fast convergence	"SPANTREE_FAST Messages" section on page 38
SPANTREE_VLAN_SWITCH	Spanning-tree VLAN switch	"SPANTREE_VLAN_SWITCH Messages" section on page 38
STORM_CONTROL	Storm control	"STORM_CONTROL Messages" section on page 38
SW_VLAN	VLAN manager	"SW_VLAN Messages" section on page 39
UDLD	UniDirectional Link Detection (UDLD)	"UDLD Messages" section on page 43
UFAST_MCAST_SW	UplinkFast multicast software	"UFAST_MCAST_SW Messages" section on page 44

- 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 2 lists the message severity levels.
- MNEMONIC is a code that uniquely identifies the message.

Table 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 3 lists the variable fields in messages.

Table 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 Gi0/2 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 messages ask you to copy the messages and take further action. These online tools can provide more information about messages:

- **Output Interpreter**

  The Output Interpreter provides additional information and suggested fixes based on the output of many CLI commands, such as the 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 allows you to 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

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

Chapter 2. Message and Recovery Procedures

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.

Notes:

1. 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.
2. The Catalyst 2950 switch messages listed in this chapter also apply to the Cisco Systems Intelligent Gigabit Ethernet Switch Module.

This chapter contains these message categories:

CIGESM Messages

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

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 cause damage to the hardware. The BladeCenter chassis will shut down the switch shortly after this condition is detected.

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

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.

Response Perform the PIC microcontroller image upgrade again.

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 the switch is still operating normally. The first thermal threshold is 167°F (75°C). Temperature inside the BladeCenter chassis should be monitored.

Response No action is required.

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.

Response No action is required.

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 over the first thermal threshold of 167°F (75°C). Temperature inside the chassis should be monitored.

Response No action is required.

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.

Response No action is required.

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.

Response No action is required.

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.

Response No action is required.

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 - 20 as well as through the management module ports 15 and 16.

Response No action is required.

PLATFORM_CIGESM-5-MM_NEITHER: The Switch Module cannot detect either Managment 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.

Response No action is required.

PLATFORM_CIGESM-5-MM_SWITCHOVER: The active Managment 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.

Response No action is required.

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). Temperature inside the chassis should be monitored.

Response No action is required.

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. This information can be configured through the CLI or through the BladeCenter Management Module WEB page.

Response No action is required.

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.

Response No action is required.

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.

Response No action is required.

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.

Response No action is required.

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.

Response No action is required.

CMP Messages

This section contains the Cluster Membership Protocol (CMP) messages.

CMP-5-ADD: The Device is added to the cluster (Cluster Name:*[chars]***, CMDR IP Address** *[inet]***).**

Explanation This message means that the device is added to the cluster. *[chars]* is the cluster name, and *[inet]* is the Internet address of the command switch.

Response No action is required.

CMP-5-MEMBER_CONFIG_UPDATE: Received member configuration from member *[dec]***.**

Explanation This message means that the active or standby command switch received a member configuration. *[dec]* is the member number of the sender.

Response No action is required.

CMP-5-MGMT_VLAN_CHNG: The management vlan has been changed to *[dec]***.**

Explanation This message means that the management VLAN has changed. *[dec]* is the new management VLAN number.

Response No action is required.

CMP-5-NBR_UPD_SIZE_TOO_BIG: Number of neighbors in neighbor update is *[int]***, maximum number of neighbors allowed in neighbor update is** *[int]***.**

Explanation This message means that the number of cluster neighbors in the clustering neighbor update packet exceeds the number of neighbors supported by the clustering module design. *[int]* is the number of cluster neighbors.

Response No action is required.

CMP-5-REMOVE: The Device is removed from the cluster (Cluster Name:*[chars]***).**

Explanation This message means that the device is removed from the cluster. *[chars]* is the cluster name.

Response No action is required.

DOT1X Messages

This section contains the 802.1X authorization messages.

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.

Response 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 9.

DOT1X-3-ROUTEDPORT: Received vlan id (*[dec]*) from RADIUS for routed port *[chars].*

Explanation This message means that during 802.1X authorization, the RADIUS server provided a VLAN ID for a routed port.

Response Remove the VLAN ID in the RADIUS configuration, or configure the port as an access port.

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

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

Response Change the VLAN ID in the RADIUS configuration, or configure the VLAN on the switch.

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

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

Response Correct the VLAN ID in the RADIUS configuration.

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

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

Response Change the VLAN ID in the RADIUS configuration, or change the voice VLAN on the switch port.

DTP Messages

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

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.

Response Reduce other system activity to ease the memory demands.

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.

Response 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.

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.

Response Reload the switch by using the **reload** privileged EXEC command.

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.

Response 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.

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.

Response This message is provided for information only.

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.

Response This message is provided for information only.

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.

Response 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.

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.

Response 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 9.

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.

Response No action is required.

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.

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

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.

Response Change the port attributes so that they match the other ports in the EtherChannel.

EC-5-CANNOT_BUNDLE_QOS: Removed [chars] from port channel because a QoS policy cannot be supported across multiple DFC cards.

Explanation This message means the specified port cannot join the port channel because the QoS policy attached to the port channel cannot support the multiple Distributed Forwarding Cards (DFCs). *[chars]* identifies the port that cannot join the port channel.

Response Place the port in another port channel or remove the QoS policy from the port channel.

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.

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

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 EtherChannel. 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.

Response Change the interface attributes to match the EtherChannel attributes.

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.

Response Change the channel group or the mode for the interface.

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.

Response Remove the interface from the EtherChannel group.

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.

Response Remove the interface from the EtherChannel group.

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

Explanation This message means that Port Aggregation Protocol (PAgP) is enabled on a Layer 3 interface, but the remote port does not have PAgP enabled. In this mode, the port is put in a suspended state.

Response Enable PAgP on the remote port.

EC-5-L3DONTBNDL2: *[chars]* **suspended: incompatible partner port with** *[chars]***.**

Explanation This message means that the group capabilities of the remote port are different than one or more of the other ports in the bundle. For a port to join a bundle, the local port and the remote port must have the same group capabilities as the other ports in the bundle.

Response Configure the remote port with the same group capabilities as the other ports in the bundle.

EC-5-L3DONTBNDL3: *[chars]* **suspended: LACP not enabled on the remote port.**

Explanation This message means that Link Aggregation Control Protocol (LACP) is enabled on a Layer 3 interface, but the remote port does not have LACP enabled. In this mode, the local port is put in a suspended state.

Response Enable LACP on the remote port.

EC-5-L3PORTDOWN: Shutting down *[chars]* **as its port-channel is admin-down**

Explanation This message means that a Layer 3 port is being forced to shut down because its aggregation port is in a down state. [chars] is the interface name.

Response Bring up the aggregation port by using the **no shutdown** interface configuration command.

EC-5-L3STAYDOWN: *[chars]* **will remain down as its port-channel** *[chars]* **is admin-down**

Explanation This message means that a Layer 3 port is being forced to shut down because its aggregation port is in a down state. *[chars]* is the interface name.

Response Bring up the aggregation port by using the **no shutdown** interface configuration command.

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.

Response Upgrade your switch with an image that supports LACP.

EC-5-NOPAGP: Invalid EC mode. PAgP not enabled.

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

Response 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.

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.

Response No action is required. Wait until the module is online to determine the port-channel setting of the EtherChannel.

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.

Response No action is required.

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 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.

Response 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, and you should call your technical support representative.

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 that the port is considered to be in the loop-back state. *[chars]* is the port.

Response No action is required.

ETHCNTR-3-LOOP_BACK_DETECTED:, Loop-back detected on *[chars]***. The port is forced to linkdown.**

Explanation This message means that the loop-back condition might be caused by a balun cable being accidentally connected to the port. *[chars]* is the port.

Response 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 bring the port up by entering the **no shutdown** interface configuration command.

HWMATM_MOD Messages

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

Response 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 9.

PLATFORM_CAT2950 Messages

This section contains the application-specific integrated circuit (ASIC) driver-related messages.

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.

Response 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 9.

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.

Response 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 9.

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.

Response If the message recurs, 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 9.

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.

Response If the message recurs, 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 9.

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*.

Response 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 9.

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.

Response If the message recurs, 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 9.

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.

Response If the message recurs, 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 9.

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.

Response If the message recurs, 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response If the message recurs, 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 9.

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.

Response If the message recurs, 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 9.

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.

Response 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 9.

PLATFORM_CATALYST2950 Messages

This section contains the Catalyst 2950 low-level platform message.

PLATFORM_CATALYST2950-1-CRASHED: *[chars]*

Explanation This message means that the system is attempting to display the failure message from the previous failure. *[chars]* is the failure message.

Response 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 9.

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.

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.

Response 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 9.

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.

Response 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 9.

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

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

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

PM-4-BAD_CARD_COOKIE: An invalid card cookie was detected.

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

Response 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 9.

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.

Response 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 9.

PM-4-BAD_COOKIE: *[chars]* **was detected.**

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

Response 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 9.

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.

Response 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 9.

PM-4-BAD_PORT_COOKIE: An invalid port cookie was detected.

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

Response 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 9.

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.

Response 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 9.

PM-4-BAD_VLAN_COOKIE: An invalid vlan cookie was detected.

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

Response 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 9.

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.

Response 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 9.

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). The first *[chars]* is the error, and the second and third *[chars]* are the affected interfaces.

Response 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 9.

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.

Response 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 9.

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.

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

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.

Response Try to configure a different VLAN on the device.

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.

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

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.

Response 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.

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.

Response 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 9.

PM-4-LIMITS: Virtual port count for *[chars]* **exceeded the recommended limit of** *[dec]***.**

Explanation This message means that the virtual port count exceeded the recommended limit of 1200 virtual ports per module and 4500 per switch. *[chars]* is the module name (for example, switch or the module number), and *[dec]* is the recommended limit.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 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.

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

SPAN Messages

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

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.

Response Reduce other system activity to ease the memory demands.

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.

Response 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.

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.

Response 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.

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.

Response 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.

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.

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

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.

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

SPANTREE-2-CHNL_MISCFG: Detected loop due to etherchannel misconfiguration of *[chars] [chars]*

Explanation This message means that a loop that caused the misconfiguration of a channel group has been detected. An example of such a misconfiguration would be when the ports on one side of the EtherChannel either are not configured to be in the channel or failed to bundle for some reason. The other side has successfully bundled the ports into the EtherChannel.

Response Determine which local ports are involved by using the **show interfaces status err-disabled** privileged EXEC command, and then verify EtherChannel configuration on the remote device by using the **show etherchannel summary** user EXEC command on the remote device. When the configuration is corrected, enter **shutdown** and **no shutdown** interface configuration commands on the associated port-channel interface.

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.

Response 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.

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.

Response 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.

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.

Response No action is required.

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.

Response 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.

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 802.1Q encapsulation. The first *[chars]* is the port, and the second *[chars]* is the VLAN.

Response 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.

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.

Response If the message recurs, 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 9.

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 802.1Q trunk. *[dec]* is the VLAN ID, the first *[chars]* is the port, and the second *[chars]* is the VLAN.

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

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.

Response 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.

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.

Response 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.

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.

Response No action is required.

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.

Response No action is required.

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 occurred in the platform-specific code that caused it to request more or less bits than are possible. 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 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.

Response 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 9.

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.

Response 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.

SPANTREE-4-PORT_NOT_FORWARDING: *[chars] [chars] [chars]*

Explanation This message means that the port is not forwarding packets or is not in a forwarding state. The first *[chars]* is the alarm ASSERT or CLEAR action. The second *[chars]* is the user-configured alarm for this fault condition. The third *[chars]* is the interface.

Response 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 9.

Note: This message applies only to the Catalyst 2955 switch.

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.

Response No action is required.

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.

Response 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.

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.

Response 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-7-PORT_FWD_UPLINK: *[chars] [chars]* **moved to Forwarding (UplinkFast).**

Explanation This message means that the listed interface has been selected as the new root port for the listed spanning-tree instance.

Response No action is required.

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. The message shows the smallest VLAN number of those VLANs that are unable have STP instances created.

Response Reduce the number of currently active spanning-tree instances by either disabling some of the currently active spanning-tree instances or by deleting the VLANs associated with currently active spanning-tree instances. You need to manually enable the spanning trees that could not be created due to limited STP instances.

SPANTREE-4-PORT_NOT_FORWARDING: ASSERT MINOR *[char]* **Port Not Forwarding.**

Explanation This message means that the port is not forwarding packets; that is, it is not in a forwarding state. *[char]* is the port.

Response 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 9.

SPANTREE_FAST Messages

This section contains the spanning-tree fast-convergence 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.

Response No action is required.

SPANTREE_VLAN_SWITCH Messages

The section contains the per-VLAN spanning-tree-specific 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 smallest VLAN number of those VLANs that are unable to have STP instances created.

Response 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 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.

Response 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.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response No action is required.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response No action is required.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response 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 9.

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.

Response No action is required.

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.

Response No action is required.

UDLD Messages

This section contains UniDirectional Link Detection (UDLD) messages.

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.

Response 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 9.

UDLD-3-UDLD_INTERNAL_ERROR: UDLD internal error:*[chars]***.**

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

Response 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 9.

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.

Response 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 9.

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.

Response Try to correct the configuration or locate the bad cable. If you are not successful, 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 9.

UDLD-6-UDLD_PORT_RESET: UDLD reset interface *[chars]*.

Explanation This message means that the UDLD Protocol detected a unidirectional connection between neighbors. You 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.

Response 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 9.

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.

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.

Response Reload the switch by using the **reload** privileged EXEC command. If this problem continues after you reload the switch, 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 9.

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.

Response Reduce other system activity to reduce memory demands.

Appendix A. Security and QoS Configuration Messages

This appendix describes the switch error messages for configuring network security with access control lists (ACLs) and for configuring quality of service (QoS). In Table 4, Access Control Parameters (ACPs) are referred to as masks. For more information about ACPs, refer to the software configuration guide for this release.

Table 4. Common ACL Error Messages .

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

Table 4. Common ACL Error Messages (Continued).

Error Message	Explanation and Suggested Solution
`%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 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 **policy-map** global configuration command with certain restrictions. For more information, refer to 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` *`policy-map name`* `from interface` *`interface_number`*	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.
`%Error:ASIC memory read write issues`	This error message means that the switch hardware is having problems. 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 9.
`%Error:ASIC Resources unavailable`	This error message means that the hardware does not have sufficient resources to support the user policies.
`%Error:Invalid mask`	This error message means that the user-defined mask is not entered correctly in the hardware. Remove the mask, and re-enter it.

Table 4. Common ACL Error Messages (Continued).

Error Message	Explanation and Suggested Solution
`%Error:Invalid rule`	This error message means that the hardware had a problem programming the resource. Re-enter the command that you had entered before receiving the error message. If the message recurs, 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 9.
`%Error:Invalid ingress port`	This error message means that an invalid ingress port was detected by the hardware. Re-enter the command that you had entered before receiving the error message. If the message recurs, 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 9.
`%Error:Another security mask on this interface`	This error message means that there is another security mask present on the interface. Only one security mask is allowed on any interface. Remove all the security access groups on this interface, and attach the security access group that is required.
`%Error:Another qos mask on this interface`	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.
`%Error:No sec mask on this interface`	This error message means that no security mask has been applied on this interface.
`%Error:No qos mask on this interface`	This error message means that no QoS mask has been applied on this interface.
`%Error:No sec rules on this interface`	This error message means that there are no security resources on this interface.
`%Error:No qos rules on this interface`	This error message means that there are no QoS resources on this interface.

Table 4. Common ACL Error Messages (Continued).

Error Message	Explanation and Suggested Solution
%Error:No free masks available	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.
%Error:Invalid sequence - IP protocol ACE not allowed after TCP/UDP protocol ACE	This error message means that a Layer 4 (TCP or UDP protocol) ACE preceded a Layer 3 (IP protocol) ACE.
%Error: Service-Policy is not supported on EtherChannel interface	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.
%Error:A MAC Access Group exists on this interface	This error message means that a MAC access group was previously configured on this interface. Delete the MAC access group by using the **no mac access-group** interface configuration command, and re-enter the **ip access-group** interface configuration command.
%Error:An IP Access Group exists on this interface	This error message means that an IP access group was previously configured on this interface. Delete the IP access group by using the **no ip access-group** interface configuration command, and re-enter the **mac access-group** interface configuration command.
%Error:Out of Rule Resources	This error message means that the hardware has run out of resources. Re-enter the command with fewer ACEs.
%Error:No free rules on this interface	This error message means that the hardware has run out of resources. Re-enter the command with fewer ACEs.
%Error:ASIC error	This error message means that the hardware has returned an error and that the command cannot be completed.
%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.

Table 4. Common ACL Error Messages (Continued).

Error Message	Explanation and Suggested Solution
`%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. If the message recurs, 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 9.
`%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. If the message recurs, 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 9.
`%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.
`%Error:Access-list with '[keyword]' keyword is not supported on Ethernet Interface. Please refer to the Software Configuration Guide for all the supported keywords`	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. Remove any nonsupported keywords from ACL.

Table 4. Common ACL Error Messages (Continued).

Error Message	Explanation and Suggested Solution
`%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`	This error message means that the granularity of the policer rate in the policy map is 1 Mbps. Change the policer rate to either of the suggested values.
`%Error:The name '[aclname]' has been used for ACL of another type`	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.

Appendix B. Getting help and technical assistance

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.ibmlink.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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