

CHAPTER

System Message Overview

This guide describes the Cisco IE 3000 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 mean problems with your system. Some messages are informational, and others can help diagnose problems with communications lines, internal hardware, or the system software.



For information about system messages that are not Cisco IE 3000 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 1-5

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

By default, a switch sends the output from system messages to a logging process.

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 the Cisco IE 3000 switch-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 |
|---------------|-------------|----------------------------------------|
| ACLMGR | | "ACLMGR Messages" section on page 2-3 |
| AUTHMGR | 2 | "AUTHMGR Messages" section on page 2-7 |

Table 1-1 Facility Codes (continued)

| Facility Code | Description | Location |
|---------------------|-------------------------------------------------------------------------|--------------------------------------------------------|
| BACKUP_INTERFACE | Flex Links | "BACKUP_INTERFACE Messages" section on page 2-9 |
| CMP | Cluster Membership Protocol | "CMP Messages" section on page 2-9 |
| DHCP_SNOOPING | DHCP snooping | "DHCP_SNOOPING Messages" section on page 2-11 |
| DOT1X | IEEE 802.1x | "DOT1X Messages" section on page 2-14 |
| DOT1X_SWITCH | IEEE 802.1x for switches | "DOT1X_SWITCH Messages" section on page 2-15 |
| DTP | Dynamic Trunking Protocol | "DTP Messages" section on page 2-19 |
| DWL | Down-when-looped | "DWL Messages" section on page 2-20 |
| EC | EtherChannel | "EC Messages" section on page 2-21 |
| ENVIRONMENT | Environment | "ENVIRONMENT Messages" section on page 2-25 |
| ЕРМ | Enforcement Policy Module | "EPM Messages" section on page 2-26 |
| ETHCNTR | Ethernet Controller | "ETHCNTR Messages" section on page 2-26 |
| EXPRESS_SETUP | Express Setup | "EXPRESS_SETUP Messages" section on page 2-27 |
| FLASH DEVICE | Flash device | "FLASH_DEVICE Messages" section on page 2-28 |
| GBIC_SECURITY | GBIC module and small form-factor pluggable (SFP) module security | "GBIC_SECURITY Messages" section on page 2-28 |
| GBIC_SECURITY_CRYPT | GBIC and SFP module security | "GBIC_SECURITY_CRYPT Messages" section on page 2-30 |
| HARDWARE | Hardware | "HARDWARE Messages" section on page 2-31 |
| HLFM | Local forwarding manager | "HLFM Messages" section on page 2-33 |
| IDBMAN | Interface description block manager | "IDBMAN Messages" section on page 2-34 |
| IFMGR | Interface manager | "IFMGR Messages" section on page 2-37 |
| IGMP_QUERIER | Internet Group Management Protocol (IGMP) querier | "IGMP_QUERIER Messages" section on page 2-37 |

Table 1-1 Facility Codes (continued)

| Facility Code | Description | Location |
|-----------------------|------------------------------------------|---------------------------------------------------------------------------|
| ILET | Cisco IOS License Enforcement Test | "ILET Messages" section on page 2-38 |
| IP | Internet Protocol | "IP Messages" section on page 2-39 |
| IP_DEVICE_TRACKING_HA | IP device tracking for high availability | "IP_DEVICE_TRACKING_HA Messages" section on page 2-39 |
| KEYMAN | Keyman | "KEYMAN Messages" section on page 2-39 |
| MAB | MAC Authentication Bypass | "MAB Messages" section on page 2-40 |
| MAC_LIMIT | MAC address table entries | "MAC_LIMIT Messages" section on page 2-40 |
| MAC_MOVE | Host activity | "MAC_MOVE Messages" section on page 2-41 |
| РНҮ | РНҮ | "PHY Messages" section on page 2-41 |
| PLATFORM | Low-level platform-specific | "PLATFORM Messages" section on page 2-43 |
| PLATFORM_ENV | Platform environment | "PLATFORM_ENV Messages" section on page 2-44 |
| PLATFORM FRULink | 10G Service Module Messages | "PLATFORM FRULink 10G Service Module Messages" section on page 2-44 |
| PLATFORM_IPVv6 | IP Version 6 | "PLATFORM_IPv6 Messages" section on page 2-46 |
| PLATFORM_PM | Platform port manager | "PLATFORM_PM Messages" section on page 2-47 |
| PLATFORM_RPC | Platform remote procedure call | "PLATFORM_RPC Messages" section on page 2-48 |
| PLATFORM_VLAN | Platform VLAN | "PLATFORM_VLAN Messages" section on page 2-48 |
| PM | Port manager | "PM Messages" section on page 2-49 |
| PORT_SECURITY | Port security | "PORT_SECURITY Messages" section on page 2-57 |
| QOSMGR | QoS manager | "QOSMGR Messages" section on page 2-58 |
| REP | Resilient Ethernet Protocol | "REP Messages" section on page 2-63 |
| RMON | Remote Network Monitoring (RMON) | "RMON Messages" section on page 2-63 |

Table 1-1 Facility Codes (continued)

| Facility Code | Description | Location |
|------------------|--------------------------------------------|-----------------------------------------------------|
| SCHED | Schedule | "SCHED Messages" section on page 2-64 |
| SESA | SESA | "SESA Messages" section on page 2-64 |
| SPAN | Switched Port Analyzer | "SPAN Messages" section on page 2-68 |
| SPANTREE | Spanning Tree | "SPANTREE Messages" section on page 2-69 |
| SPANTREE_FAST | Spanning-tree fast convergence | "SPANTREE_FAST Messages" section on page 2-77 |
| SPANTREE_VLAN_SW | Spanning-tree VLAN switch | "SPANTREE_VLAN_SW Messages" section on page 2-77 |
| STORM_CONTROL | Storm control | "STORM_CONTROL Messages" section on page 2-78 |
| SUPERVISOR | Supervisor ASIC | "SUPERVISOR Messages" section on page 2-79 |
| SUPQ | Supervisor queue | "SUPQ Messages" section on page 2-79 |
| SW_MACAUTH | MAC address authentication | "SW_MACAUTH Messages" section on page 2-81 |
| SW_VLAN | VLAN manager | "SW_VLAN Messages" section on page 2-81 |
| SWITCH_QOS_TB | QoS trusted boundary | "SWITCH_QOS_TB Messages" section on page 2-88 |
| TCAMMGR | Ternary content addressable memory manager | "TCAMMGR Messages" section on page 2-88 |
| UDLD | UniDirectional Link Detection | "UDLD Messages" section on page 2-90 |
| VQPCLIENT | VLAN Query Protocol client | "VQPCLIENT Messages" section on page 2-90 |

• 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. | |

Table 1-2 Message Severity Levels (continued)

| Severity Level | Description | |
|-------------------|---------------------------------------------|--|
| 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) |
| [hex] | Hexadecimal integer |
| [inet] | Internet address |

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 ix for further information.