

EX2500 Ethernet Switch Quick Start



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Installing and Initially Configuring the Switch

To install and initially configure a Juniper Networks EX2500 Ethernet Switch in a standard 2-post rack, you need the following tools and equipment:

- Rack-mount kit: 2 mounting brackets; 8 M4 screws; and 4 each M6 screws, M6 locking washers, M6 clip nuts, and M6 cage nuts (provided)
- One standard flat-blade (–) screwdriver and one Phillips (+) screwdriver number 2
- Electrostatic discharge (ESD) grounding wrist strap
- 2 AC power cords (provided)
- Management terminal or PC with an RS-232 serial port
- Mini-USB serial console cable (provided)

NOTE: To install an EX2500 switch in a 4-post rack and for complete installation and configuration information, see the EX2500 documentation available from <http://www.juniper.net/techpubs/>. From the Technical Documentation Web page, select the EX Series link and then select **EX2500 Switch**.

Part 1: Install the Switch

WARNING: The EX2500 switch does not have a power switch. When you connect one of the two power cords to an energized AC power outlet, the switch powers on immediately. You must disconnect the power cords to power off the switch. Always connect each power cord to a universal grounded power source in a quickly and safely accessible location.

1. Select a permanent installation location from which you can connect the switch to two universal grounded AC power sources that are quickly and safely accessible.
2. Make sure the rack is properly secured to the building in its permanent location.
3. Attach the ESD grounding strap to your bare wrist, and connect the strap to an outside ESD point.
4. Use the M4 screws to attach a mounting bracket to each side of the switch. Torque the screws to approximately 30 inch-pounds (3.4 Nm).
5. Have one person grasp both sides of the switch, lift the switch, and position it in the rack, aligning the bracket holes with the threaded holes in the rack.
6. Have a second person install an M6 screw, washer, and clip nut or cage nut in each bracket hole. Torque each screw to approximately 30 inch-pounds.

Part 2: Connect Power to the Switch

1. Connect one AC power cord to one of the two IEC 320 power connections on the rear panel of the EX2500 switch, and connect the second AC power cord to the other IEC connector for redundant power.
2. If the AC power source outlets have a power switch, set each outlet switch to the OFF (O) position.
3. Insert one power cord into one AC power source outlet, and then insert the second power cord into an AC power source on a separate circuit. If the outlet does not have a power switch, the switch powers on immediately.
4. If the AC power source outlets have a power switch, set each outlet switch to the ON (I) position. The switch powers on immediately.
5. Verify that the SYS LED on the left front panel is blinking green if one power cord is connected or is solid green if both cords are connected.
6. Verify that the FAN LED is solid green.

CAUTION: A blinking green FAN LED indicates a fan failure. Contact Juniper Networks technical support.

When you plug in an EX2500 power cord, the switch initializes automatically.

Part 3: Perform Initial Configuration

Use the serial port to initially configure a management port for a network connection.

1. Verify that the terminal or PC you are using for management is running a terminal emulation program with the following port settings: **9600** (bits per second default baud rate), **8** (character size), **none** (parity), **1** (stop bit), **8** (data bits), and **none** (flow control).
2. Connect one end of the mini-USB serial console cable to the RS-232 serial (CON) port on the right front of the EX2500 switch, and connect the other end to a serial port on the management terminal or PC.

The switch performs initial self-tests and displays the **Password** prompt.

530-029708-01



- At the **Password** prompt, type the default switch password **admin** and press Enter.
- At the prompt that appears, type **enable** and press Enter.
- Type **configure terminal** and press Enter.
- Configure the management port with an IP address, subnet mask, and gateway. For example:

```
ex2500(config)# interface ip-mgmt address 10.10.10.2
ex2500(config)# interface ip-mgmt netmask 255.255.255.0
ex2500(config)# interface ip-mgmt enable
ex2500(config)# interface ip-mgmt gateway 10.10.10.1
ex2500(config)# interface ip-mgmt gateway enable
ex2500(config)# exit
```

You can now connect to the management (MGMT) port over a network and use Telnet from an external management station to access and control the switch through the EX2500 command-line interface (CLI). For instructions, see the *EX2500 Ethernet Switch Configuration Guide*.

For EX2500 documentation, go to <http://www.juniper.net/techpubs/>, select the EX Series link, and then select **EX2500 Switch**.

Part 4: Basic Troubleshooting

System LEDs do not light

Symptom: The SYS and FAN LEDs do not light.

Solution: Verify that the power cord or cords are properly connected to the power plug or plugs. Verify that AC power is available from the power source.

Temperature sensor warning

Symptom: A temperature warning is displayed on the management console.

Solution:

- Verify that the air circulation vents on the front and back of the switch are free from obstruction by cables, panels, rack frames, and other materials.
- Make sure all cooling fans inside the switch are running. The FAN LED blinks to indicate a failure of one or more fans.
- Use the **show sys-info** command to display fan status. If any fan stops during switch operation, contact Juniper Networks technical support.
- If necessary, cool the room to a lower temperature or provide a fan for greater air circulation.

Switch does not initialize (boot)

Symptom: All switch LEDs stay lit, and no command prompt appears on the console.

Solution: The operating system might have been damaged. Use the console port to perform a serial upgrade of the software. For instructions, see the *EX2500 Ethernet Switch Command Reference*.

Safety Warnings Summary

NOTE: This is a summary of safety warnings. For a complete list of warnings, including translations, see the *EX2500 Ethernet Switch Hardware Guide*. For EX2500 documentation, go to <http://www.juniper.net/techpubs/>, select the EX Series link, and then select **EX2500 Switch**.

WARNING: Failure to observe these safety warnings can result in serious physical injury.

- To reduce the risk of electric shock, use only power cords that have a grounding path, and always connect the power cord to a properly grounded power outlet.
- Electrical current from power, telephone, and communication cables is hazardous. To prevent a shock hazard:
 - Do not connect or disconnect any cables or work on the switch during an electrical storm.
 - Before working on equipment connected to power lines, remove jewelry (rings, necklaces, and watches). Metal objects heat up when connected to power and ground and can cause serious burns or become welded to the terminals.
 - Connect all power cords—for the switch and any attached equipment—to a properly wired and grounded electrical outlet.
 - When possible use one hand only to connect or disconnect cables.
 - Never turn on any equipment that has evidence of fire, water, or structural damage.
 - Disconnect the power cords before installing, uninstalling, or moving the switch. Both power cords must be disconnected to ensure the removal of hazardous energy.
- The EX2500 switch does not have a power switch. When you connect one of the two power cords to an energized AC power outlet, the switch powers on immediately. You must disconnect the power cords to power off the switch. Always connect each power cord to a universal grounded power source in a quickly and safely accessible location.
- Do not stack other devices on top of the switch in a rack. The mounting brackets cannot support multiple devices. Use mounting brackets to secure each device to the rack.
- Optical SFP+ transceivers are Class 1 laser products. To prevent eye injury, do not look directly into a fiber-optic transceiver or into the ends of fiber-optic cables. Do not leave a fiber-optic transceiver uncovered—keep the safety cap on—except when inserting or removing cables. Always inspect and clean the LC connector end faces before making any connections.

Contacting Juniper Networks

For technical support, see <http://www.juniper.net/support/requesting-support.html>.