



# System Message Overview

This guide describes system messages for the Catalyst 2950 switch. 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, page 1-1](#)
- [Error Message Traceback Reports, page 1-3](#)

## 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                                                   |
|---------------|-----------------------------|------------------------------------------------------------|
| CMP           | Cluster Membership Protocol | <a href="#">“CMP Messages” section on page 2-1</a>         |
| DOT1X_MOD     | 802.1X authentication       | <a href="#">“DOT1X_MOD Messages” section on page 2-2</a>   |
| DTP           | Dynamic Trunking Protocol   | <a href="#">“DTP Messages” section on page 2-2</a>         |
| EC            | EtherChannel                | <a href="#">“EC Messages” section on page 2-4</a>          |
| ENVIRONMENT   | Environment                 | <a href="#">“ENVIRONMENT Messages” section on page 2-5</a> |
| ETHCNTR       | Ethernet controller         | <a href="#">“ETHCNTR Messages” section on page 2-5</a>     |

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

| Facility Code         | Description                                                             | Location                                                              |
|-----------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------|
| GBIC                  | Gigabit Interface Converter (GBIC) module identification and validation | <a href="#">“GBIC Messages” section on page 2-6</a>                   |
| GBIC_1000BASET        | 1000BASE-T GBIC module                                                  | <a href="#">“GBIC Messages” section on page 2-6</a>                   |
| GBIC_SECURITY         | GBIC module security                                                    | <a href="#">“GBIC_SECURITY Messages” section on page 2-9</a>          |
| GIGASTACK             | GigaStack GBIC module                                                   | <a href="#">“GIGASTACK Messages” section on page 2-10</a>             |
| HWMATM_MOD            | Hardware MAC address table manager                                      | <a href="#">“HWMATM_MOD Messages” section on page 2-11</a>            |
| LRE_CPE               | Long-Reach Ethernet (LRE) customer premises equipment (CPE)             | <a href="#">LRE_CPE Messages, page 2-11</a>                           |
| LRE_LINK              | LRE link                                                                | <a href="#">LRE_LINK Messages, page 2-14</a>                          |
| PLATFORM_CAT2950      | Application-specific integrated circuit (ASIC)                          | <a href="#">“PLATFORM_CAT2950 Messages” section on page 2-15</a>      |
| PLATFORM_CATALYST2950 | Low-level platform messages                                             | <a href="#">“PLATFORM_CATALYST2950 Messages” section on page 2-20</a> |
| PM                    | Port manager                                                            | <a href="#">“PM Messages” section on page 2-20</a>                    |
| SPAN                  | Switched Port Analyzer (SPAN)                                           | <a href="#">“SPAN Messages” section on page 2-25</a>                  |
| SPANTREE              | Spanning tree                                                           | <a href="#">“SPANTREE Messages” section on page 2-26</a>              |
| SPANTREE_FAST         | Spanning-tree fast convergence                                          | <a href="#">“SPANTREE_FAST Messages” section on page 2-31</a>         |
| SPANTREE_VLAN_SW      | Spanning-tree VLAN switch                                               | <a href="#">“SPANTREE_VLAN_SWITCH Messages” section on page 2-31</a>  |
| STORM_CONTROL         | Storm control                                                           | <a href="#">“STORM_CONTROL Messages” section on page 2-31</a>         |
| SW_VLAN               | VLAN manager                                                            | <a href="#">“SW_VLAN Messages” section on page 2-32</a>               |
| UDLD                  | UniDirectional Link Detection (UDLD)                                    | <a href="#">“UDLD Messages” section on page 2-36</a>                  |
| UFAST_MCAST_SW        | UplinkFast multicast software                                           | <a href="#">“UFAST_MCAST_SW Messages” section on page 2-38</a>        |

- 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 Gi0/9 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 sample message includes traceback information:

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

