CHAPTER 1

System Message Overview

This guide describes the Catalyst 3750, 3560, 3550, 2975, 2970, and 2960-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 mean problems with your system. Some messages are informational, and others can help diagnose problems with communications lines, internal hardware, or the system software.

Note For information about system messages that are not Catalyst 3750, 3560, 3550, 2975, 2970, or 2960 platform-specific, see the *Cisco IOS Software System Messages* for *Cisco IOS Release 12.2S* on www.cisco.com.

How to Read System Messages

System log messages can contain up to 80 characters and a percent sign (%), which follows the optional sequence number or time-stamp information, if configured. Messages appear in this format:

seq no:timestamp: %facility-severity-MNEMONIC:description (hostname-n) (only Catalyst 3750 and 2975 switches)

seq no:timestamp: %facility-severity-MNEMONIC:description (switches other than Catalyst 3750 and 2975 switches)

By default, a switch sends the output from system messages to a logging process. In a switch stack, stack members append their hostnames to the output from system messages and redirect the output to the logging process on the stack master.

Each system message begins with a percent sign (%) and is structured as follows:

%FACILITY-SEVERITY-MNEMONIC: Message-text

- FACILITY is 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 Catalyst 3750, 3560, 3550, 2975, 2970, and 2960-specific facility codes.

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

Table 1-1 Facility Codes

Facility Code	Description	Location
ACLMGRR	ACL manager	"ACLMGR Messages" section on page 2-3
AUTOQOS	Automatic quality of service (auto-QoS) (only Catalyst 3550 switches)	"AUTOQOS Messages" section on page 2-8
BACKUP_INTERFACE	Flex Links	"BACKUP_INTERFACE Messages" section on page 2-8
BADTRANSCEIVER	Defective transceiver messages (only 3750 and 2975 switches)	"BADTRANSCEIVER Messages" section on page 2-9
BSPATCH	Boot loader patch	"BSPATCH Messages" section on page 2-9
CFGMGR	Configuration manager (only Catalyst 3750 and 2975 switches)	"CFGMGR Messages" section on page 2-10
CMP	Cluster Membership Protocol	"CMP Messages" section on page 2-13
DHCP_SNOOPING	DHCP snooping	"DHCP_SNOOPING Messages" section on page 2-14
DHCP_SNOOPING_CAT3550	DHCP snooping (only Catalyst 3550 switches)	"DHCP_SNOOPING_CAT3550 Messages" section on page 2-18
DOT1Q_TUNNELLING	IEEE 802.1Q tunneling (only Catalyst 3550 switches)	"DOT1Q_TUNNELLING Messages" section on page 2-18
DOT1X	IEEE 802.1x	"DOT1X Messages" section on page 2-19
DOT1X_SWITCH	IEEE 802.1x for switches	"DOT1X_SWITCH Messages" section on page 2-20
DTP	Dynamic Trunking Protocol	"DTP Messages" section on page 2-23
DWL	Down-when-looped	"DWL Messages" section on page 2-25
EC	EtherChannel	"EC Messages" section on page 2-25
ENVIRONMENT	Environment (only Catalyst 3550 switches)	"ENVIRONMENT Messages" section on page 2-30
ETHCNTR	Ethernet Controller	"ETHCNTR Messages" section on page 2-31
EXPRESS_SETUP	Express Setup	"EXPRESS_SETUP Messages" section on page 2-35
FM	Feature manager (only Catalyst 3550 switches)	"FM Messages" section on page 2-36

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
FRNTEND_CTRLR	Front-end controller (only Catalyst 3750 and 2975 switches)	"FRNTEND_CTRLR Messages" section on page 2-45
GBIC	Gigabit Interface Converter (GBIC) module identification and validation (only Catalyst 3550 switches)	"GBIC Messages" section on page 2-46
GBIC_SECURITY	GBIC module and small form-factor pluggable (SFP) module security	"GBIC_SECURITY Messages" section on page 2-50
GBIC_SECURITY_CRYPT	GBIC and SFP module security	"GBIC_SECURITY_CRYPT Messages" section on page 2-53
GBIC_SECURITY_UNIQUE	GBIC and SFP module security	"GBIC_SECURITY_UNIQUE Messages" section on page 2-54
GIGASTACK	GigaStack GBIC module (only Catalyst 3550 switch)	"GIGASTACK Messages" section on page 2-54
HARDWARE	Hardware	"HARDWARE Messages" section on page 2-56
HLFM	Local forwarding manager	"HLFM Messages" section on page 2-58
HPSECURE	HP secure	"HPSECURE Messages" section on page 2-59
IDBMAN	Interface description block manager	"IDBMAN Messages" section on page 2-60
IGMP_QUERIER	Internet Group Management Protocol (IGMP) querier	"IGMP_QUERIER Messages" section on page 2-63
ILPOWER	Power over Ethernet (PoE)	"ILPOWER Messages" section on page 2-64
IMAGEMGR	Image manager (only Catalyst 3750 and 2975 switches)	"IMAGEMGR Messages" section on page 2-71
IP_DEVICE_TRACKING_HA	IP device tracking for high availability	"IP_DEVICE_TRACKING_HA Messages" section on page 2-72
L2TM	Layer 2 forwarding manager (only Catalyst 3550 switches)	"L2TM Messages" section on page 2-73
L3TCAM	Layer 3 unicast routing manager (only Catalyst 3550 switches)	"L3TCAM Messages" section on page 2-74
MAC_LIMIT	MAC address table entries	"MAC_LIMIT Messages" section on page 2-75
MAC_MOVE	Host activity	"MAC_MOVE Messages" section on page 2-76
NETWORK_PORT_SATELLITE	Network port satellite (only Catalyst 3550 switches)	"NETWORK_PORT_SATELLITE Messages" section on page 2-76

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
PAGP_DUAL_ACTIVE	Port Aggregation Protocol (PAgP) dual-active detection	"PAGP_DUAL_ACTIVE Messages" section on page 2-77
PBR	Policy-based routing (PBR) (only Catalyst 3550 switches)	"PBR Messages" section on page 2-77
PHY	PHY	"PHY Messages" section on page 2-80
PIMSN	Protocol Independent Multicast (PIM) snooping	"PIMSN Messages" section on page 2-82
PLATFORM	Low-level platform-specific	"PLATFORM Messages" section on page 2-83
PLATFORM_FBM	Fallback bridging manager	"PLATFORM_FBM Messages" section on page 2-84
PLATFORM_HCEF	Cisco Express Forwarding (CEF) (only Catalyst 3750 and 3560 switches)	"PLATFORM_HCEF Messages" section on page 2-85
PLATFORM_HPLM	Platform pseudo label manager	"PLATFORM_HPLM Messages" section on page 2-86
PLATFORM_IPC	Platform inter-process communication protocol (only Catalyst 3750 and 2975 switches)	"PLATFORM _IPC Messages" section on page 2-87
PLATFORM_IPv6	IP Version 6	"PLATFORM_IPv6 Message" section on page 2-88
PLATFORM_PBR	Platform policy-based routing	"PLATFORM_PBR Messages" section on page 2-89
PLATFORM_PM	Platform port manager	"PLATFORM_PM Messages" section on page 2-91
PLATFORM_RPC	Platform remote procedure call (only Catalyst 3750 and 2975 switches)	"PLATFORM_RPC Messages" section on page 2-92
PLATFORM_SPAN	Platform Switched Port Analyzer	"PLATFORM_SPAN Messages" section on page 2-95
PLATFORM_UCAST	Platform unicast routing	"PLATFORM_UCAST Messages" section on page 2-95
PLATFORM_VLAN	Platform VLAN	"PLATFORM_VLAN Messages" section on page 2-98
PLATFORM_WCCP	Platform WCCP	"PLATFORM_WCCP Messages" section on page 2-99
PM	Port manager	"PM Messages" section on page 2-100
PORT SECURITY	Port security	"PORT_SECURITY Messages" section on page 2-108

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
QATM	QoS and ACL TCAM manager (only Catalyst 3550 switches)	"QATM Messages" section on page 2-109
QM	QoS manager (only Catalyst 3550 switches)	"QM Messages" section on page 2-111
QOSMGR	QoS manager	"QOSMGR Messages" section on page 2-114
RMON	Remote network monitoring	"RMON Messages" section on page 2-121
SDM	Switch Database Manager (only Catalyst 3750 switches)	"SDM Messages" section on page 2-121
SPAN	Switched Port Analyzer	"SPAN Messages" section on page 2-122
SPANTREE	Spanning tree	"SPANTREE Messages" section on page 2-122
SPANTREE_FAST	Spanning-tree fast convergence	"SPANTREE_FAST Messages" section on page 2-131
SPANTREE_VLAN_SW	Spanning-tree VLAN switch	"SPANTREE_VLAN_SW Messages" section on page 2-131
STACKMGR	Stack manager (only Catalyst 3750 and 2975 switches)	"STACKMGR Messages" section on page 2-131
STORM_CONTROL	Storm control	"STORM_CONTROL Messages" section on page 2-134
SUPERVISOR	Supervisor ASIC	"SUPERVISOR Messages" section on page 2-135
SUPQ	Supervisor queue	"SUPQ Messages" section on page 2-135
SW_DAI	Dynamic ARP inspection	"SW_DAI Messages" section on page 2-138
SW_MACAUTH	MAC address authentication (only Catalyst 3750 and 3560 switches)	"SW_MACAUTH Messages" section on page 2-141
SW_MATM	MAC address table manager (only Catalyst 3750 and 3560 switches)	"SW_MATM Messages" section on page 2-141
SW_VLAN	VLAN manager	"SW_VLAN Messages" section on page 2-142
SWITCH_QOS_TB	QoS trusted boundary	"SWITCH_QOS_TB Messages" section on page 2-149
TCAMMGR	Ternary content addressable memory manager	"TCAMMGR Messages" section on page 2-150

Table 1-1 Facility Codes (continued)

Facility Code	Description	Location
UDLD	UniDirectional Link Detection	"UDLD Messages" section on page 2-152
UFAST_MCAST_SW	UplinkFast packet transmission	"UFAST_MCAST_SW Messages" section on page 2-154
VQPCLIENT	VLAN Query Protocol (VQP) client	"VQPCLIENT Messages" section on page 2-154
WCCP	Web Cache Communication Protocol (WCCP)	"WCCP Messages" section on page 2-156
WRLSCNTR	Catalyst 3750 Integrated Wireless LAN Controller switch	"WRLSCNTR Messages" section on page 2-156

- 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.

Table 1-2 Message Severity Levels

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

- MNEMONIC is a code that uniquely identifies the message.
- 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 Variable Fields

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

Table 1-3 Variable Fields (continued)

Representation	Type of Information
[hex]	Hexadecimal integer
[inet]	Internet address

All syslog messages generated by a Catalyst 3750 and 2975 switch other than the master switch are displayed ending with (*Switch-x*) where *Switch-x* is the number of the stack member generating the message. Syslog messages generated by the master switch are displayed with no hostname string.

This example shows a partial switch system message on a switch other than a Catalyst 3750 and 2975 switch:

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed
state to down 2 *Mar  1 18:46:11: %SYS-5-CONFIG_I: Configured from console by vty2
(10.34.195.36)
18:47:02: %SYS-5-CONFIG_I: Configured from console by vty2 (10.34.195.36)
*Mar  1 18:48:50.483 UTC: %SYS-5-CONFIG_I: Configured from console by vty2 (10.34.195.36)
```

This example shows a partial switch system message for a stack master and a stack member switch (hostname *Switch-2*) in a Catalyst 3750 switch stack or a Catalyst 2975 switch stack:

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet1/0/1, changed state to up
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet1/0/2, changed state to up
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/1, changed
state to down 2
*Mar  1 18:46:11: %SYS-5-CONFIG_I: Configured from console by vty2 (10.34.195.36)
18:47:02: %SYS-5-CONFIG_I: Configured from console by vty2 (10.34.195.36)
*Mar  1 18:48:50.483 UTC: %SYS-5-CONFIG_I: Configured from console by vty2 (10.34.195.36)

00:00:46: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up (Switch-2)
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet1/0/1, changed state to up (Switch-2)
00:00:47: %LINK-3-UPDOWN: Interface GigabitEthernet1/0/2, changed state to up (Switch-2)
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
(Switch-2)
00:00:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/1, changed
state to down 2 (Switch-2)
```

Error Message Traceback Reports

Some messages describe internal errors and contain traceback information. Include this information 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 resolutions based on the output of many CLI commands, such as the **show tech-support** privileged EXEC command.

https://www.cisco.com/pcgi-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.

http://tools.cisco.com/Support/BugToolKit/

Contacting TAC

If you cannot determine the nature of the error, see the "Obtaining Documentation and Submitting a Service Request" section on page x for further information.