

J4300 and J6300 Services Router PIM Installation Instructions

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This document describes how to remove and replace a Physical Interface Module (PIM) on Juniper Networks J4300 and J6300 Services Routers. For hardware installation and basic troubleshooting procedures for J-series Services Routers, see the *J-series Services Router Getting Started Guide*.

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Tools and Parts Required

To replace a component, you need the following tools and parts:

- Electrostatic bag or antistatic mat
- Electrostatic discharge (ESD) grounding wrist strap
- Flat-blade screwdriver, approximately 1/4 in. (6 mm)

Replacing a PIM

Physical Interface Modules (PIMs) in J4300 and J6300 Services Routers are field replaceable. The router must be powered off before the PIMs are removed or installed. This section contains the following topics:

- Removing a PIM on page 2
- Installing a PIM on page 3

Removing a PIM

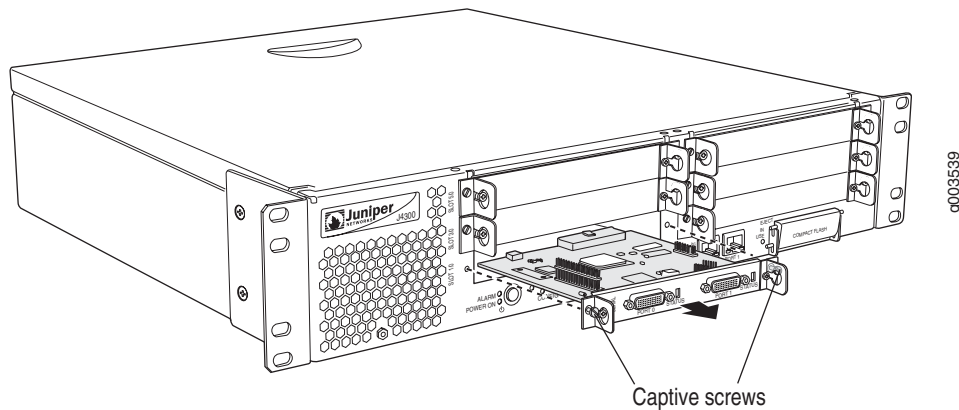
The PIMs are installed in the front of the Services Router. A PIM weighs less than 1 lb (0.5 kg).

To remove a PIM (see Figure 1):

1. Place an electrostatic bag or antistatic mat on a flat, stable surface to receive the PIM.
2. Attach an electrostatic discharge (ESD) grounding strap to your bare wrist and connect the strap to the ESD point on the chassis, or to an outside ESD point if the Services Router is disconnected from earth ground. For more information about ESD, see the *J-series Services Router Getting Started Guide*.
3. Press and release the power button to power off the router. Verify that the POWER ON LED blinks and then turns off.
4. Label the cables connected to the PIM so that you can later reconnect each cable to the correct PIM.
5. Disconnect the cables from the PIM.
6. If necessary, arrange the cables to prevent them from dislodging or developing stress points:
 - Secure the cable so that it is not supporting its own weight as it hangs to the floor.
 - Place excess cable out of the way in a neatly coiled loop.
 - Use fasteners to maintain the shape of cable loops.

7. Loosen the captive screws on each side of the PIM faceplate.
8. Grasp the handles on each side of the PIM faceplate and slide the PIM out of the router. Place it in the electrostatic bag or on the antistatic mat.
9. If you are not reinstalling a PIM into the emptied slot, install a blank PIM panel over the slot to maintain proper airflow.

Figure 1: Removing a PIM



Installing a PIM

To install a PIM (see Figure 2):

1. Attach an electrostatic discharge (ESD) grounding strap to your bare wrist and connect the strap to the ESD point on the chassis, or to an outside ESD point if the Services Router is disconnected from earth ground. For more information about ESD, see the *J-series Services Router Getting Started Guide*.
2. Press and release the power button to power off the router. Verify that the **POWER ON LED** blinks and then turns off.
3. Align the notches in the connector at the rear of the PIM with the notches in the PIM slot in the Services Router, and then slide the PIM in until it lodges firmly in the router.

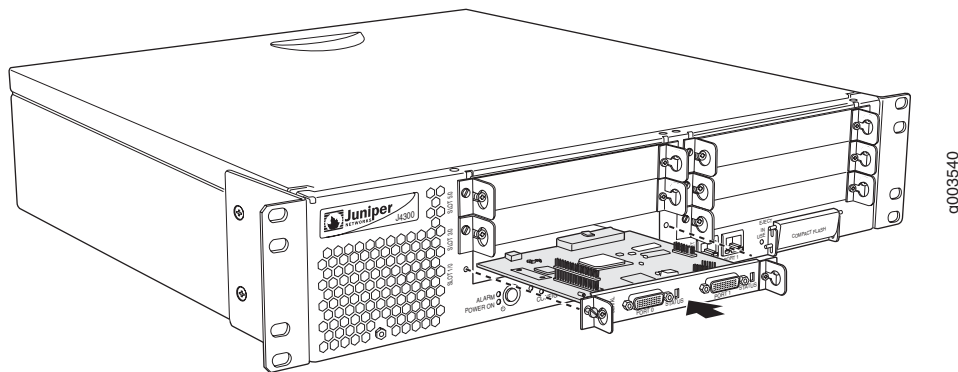


CAUTION: Slide the PIM straight into the slot to avoid damaging the components on the PIM.

4. Tighten the captive screws on each side of the PIM faceplate.
5. Insert the appropriate cables into the cable connectors on the PIM.
6. If necessary, arrange the cables to prevent them from dislodging or developing stress points:
 - Secure the cable so that it is not supporting its own weight as it hangs to the floor.
 - Place excess cable out of the way in a neatly coiled loop.
 - Use fasteners to maintain the shape of cable loops.
7. Press and release the power button to power on the router. Verify that the POWER ON LED lights steadily after you press the power button.
8. Verify that the PIM LEDs light steadily green to confirm that the PIM and its ports are online and operational. For more information about PIM LEDs, see the *J-series Services Router Getting Started Guide*.

You can also verify correct PIM functioning by issuing the `show chassis fpc pic-status` command described in the *JUNOS Protocols, Class of Service, and System Basics Command Reference*.

Figure 2: Installing a PIM



Related Juniper Networks Documentation

Table 1 lists and describes the publications for the J-series Services Routers, the JUNOS CLI, the JUNOScript application programming interface (API), and the JUNOScope network management software.

Table 1: Juniper Networks Technical Documentation

| Title | Description |
|--|---|
| J-series Guides | |
| <i>J-series Services Router Getting Started Guide</i> | Provides an overview, basic instructions, and specifications for J-series Services Routers. The guide explains how to prepare your site for installation, unpack and install the router and its components, install licenses, and establish basic connectivity. |
| <i>J-series Services Router Configuration Guide</i> | Explains how to configure the interfaces on J-series Services Routers for basic IP routing with standard routing protocols. The guide also shows how to configure virtual private networks (VPNs), configure and manage multicast networks, and apply routing techniques such as policies, firewall filters, IP Security (IPSec) tunnels, and service classification for safer, more efficient routing. |
| <i>J-series Services Router Administration Guide</i> | Shows how to manage users and operations, monitor network performance, upgrade software, and diagnose common problems on J-series Services Routers. |
| JUNOS Configuration Guides | |
| <i>JUNOS Feature Guide</i> | Provides a detailed explanation and configuration examples for several of the most complex features in the JUNOS software. |
| <i>JUNOS System Basics Configuration Guide</i> | Provides an overview of the JUNOS software and describes how to install and upgrade the software. This manual also describes how to configure system management functions and how to configure the chassis, including user accounts, passwords, and redundancy. |
| <i>JUNOS Network Interfaces and Class of Service Configuration Guide</i> | Provides an overview of the network interface and class-of-service functions of the JUNOS Internet software and describes how to configure the network interfaces on the router. |
| <i>JUNOS Multicast Protocols Configuration Guide</i> | Provides an overview of multicast concepts and describes how to configure multicast routing protocols. |
| <i>JUNOS Network Management Configuration Guide</i> | Provides an overview of network management concepts and describes how to configure various network management features, such as SNMP and accounting options. |
| <i>JUNOS Policy Framework Configuration Guide</i> | Provides an overview of policy concepts and describes how to configure routing policy, firewall filters, and forwarding options. |
| <i>JUNOS Routing Protocols Configuration Guide</i> | Provides an overview of routing concepts and describes how to configure routing, routing instances, and unicast routing protocols. |
| <i>JUNOS Services Interfaces Configuration Guide</i> | Provides an overview of the services interfaces functions of the JUNOS software and describes how to configure the services interfaces on the router. |
| JUNOS References | |
| <i>JUNOS Network and Services Interfaces Command Reference</i> | Describes the JUNOS software operational mode commands you use to monitor and troubleshoot network and services interfaces on Juniper Networks routers. |

| Title | Description |
|---|---|
| <i>JUNOS Protocols, Class of Service, and System Basics Command Reference</i> | Describes the JUNOS Internet software operational mode commands you use to monitor and troubleshoot most aspects of Juniper Networks routers. |
| <i>JUNOS System Log Messages Reference</i> | Describes how to access and interpret system log messages generated by JUNOS software modules and provides a reference page for each message. |
| JUNOScript API Documentation | |
| <i>JUNOScript API Guide</i> | Describes how to use the JUNOScript application programming interface (API) to monitor and configure Juniper Networks routers. |
| <i>JUNOScript API Configuration Reference</i> | Provides a reference page for the configuration tags in the JUNOScript API. |
| <i>JUNOScript API Operational Reference</i> | Provides a reference page for the operational tags in the JUNOScript API. |
| JUNOS Comprehensive Index and Glossary | |
| <i>JUNOS Comprehensive Index and Glossary</i> | Provides a complete index of all JUNOS Internet software books and the <i>JUNOScript API Guide</i> . Also provides a comprehensive glossary. |
| JUNOScope Software Documentation | |
| <i>JUNOScope Software User Guide</i> | Describes the JUNOScope software graphical user interface (GUI), how to install and administer the software, and how to use the software to manage router configuration files and monitor router operations. |
| Release Notes | |
| <i>J-series Services Router Release Notes</i> | Summarize new features, identify hardware problems, provide information omitted from the manual, and contain upgrade and downgrade instructions. |
| <i>JUNOS Internet Software Release Notes</i> | Provide a summary of new features for a particular software release. Software release notes also contain corrections and updates to published JUNOS and JUNOScript manuals, provide information that might have been omitted from the manuals, and describe upgrade and downgrade procedures. |
| <i>JUNOScope Software Release Notes</i> | Contain corrections and updates to the published JUNOScope manual, provide information that might have been omitted from the manual, and describe upgrade and downgrade procedures. |

Requesting Support

For technical support, open a support case using the Case Manager link at <http://www.juniper.net/support/> or call 1-888-314-JTAC (within the United States) or 1-408-745-9500 (outside the United States).

For documentation issues, fill out the bug report form located at <http://www.juniper.net/techpubs/docbug/docbugreport.html>.

Revision History

13 April 2005 2005—530-013370-01 Revision 1. Updated book cross-references.

4 November 2004—530-011519-01 Revision 1.

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