System Message Overview

This guide describes the Catalyst 2950- and Catalyst 2955-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.

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 1-1 lists the system facility codes.

Table 1-1 Facility Codes

Facility Code	Description	Location
AUTOQOS	Automatic quality of service (auto-QoS)	"AUTOQOS Messages" section on page 2-2
CMP	Cluster Membership Protocol	"CMP Messages" section on page 2-2
DOT1X	802.1x	"DOT1X Messages" section on page 2-3
DTP	Dynamic Trunking Protocol	"DTP Messages" section on page 2-8
EC	EtherChannel	"EC Messages" section on page 2-9
ENVIRONMENT	Environment	"ENVIRONMENT Messages" section on page 2-12

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
ETHCNTR	Ethernet controller	"ETHCNTR Messages" section on page 2-15
EXPRESS_SETUP	Express Setup	"EXPRESS_SETUP Messages" section on page 2-16
GBIC	Gigabit Interface Converter (GBIC) module identification and validation	"GBIC Messages" section on page 2-17
GBIC_SECURITY	GBIC module security	"GBIC_SECURITY Messages" section on page 2-20
GBIC_SECURITY_CRYPT	GBIC module security	"GBIC_SECURITY_CRYPT Messages" section on page 2-21
GBIC_SECURITY_UNIQUE	GBIC module security	"GBIC_SECURITY_UNIQUE Messages" section on page 2-22
GIGASTACK	GigaStack GBIC module	"GIGASTACK Messages" section on page 2-22
HWMATM_MOD	Hardware MAC address table manager	"HWMATM_MOD Messages" section on page 2-23
LINK	Fast Ethernet link for the Catalyst 2955 switches	"LINK Messages" section on page 2-24
LRE_CPE	Long-Reach Ethernet (LRE) customer premises equipment (CPE) for the Catalyst 2950 LRE switches	"LRE_CPE Messages" section on page 2-25
LRE_LINK	LRE link for the Catalyst 2950 LRE switches	"LRE_LINK Messages" section on page 2-27
LRE_UPGRADE	LRE upgrade for the Catalyst 2950 LRE switches	"LRE_UPGRADE Messages" section on page 2-28
PHY	PHY	"PHY Messages" section on page 2-29
PLATFORM_CAT2950	Application-specific Integrated Circuit (ASIC) for Catalyst 2950 switches	"PLATFORM_CAT2950 Messages" section on page 2-30
PLATFORM_CATALYST2950	Low-level platform messages	"PLATFORM_CATALYST2950 Messages" section on page 2-34
PLATFORM_CATALYST2955	Application-specific Integrated Circuit (ASIC) for Catalyst 2955 switches	"PLATFORM_CATALYST2955 Messages" section on page 2-35
PM	Port manager	"PM Messages" section on page 2-35
PORT_SECURITY	Port security	"PORT SECURITY Messages" section on page 2-42
SPAN	Switch Port Analyzer (SPAN)	"SPAN Messages" section on page 2-42

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
SPANTREE	Spanning tree	"SPANTREE Messages" section on page 2-43
SPANTREE_FAST	Spanning-tree fast convergence	"SPANTREE_FAST Messages" section on page 2-50
SPANTREE_VLAN_SWITCH	Spanning-tree VLAN switch	"SPANTREE_VLAN_SWITCH Messages" section on page 2-50
STORM_CONTROL	Storm control	"STORM_CONTROL Messages" section on page 2-50
SW_VLAN	VLAN manager	"SW_VLAN Messages" section on page 2-51
UDLD	UniDirectional Link Detection (UDLD)	"UDLD Messages" section on page 2-56
UFAST_MCAST_SW	UplinkFast multicast software	"UFAST_MCAST_SW Messages" section on page 2-57

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

Table 1-2 Message Severity Levels

Severity Level	Description
0 – emergency	System is unusable.
1 – alert	Immediate action required.
2 – critical	Critical condition.
3 – error	Error condition.
4 – warning	Warning condition.
5 – notification	Normal but significant condition.
6 – informational	Informational message only.
7 – debugging	Message that appears during debugging only.

- Message-text is a text string describing the condition. This portion of the message sometimes contains detailed information about the event, including terminal port numbers, network addresses, or addresses that correspond to locations in the system memory address space. Because the information in these variable fields changes from message to message, it is represented here by short strings enclosed in square brackets ([ ]). A decimal number, for example, is represented as [dec]. Table 1-3 lists the variable fields in messages.

Table 1-3 Representation of Variable Fields in Messages

Representation	Type of Information
[dec]	Decimal integer
[char]	Single character
[chars]	Character string
[enet]	Ethernet address (for example, 0000.FEED.00C0)
[hex]	Hexadecimal integer
[inet]	Internet address

This is a sample system message:

```
%EC-5-UNBUNDLE:Interface Gi0/1 left the port-channel Po2
```

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

Error Message Traceback Reports

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

This message example includes traceback information:

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

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

Output Interpreter

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

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

Bug Toolkit

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

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

Contacting TAC

If you cannot determine the nature of the error, see the "Obtaining Documentation" section on page vii for more information.