



# CHAPTER 1

## System Message Overview

---

This guide describes the Catalyst 3750-X, 3750-E, 3560-X, or 3560-E-specific system messages. 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-X, 3750-E, 3560-X, or 3560-E platform-specific, see the *Cisco IOS Software System Messages for Cisco IOS Release 12.2S*.

---

- [How to Read System Messages, page 1-1](#)
- [Error Message Traceback Reports, page 1-7](#)

## 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)* (Catalyst 3750-X or 3750-E switches)

*seq no:timestamp: %facility-severity-MNEMONIC:description* (Catalyst 3560-X or 3560-E 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.

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
AUTHMGR	Authentication manager	<a href="#">“ACLMGR Messages” section on page 2-3</a>
ACLMGR	ACL manager	<a href="#">“ACLMGR Messages” section on page 2-3</a>
BACKUP_INTERFACE	Flex Links	<a href="#">“BACKUP_INTERFACE Messages” section on page 2-9</a>
BADTRANSCEIVER	Defective transceiver messages (Catalyst 3750-X and 3750-E switches)	<a href="#">“BADTRANSCEIVER Messages” section on page 2-9</a>
BSPATCH	Boot loader patch	<a href="#">“BSPATCH Messages” section on page 2-10</a>
CFGMGR	Configuration manager (Catalyst 3750-X and 3750-E switches)	<a href="#">“CFGMGR Messages” section on page 2-11</a>
CLS_ACC	Consoleless access	<a href="#">“CLS_ACC Messages” section on page 2-13</a>
CMP	Cluster Membership Protocol	<a href="#">“CMP Messages” section on page 2-17</a>
DHCP_SNOOPING	DHCP snooping	<a href="#">“DHCP_SNOOPING Messages” section on page 2-18</a>
DOT1X	802.1x	<a href="#">“DOT1X Messages” section on page 2-21</a>
DOT1X_SWITCH	802.1x for switches	<a href="#">“DOT1X_SWITCH Messages” section on page 2-24</a>
DTP	Dynamic Trunking Protocol	<a href="#">“DTP Messages” section on page 2-27</a>
DWL	Down-when-looped	<a href="#">“DWL Messages” section on page 2-29</a>
EC	EtherChannel	<a href="#">“EC Messages” section on page 2-29</a>
EPM	Enforcement Policy Module	<a href="#">“EPM Messages” section on page 2-33</a>
ETHCNTR	Ethernet controller	<a href="#">“ETHCNTR Messages” section on page 2-33</a>
EXPRESS_SETUP	Express Setup	<a href="#">“EXPRESS_SETUP Messages” section on page 2-35</a>
FRNTEND_CTRLR	Front-end controller (Catalyst 3750-X and 3750-E switches)	<a href="#">“FRNTEND_CTRLR Messages” section on page 2-36</a>
GBIC_SECURITY	GBIC module and small form-factor pluggable (SFP) module security	<a href="#">“GBIC_SECURITY Messages” section on page 2-36</a>
GBIC_SECURITY_CRYPT	GBIC and SFP module security	<a href="#">“GBIC_SECURITY_CRYPT Messages” section on page 2-38</a>

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

Facility Code	Description	Location
GBIC_SECURITY_UNIQUE	GBIC and SFP module security	“GBIC_SECURITY_UNIQUE Messages” section on page 2-39
HARDWARE	Hardware	“HARDWARE Messages” section on page 2-39
HLFM	Local forwarding manager	“HLFM Messages” section on page 2-42
HPSECURE	Port security (Catalyst 3750-X and 3750-E switches)	“HPSECURE Messages” section on page 2-43
HULC_LICENSE	Licensing	“HULC_LICENSE Messages” section on page 2-43
IFMGR	Interface manager	“IFMGR Messages” section on page 2-44
IGMP_QUERIER	Internet Group Management Protocol (IGMP) querier	“IGMP_QUERIER Messages” section on page 2-44
ILET	Cisco IOS License Enforcement Test	“ILET Messages” section on page 2-45
ILPOWER	Power over Ethernet (PoE)	“ILPOWER Messages” section on page 2-46
IMAGEMGR	Image manager (Catalyst 3750-X and 3750-E switches)	“IMAGEMGR Messages” section on page 2-49
IP_DEVICE_TRACKING	IP device tracking	“IP_DEVICE_TRACKING Messages” section on page 2-51
MAC_MOVE	Host activity	“MAC_MOVE Messages” section on page 2-51
PAGP	Port Aggregation Protocol	“PAGP Messages” section on page 2-51
PHY	PHY	“PHY Messages” section on page 2-52
PIMSN	Protocol Independent Multicast (PIM) snooping	“PIMSN Messages” section on page 2-53
PLATFORM	Low-level platform-specific	“PLATFORM Messages” section on page 2-54
PLATFORM_ENV	Platform environment	“PLATFORM_ENV Messages” section on page 2-56
PLATFORM_FBM	Platform fallback bridging manager	“PLATFORM_FBM Messages” section on page 2-61
PLATFORM_HCEF	Cisco Express Forwarding	“PLATFORM_HCEF Messages” section on page 2-61
PLATFORM_HPLM	Platform pseudo-label manager	“PLATFORM_HPLM Messages” section on page 2-62

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

Facility Code	Description	Location
PLATFORM_IPC	Platform Interprocess Communication Protocol (Catalyst 3750-X and 3750-E switches)	<a href="#">“PLATFORM_IPC Messages” section on page 2-62</a>
PLATFORM_IPv6_UCAST	IP Version 6 Unicast	<a href="#">“PLATFORM_IPv6_UCAST Messages” section on page 2-64</a>
PLATFORM_PBR	Platform policy-based routing	<a href="#">“PLATFORM_PBR Messages” section on page 2-64</a>
PLATFORM_PM	Platform port manager	<a href="#">“PLATFORM_PM Messages” section on page 2-66</a>
PLATFORM_RPC	Platform remote procedure call (Catalyst 3750-X and 3750-E switches)	<a href="#">“PLATFORM_RPC Messages” section on page 2-67</a>
PLATFORM_SPAN	Platform switched port analyzer	<a href="#">“PLATFORM_SPAN Messages” section on page 2-69</a>
PLATFORM_STACKPOWER	Platform stack power	<a href="#">“PLATFORM_STACKPOWER Messages” section on page 2-70</a>
PLATFORM_UCAST	Platform unicast routing	<a href="#">“PLATFORM_UCAST Messages” section on page 2-79</a>
PLATFORM_VLAN	Platform VLAN	<a href="#">“PLATFORM_VLAN Messages” section on page 2-81</a>
PLATFORM_WCCP	Platform WCCP	<a href="#">“PLATFORM_WCCP Messages” section on page 2-82</a>
PM	Port manager	<a href="#">“PM Messages” section on page 2-82</a>
PORT_SECURITY	Port security	<a href="#">“PORT_SECURITY Messages” section on page 2-90</a>
POWERNET_ISSU	EnergyWise domain	<a href="#">“POWERNET_ISSU Messages” section on page 2-91</a>
PT	Protocol tunneling	<a href="#">“PT Messages” section on page 2-92</a>
QOSMGR	QoS manager	<a href="#">“QOSMGR Messages” section on page 2-92</a>
RMON	Remote Network Monitoring (RMON)	<a href="#">“RMON Messages” section on page 2-97</a>
SCHED	Schedule	<a href="#">“SCHED Messages” section on page 2-97</a>
SDM	Switch Database Manager (Catalyst 3750-X and 3750-E switches)	<a href="#">“SDM Messages” section on page 2-97</a>
SPAN	Switched port analyzer	<a href="#">“SPAN Messages” section on page 2-98</a>

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

Facility Code	Description	Location
SPANTREE	Spanning tree	“SPANTREE Messages” section on page 2-99
SPANTREE_FAST	Spanning-tree fast convergence	“SPANTREE_FAST Messages” section on page 2-106
SPANTREE_VLAN_SW	Spanning-tree VLAN switch	“SPANTREE_VLAN_SW Messages” section on page 2-107
STACKMGR	Stack manager (Catalyst 3750-X and 3750-E switches)	“STACKMGR Messages” section on page 2-107
STORM_CONTROL	Storm control	“STORM_CONTROL Messages” section on page 2-109
SUPERVISOR	Supervisor ASIC	“SUPERVISOR Messages” section on page 2-110
SUPQ	Supervisor queue	“SUPQ Messages” section on page 2-110
SW_DAI	Dynamic ARP inspection	“SW_DAI Messages” section on page 2-112
SW_MACAUTH	MAC address authentication	“SW_MACAUTH Messages” section on page 2-114
SW_MATM	MAC address table manager	“SW_MATM Messages” section on page 2-115
SW_VLAN	VLAN manager	“SW_VLAN Messages” section on page 2-115
SW_QOS_TB	QoS trusted boundary	“SWITCH_QOS_TB Messages” section on page 2-121
TCAMMGR	Ternary content addressable memory manager	“TCAMMGR Messages” section on page 2-121
UDLD	UniDirectional Link Detection	“UDLD Messages” section on page 2-123
UFAST_MCAST_SW	UplinkFast packet transmission	“UFAST_MCAST_SW Messages” section on page 2-125
VQPCLIENT	VLAN Query Protocol client	“VQPCLIENT Messages” section on page 2-125
WCCP	Web Cache Communication Protocol (WCCP)	“WCCP Messages” section on page 2-126

- 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 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 Variable Fields**

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

All syslog messages generated by a Catalyst 3750-X or 3750-E switch other than the master switch appear with (*Switch-x*) where *Switch-x* is the number of the stack member generating the message. Syslog messages generated by the master switch appear with no hostname string.

This example shows a partial switch system message on a switch other than a Catalyst 3750-E:

```
00:00:46: %LINK-3-UPDOWN: Interface Port-channell1, 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-E 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.

## 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/cgi-bin/Support/OutputInterpreter/home.pl>

## Bug Toolkit

The Bug Toolkit provides information on open and closed caveats. You can 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 ix for further information.

