

# **Configuring Ethernet Management Port**

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### **Restrictions for Ethernet Management Port**

The GigabitEthernet0/0 management port is not supported on the Cisco Catalyst 9200CX Series Switches.

# **Prerequisites for Ethernet Management Port**

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

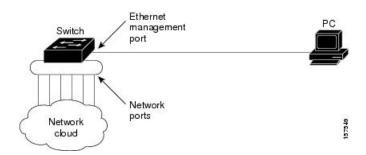
# Information About the Ethernet Management Port

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 device console port for network management.

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

Figure 1: Connecting a Device to a PC

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



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

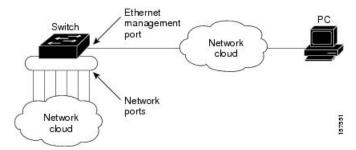
In a stack with only stack devices, all the Ethernet management ports on the stack members are connected to a hub to which the PC is connected. The active link is from the Ethernet management port on the active switch through the hub, to the PC. If the active switch fails and a new active device is elected,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

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

By default, the Ethernet management port is enabled. The device 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 2: Network Example with Routing Protocols Enabled

Enable routing protocols on the Ethernet management port when the PC is multiple hops away from the device and the packets must pass through multiple Layer 3 devices to reach the PC.



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 device 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 device stacks)
- Network Assistant
- Telnet with passwords
- TFTP
- Secure Shell (SSH)
- DHCP-based autoconfiguration
- SNMP (only ENTITY-MIB and 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



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 device might fail.

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

This section contains the procedures of how to configure the Ethernet Management Port.

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

#### **Procedure**

	Command or Action	Purpose
Step 1	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	

	Command or Action	Purpose	
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 device using the Ethernet management port. See the Network Management section.

# **Example for Configuring IP Address on Ethernet Management Interface**

This example shows how to configure IP address on the GigabitEthernet0/0 management interface.

```
Device# configure terminal
Device(config)# interface gigabitethernet0/0
Device(config-if)# vrf forwarding Mgmt-vrf
Device(config-if)# ip address 192.168.247.10 255.255.0.0
Device(config-if)# end
Device# show running-config interface Gi0/0
Building configuration...
Current configuration : 118 bytes
!
interface GigabitEthernet0/0
```

```
vrf forwarding Mgmt-vrf
ip address 192.168.247.10 255.255.0.0
negotiation auto
end
```

This example shows how to configure IP address on the TenGigabitEthernet0/1 management interface.

```
Device# configure terminal
Device(config)# interface TenGigabitEthernet0/1
Device(config-if)# vrf forwarding Mgmt-vrf
Device(config-if)# ip address 192.168.247.20 255.255.0.0
Device(config-if)# negotiation auto
Device(config-if)# end

Device# show running-config interface Te0/1

Building configuration...

Current configuration: 118 bytes
!
interface TenGigabitEthernet0/1
    vrf forwarding Mgmt-vrf
    ip address 192.168.247.20 255.255.0.0
    negotiation auto
```

# Additional References for Ethernet Management Port

#### **Related Documents**

Related Topic	Document Title
<b>Bootloader configuration</b>	See the System Management section of this guide.
<b>Bootloader commands</b>	See the System Management Commands section of the Command Reference (Catalyst 9200 Series Switches)

### Feature History for Ethernet Management Port

This table provides release and related information for features explained in this module.

These features are available on all releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Fuji 16.9.2	Ethernet Management Port	The Ethernet management port is a VRF interface to which you can connect a PC. You can use the Ethernet management port instead of the device console port for network management.

Release	Feature	Feature Information
Cisco IOS XE Cupertino 17.9.1	Ethernet Management Port	This feature was implemented on C9200CX-12P-2X2G, C9200CX-8P-2X2G, and C9200CX-12T-2X2G models of the Cisco Catalyst 9200CX Series Switches, which were introduced in this release.

Use Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to Cisco Feature Navigator.