

## **Configuring Ethernet Management Port**

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## **Finding Feature Information**

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <a href="http://www.cisco.com/go/cfn">http://www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

## **Prerequisites for Ethernet Management Ports**

When connecting a PC to the Ethernet management port, you must first assign an IP address.

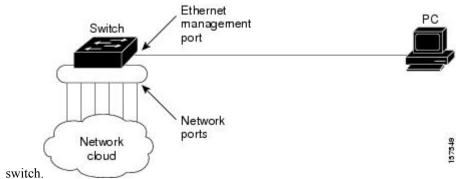
## Information about the Ethernet Management Port

The Ethernet management port, also referred to as the *Gi0/0* or *GigabitEthernet0/0* port, is a VRF (VPN routing/forwarding) interface to which you can connect a PC. You can use the Ethernet management port instead of the switch console port for network management. When managing a switch stack, connect the PC to the Ethernet management port on a stack member.

### **Ethernet Management Port Direct Connection to a Switch**

Figure 1: Connecting a Switch to a PC

This figure displays how to connect the Ethernet management port to the PC for a switch or a standalone



### **Ethernet Management Port Connection to Stack Switches using a Hub**

In a stack with only stack switches, all the Ethernet management ports on the stack members are connected to a hub to which the PC is connected. The active link is from the Ethernet management port on the active switchthrough the hub, to the PC. If the active switch fails and a new active switch is elected, the active link is now from the Ethernet management port on the new active switch to the PC.

#### Figure 2: Connecting a Switch Stack to a PC

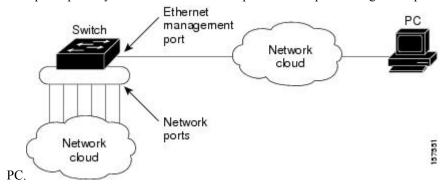
This figure displays how a PC uses a hub to connect to a switch stack.

### **Ethernet Management Port and Routing**

By default, the Ethernet management port is enabled. The switch cannot route packets from the Ethernet management port to a network port, and the reverse. Even though the Ethernet management port does not support routing, you may need to enable routing protocols on the port.

Figure 3: Network Example with Routing Protocols Enabled

In the following figure, you must enable routing protocols on the Ethernet management port when the PC is multiple hops away from the switch and the packets must pass through multiple Layer 3 devices to reach the



In the above figure, if the Ethernet management port and the network ports are associated with the same routing process, the routes are propagated as follows:

- The routes from the Ethernet management port are propagated through the network ports to the network.
- The routes from the network ports are propagated through the Ethernet management port to the network.

Because routing is not supported between the Ethernet management port and the network ports, traffic between these ports cannot be sent or received. If this happens, data packet loops occur between the ports, which disrupt the switch and network operation. To prevent the loops, configure route filters to avoid routes between the Ethernet management port and the network ports.

### **Supported Features on the Ethernet Management Port**

The Ethernet management port supports these features:

- Express Setup (only in switch stacks)
- · Network Assistant
- Telnet with passwords
- TFTP
- Secure Shell (SSH)
- · DHCP-based autoconfiguration
- SMNP (only the ENTITY-MIB and the IF-MIB)
- IP ping
- · Interface features
  - Speed—10 Mb/s, 100 Mb/s, and autonegotiation
  - Duplex mode—Full, half, and autonegotiation
  - · Loopback detection
- Cisco Discovery Protocol (CDP)
- DHCP relay agent
- IPv4 and IPv6 access control lists (ACLs)
- Routing protocols



#### Caution

Before enabling a feature on the Ethernet management port, make sure that the feature is supported. If you try to configure an unsupported feature on the Ethernet Management port, the feature might not work properly, and the switch might fail.

## **How to Configure the Ethernet Management Port**

### **Disabling and Enabling the Ethernet Management Port**

To disable or enable the Ethernet management port in the CLI, follow this procedure.

#### **Procedure**

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 2	interface gigabitethernet0/0	Specifies the Ethernet management port in the
	Example:	CLI.
	<pre>Device(config) # interface gigabitethernet0/0</pre>	
Step 3	shutdown	Disables the Ethernet management port.
	Example:	
	Device(config-if)# shutdown	
Step 4	no shutdown	Enables the Ethernet management port.
	Example:	
	Device(config-if)# no shutdown	
Step 5	exit	Exits interface configuration mode.
	Example:	
	Device(config-if)# exit	
Step 6	show interfaces gigabitethernet0/0	Displays the link status.
	Example:	To find out the link status to the PC, you can
	Device# show interfaces	monitor the LED for the Ethernet management
	gigabitethernet0/0	port. The LED is green (on) when the link is active, and the LED is off when the link is
		down. The LED is amber when there is a POST failure.

### What to do next

Proceed to manage or configure your switch using the Ethernet management port. Refer to the *Network Management Configuration Guide (Catalyst 3850 Switches)*.

### **Additional References**

#### **Related Documents**

Related Topic	Document Title	
<b>Bootloader configuration</b>	System Management Configuration Guide (Catalyst 3850 Switches)	
<b>Bootloader commands</b>	System Management Command Reference (Catalyst 3850 Switches)	

### **Error Message Decoder**

Description	Link
To help you research and resolve system error messages in this release, use the Error Message Decoder tool.	https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi

#### **MIBs**

MIB	MIBs Link
All supported MIBs for this release.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:
	http://www.cisco.com/go/mibs

#### **Technical Assistance**

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.	http://www.cisco.com/support
To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.	
Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	

# **Feature Information for Ethernet Management Ports**

Release	Modification
Cisco IOS XE 3.2SE	This feature was introduced.

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