

Configuring Gigabit Ethernet Interfaces (J-Web Procedure)

An Ethernet interface must be configured for optimal performance in a high-traffic network.

To configure properties on a Gigabit Ethernet interface or a 10-Gigabit Ethernet interface on an EX-series switch:

1. Select the **Interfaces** option from the **Configure** menu.
2. Select the option **Ports**. The page lists all the Gigabit Ethernet and 10-Gigabit Ethernet interfaces and their link status.
3. In order to set up interface monitoring for virtual chassis configuration and EX 8200 series, select a member from the **Port for FPC** list. Details such as the admin status, link status, speed, duplex, and flow control are displayed in the table.



NOTE: By default, the details of the first member in the **Port for FPC** drop-down list, is displayed.

4. Configure the interface by selecting options in the **Edit** menu. See Table 1 on page 1 for details on the options.

You can select multiple interfaces and modify their settings.



NOTE: When you select multiple interfaces at the same time, you cannot modify the IP address or enable or disable the administrative status of the selected interfaces.

5. Click **Enable Port/Disable Port** to enable or disable the administrative status on the selected port.

Table 1: Port Edit Options

Field	Function	Your Action
Port Role		

Table 1: Port Edit Options *(continued)*

Field	Function	Your Action
Port Role		<p>The options available are:</p> <ul style="list-style-type: none">■ Default—The default configuration is applied.■ Desktop Select an existing VLAN configuration or a new VLAN configuration to be associated with the port.■ Desktop and Phone Select an existing VLAN configuration or a new VLAN configuration to be associated with the port. You can also select an existing VoIP VLAN configuration or a new VoIP VLAN configuration to be associated with the port.■ Wireless Access Point Select an existing VLAN configuration or a new VLAN configuration to be associated with the port. For a new VLAN, VLAN ID is a mandatory options.■ Routed Uplink Specify the IP address and the subnet mask.■ Layer 2 Uplink For this port role you can select a VLAN member and associate a native VLAN. Click Details to view the CLIs corresponding to each port role.■ None—No port role is configured for the selected interface. <p>Select the option and click OK.</p> <p>NOTE: See Port Role Configuration with the J-Web Interface—CLI Reference for details on the CLI commands that are associated with each port role.</p> <p>NOTE: Only the following port roles can be applied on an EX-8200 series switch interfaces:</p> <ul style="list-style-type: none">■ Default■ Layer 2 Uplink■ Routed Uplink

Table 1: Port Edit Options *(continued)*

Field	Function	Your Action
	Specifies the role assigned to the port.	
	<p>NOTE: Once a port role is configured on the interface, you cannot specify VLAN options and IP options.</p> <p>Depending on the profile selected, the corresponding configuration is applied:</p> <ul style="list-style-type: none"> ■ Default—Interface family is set to ethernet-switching, port mode is set to access, and RSTP protocol is enabled if redundant trunk groups are not configured. ■ Desktop—Interface family is set to ethernet-switching, port mode is set to access, RSTP is enabled with the edge and point-to-point options if the interfaces are not part of any redundant trunk groups, and port security parameters (MAC limit = 1; dynamic ARP Inspection and DHCP snooping enabled) are set. ■ Desktop and Phone—Interface family is set to ethernet-switching, port mode is set to access, port security parameters (MAC limit = 1; dynamic ARP Inspection, DHCP snooping enabled) are set, and recommended CoS parameters are specified for forwarding classes, schedulers, and classifiers. See Table 2 on page 5 for more information. ■ Wireless Access Point—Interface family is set to ethernet-switching, port mode is set to access, RSTP is enabled with the edge and point-to-point options if the interfaces are not part of any redundant trunk groups. ■ Routed Uplink—Port family is set to inet, and recommended CoS parameters are set for schedulers and classifiers. See Table 2 on page 5 for more information. ■ Layer 2 Uplink—Interface family is set to ethernet-switching, port mode is set to trunk, RSTP is enabled with the edge and point-to-point options if the interfaces are not part of any redundant trunk groups, and port security is set to dhcp-trusted. <p>NOTE: For an EX-8200 series switch,</p>	

Table 1: Port Edit Options *(continued)*

Field	Function	Your Action
	ARP inspection and DHCP snooping parameters are not configured.	
VLAN Options		
Port Mode	Specifies the mode of operation for the port: trunk or access.	<p>If you select Trunk, you can:</p> <ol style="list-style-type: none"> 1. Click Add to add a VLAN member. 2. Select the VLAN and click OK. 3. (Optional) Associate a native VLAN with the interface. <p>If you select Access, you can:</p> <ol style="list-style-type: none"> 1. Select the VLAN member to be associated with the interface. 2. (Optional) Associate a VoIP VLAN with the interface. Only a VLAN with a VLAN ID can be associated as a VoIP VLAN. 3. Click OK.
Link Options		
MTU (bytes)	Specifies the maximum transmission unit size for the interface.	Type a value from 256 through 9216 bytes. The default MTU for Gigabit Ethernet interfaces is 1514 .
Speed	Specifies the speed for the mode.	Select one of the following values: 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps.
Duplex	Specifies the link mode.	Select one: automatic , half-duplex , or full-duplex .
Description	Describes the link. NOTE: If the port is part of an aggregate, only the option Description is enabled.	Enter a brief description for the link.
Enable Auto Negotiation	Enables or disables autonegotiation.	Select the check box to enable autonegotiation, or clear the check box to disable it. By default, autonegotiation is enabled.
Enable Flow Control	Enables or disables flow control.	Select the check box to enable flow control to regulate the amount of traffic sent out of the interface, or clear the check box to disable flow control and permit unrestricted traffic. Flow control is enabled by default.
IP Options		

Table 1: Port Edit Options *(continued)*

Field	Function	Your Action
Enable IP Address	Specifies an IP address for the interface. NOTE: If the IP address is cleared, the interface belongs to the <code>inet</code> family.	<ol style="list-style-type: none"> 1. Click the check box to enable IP settings 2. Type an IP address, for example: <code>10.10.10.10</code> 3. Enter the subnet mask or address prefix. For example, 24 bits represents <code>255.255.255.0</code>. 4. Click OK.

Table 2: Recommended CoS Settings for Port Roles

CoS Parameter	Recommended Settings
Forwarding Classes	<p>There are four forwarding classes:</p> <ul style="list-style-type: none"> ■ voice—Queue number is set to 7. ■ expedited-forwarding—Queue number is set to 5. ■ assured-forwarding—Queue number is set to 1. ■ best-effort—Queue number is set to 0.
Schedulers	<p>The schedulers and their settings are:</p> <ul style="list-style-type: none"> ■ Strict-priority—Transmission rate is set to 10 percent and buffer size to 5 percent. ■ Expedited-scheduler—Transmission rate is set to 30 percent, buffer size to 30 percent, and priority is set to low. ■ Assured-scheduler—Transmission rate is set to 25 percent, buffer size to 25 percent, and priority is set to low. ■ Best-effort scheduler—Transmission-rate is set to 35 percent, buffer size to 40 percent, and priority is set to low.
Scheduler maps	When a Desktop and Phone, Routed Uplink, or Layer 2 Uplink role is applied on an interface, the forwarding classes and schedulers are mapped using the scheduler map.
ieee-802.1 classifier	Imports the default ieee-802.1 classifier configuration, and sets the loss priority to low for the code point 101 for the voice forwarding class.
dscp classifier	Imports the default dscp classifier configuration, and sets the loss-priority to low for the code points 101110 for the voice forwarding class.
Related Topics	<ul style="list-style-type: none"> ■ Configuring Gigabit Ethernet Interfaces (CLI Procedure) ■ Monitoring Interface Status and Traffic ■ EX-series Switches Interfaces Overview

