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JATP400 Appliance Hardware Guide

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The information in this document is current as of the date on the title page.

YEAR 2000 NOTICE

Juniper Networks hardware and software products are Year 2000 compliant. Junos OS has no known time-related limitations through the year 2038. However, the NTP application is known to have some difficulty in the year 2036.

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Table of Contents

About This Guide

Use this guide to install hardware and perform initial software configuration, routine maintenance, and troubleshooting for the Juniper Networks Advanced Threat Prevention 400 (JATP400) appliance. After completing the installation and basic configuration procedures covered in this guide, refer to the JATP Software documentation for information about further software configuration.

RELATED DOCUMENTATION

- How to Set Up Your JATP400 Appliance

1

CHAPTER

Overview

JATP400 System Overview

IN THIS SECTION

JATP400 Appliance Description

IN THIS SECTION

Juniper Networks Advanced Threat Prevention 400 (JATP400) appliance is an advanced threat prevention platform that is designed to identify and prevent targeted attacks across multiple threat vectors. The appliance can be deployed as a Core device, Traffic Collector, Email Collector, Manager of Central Managers (MCM), Secondary Core, or as an All-In-One device.

The JATP400 appliance is a 1-rack-unit (1-U), rack-mountable chassis with hot-swappable dual AC power supplies (or optional dual DC power supplies), four hot-swappable hard disk drives that support RAID, 32-GB memory, two 10-Gigabit Ethernet interfaces, two 10-Gigabit Ethernet SFP+ interfaces, and four 1-Gigabit Ethernet interfaces.

Benefits of the JATP400 Appliance

- **Multivector traffic inspection**—Provides continuous, multistage detection and analysis of Web, e-mail, and lateral spread traffic moving through the network.
- **Multistage threat detection**—Monitors network traffic to identify threats as they progress through the kill chain, detecting phishing, exploits, malware downloads, command and control communications, and internal threats.

- **Multistage threat analysis**—Performs static, payload, machine learning, and behavior analyses, as well as malware reputation analysis, and continuously adapts to the changing threat landscape by leveraging Juniper Networks Global Security Service, a cloud-based service that offers the latest threat detection and mitigation information.
- **Threat analytics**—Offers a holistic view of identity and threat activity gathered from a diverse set of sources such as Active Directory, endpoint antivirus, firewalls, secure Web gateways, intrusion detection systems, and endpoint detection and response tools. The analytics component receives data from these sources, identifies advanced malicious traits, and correlates the events to provide complete visibility into a threat's kill chain.
- **Integration with third-party devices**—The JATP400 appliance supports an open API architecture, which enables it to integrate with several third-party security devices to seamlessly and automatically mitigate threats.

JATP400 Appliance Transceiver Interface

Two 10-Gigabit Ethernet SFP+ ports on the rear panel of the JATP400 appliance support SFP+ transceivers. Table 1 on page 3 lists the details of supported transceiver type.

Table 1: JATP400 Appliance Transceiver Type

Transceiver Type	Card Model	Description
SFP+	UNIV-SFPP-DUAL-SR	Dual Rate 10GBASE-SR/1000BASE-SX
	UNIV-SFPP-DUAL-LR	Dual Rate 10GBASE-LR/1000BASE-LX

JATP400 Field-Replaceable Units

Field-replaceable units (FRUs) are hardware components that can be replaced at the customer site. Hot-swappable FRUs are the components that you can remove and replace without powering off the device or disrupting the functions of the device.

JATP400 appliance supports FRUs: power supply and hard disk drive.

RELATED DOCUMENTATION

JATP400 Chassis

IN THIS SECTION

JATP400 Appliance Front Panel Description

Figure 1 on page 4 shows the front panel components of the JATP400 appliance.

Figure 1: JATP400 Front Panel

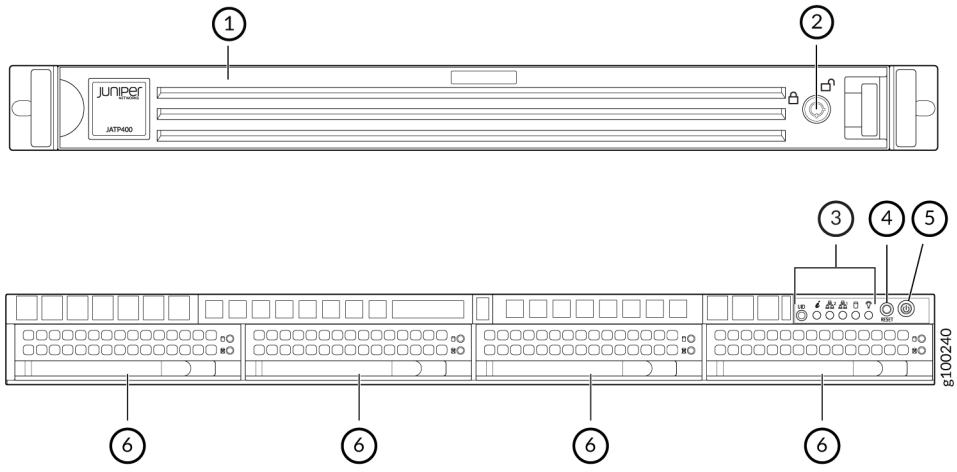

Table 2 on page 5 lists the front panel components of the JATP400 appliance.

Table 2: JATP400 Front Panel Components

Callout	Component	Description
1	Front Bezel	Protects the appliance.
2	Lock	Locks the appliance.
3	Chassis LEDs	Provides the colors and states, and the status they indicate.
4	RESET button	Reboots the appliance.
5	Power button	Powers on or powers off the appliance. Use the main power button to apply or remove power from the power supply to the server. Turning off system power with this button removes the main power but maintains standby power. To perform many maintenance tasks, you must also unplug system before servicing.
6	Hard drive	Four 2-TB hard disk drives.

Figure 2 on page 5 shows the front panel LEDs of the JATP400 appliance.

Figure 2: JATP400 Front Panel LEDs

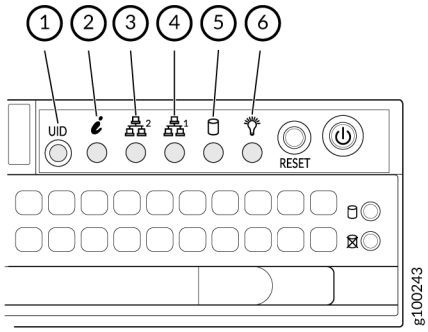

Table 3 on page 6 lists the front panel LEDs of the JATP400 appliance.

Table 3: JATP400 Front Panel LEDs

Callout	LEDs	Description
1	UID	Depressing the UID (unit identifier) button illuminates an LED on both the front and rear of the chassis for easy system location in large stack configurations. The LED will remain on until the button is pushed a second time.
2	Information	• Solid red—Indicates an overheat condition, which might be caused due to cable congestion. **TIP**: Check the routing of the cables if they are obstructing the airflow from the system. • Red (blinking)—Indicates a fan failure. Check for an inoperative fan. • Red (slowly blinking)—Indicates a power failure. That is, the power is received but the power supply is not functioning. Check for a non-operational power supply. • Solid blue —Indicates local User ID (UID) function is activated. Use this function to locate the server in a rack mount environment. • Blue (blinking)—Indicates Remote UID is on. Use this function to identify that the server is used from a remote location.

Table 3: JATP400 Front Panel LEDs *(Continued)*

Callout	LEDs	Description
3	GLAN2	• Flashing—Indicates network activity on LAN port 2. • Steady—Indicates link.
4	GLAN1	• Flashing—Indicates network activity on LAN port 1. • Steady—Indicates link.
5	Hard drive	Indicates activity on a hard drive when flashing.

Table 3: JATP400 Front Panel LEDs *(Continued)*

Callout	LEDs	Description
6	Power	For AC power supply: • Solid green—Indicates that the appliance is receiving power. • Solid amber—Indicates that the power supply is plugged in and turned off, or the system is off but in an abnormal state. For DC power supply: • Solid green—Indicates that the appliance is receiving power. • Solid amber—Indicates that the power supply is plugged in and turned off, or the system is off but in an abnormal state. • Amber (blinking)—Indicates that the system power supply temperature has reached 63° C. **NOTE**: The system powers down automatically when the power supply temperature reaches 70° C and restarts when the power supply temperature goes below 60° C.

Table 4 on page 8 lists the JATP400 hard disk drive port LEDs.

Table 4: JATP400 HDD Port LEDs

LEDs	Description
Activity (top)	• Solid green—Indicates that the SAS drive is installed. • Green (blinking)—Indicates the I/O activity.

Table 4: JATP400 HDD Port LEDs *(Continued)*

LEDs	Description

Status (bottom)	• Solid red—Indicates failed drive for Serial Attached SCSI (SAS), Serial Advanced Technology Attachment (SATA), or Non-volatile memory express (NVMe) with Rapid Storage Technology enterprise (RSTe) support.
	• Red (blinking):
	  • At 1 Hz—Indicates rebuild drive for SAS/SATA with RSTe support.
	  • Two blinks and one stop at 1 Hz—Indicates hot spare for SAS/SATA with RSTe support.
	  • On for five seconds, then off—Indicates power on for SAS/SATA with RSTe support.
	  • At 4 Hz—Indicates identify drive for SAS/SATA with RSTe support.
	• Solid green—Indicates that it is safe to remove NVMe device.
	• Amber (blinking at 1 Hz)—Indicates attention state.
	NOTE: Do not remove NVMe device.

JATP400 Appliance Back Panel Description

Figure 3 on page 10 shows the back panel components of the JATP400 appliance.

Figure 3: JATP400 Back Panel

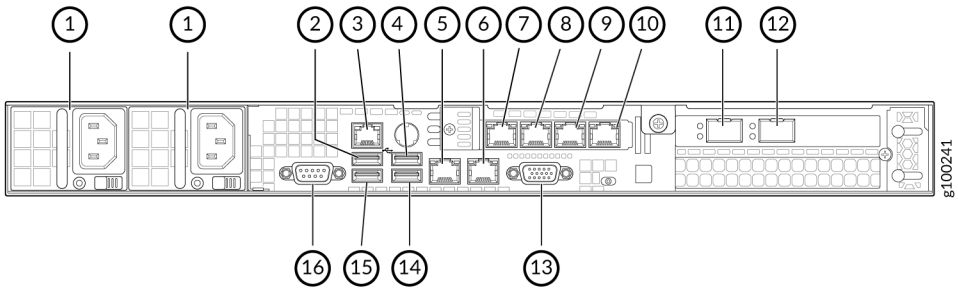

Table 5 on page 10 lists the back panel components of the JATP400 appliance.

Table 5: JATP400 Back Panel Components

Callout	Components	Description
1	Power supply	Provides power to all components.
2	USB port	Port 1 of USB 2.0.
3	Dedicated IPMI LAN port	One RJ-45 dedicated Intelligent Platform Management Interface (IPMI) LAN port.
4	USB port	Port 7 of USB 3.0.
5	GLAN1	10-Gigabit Ethernet LAN port (eth6). **NOTE**: This port is not supported.
6	GLAN2	10-Gigabit Ethernet LAN port (eth7). **NOTE**: This port is not supported.
7	1-Gigabit Ethernet LAN port	RJ-45 port, eth0, management interface.

Table 5: JATP400 Back Panel Components *(Continued)*

Callout	Components	Description
8	1-Gigabit Ethernet LAN port	RJ-45 port, eth4. eth1 when this port is used as 1-Gigabit Ethernet copper port.
9	1-Gigabit Ethernet LAN port	RJ-45 port, eth2, alternate exhaust interface. Use the alternate exhaust interface for external connectivity in threat detection. **NOTE**: You can configure alternate exhaust interface only for Core or All-In-One appliance.
10	1-Gigabit Ethernet LAN port	RJ-45 port, eth3.
11	10-Gigabit Ethernet SFP+ port	eth5. **NOTE**: You can use this port as either Fiber or Copper port based on type of SFP used.
12	10-Gigabit Ethernet SFP+ port	eth1. By default, this port is a 10-Gigabit Ethernet fiber monitoring port. **NOTE**: You can change this port to 1-Gigabit Ethernet copper port for traffic monitoring through the following command: `# set traffic-monitoring-ifc 1gb_ifc` After you reboot the appliance, the eth4 interface becomes the eth1 interface and this port becomes eth4.
13	VGA port	One VGA port. Use this connection for VGA display.

Table 5: JATP400 Back Panel Components *(Continued)*

Callout	Components	Description
14	USB port	Port 8 of USB 3.0.
15	USB port	Port 2 of USB 2.0.
16	COM port	One DB-9 COM port. **NOTE**: This port is not supported.

Figure 4 on page 12 shows the back panel 10-Gigabit Ethernet port LEDs of the JATP400 appliance.

Figure 4: JATP400 10-Gigabit Ethernet Port LEDs

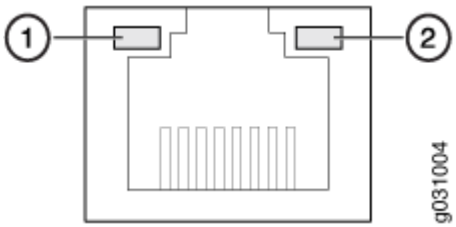

Table 6 on page 12 lists the JATP400 10-Gigabit Ethernet port LEDs.

Table 6: JATP400 10-Gigabit Ethernet Port LEDs

Callout	LEDs	Description
1	Link	• Green—Indicates that the speed of the connection is 10 Gbps. • Amber—Indicates that the speed of the connection is 1 Gbps.
2	Activity	• Green (blinking)—Indicates that there is activity on this port. • Off—Indicates no traffic.

Figure 5 on page 13 shows the back panel 1-Gigabit Ethernet port LEDs of the JATP400 appliance.

Figure 5: JATP400 1-Gigabit Ethernet Port LEDs

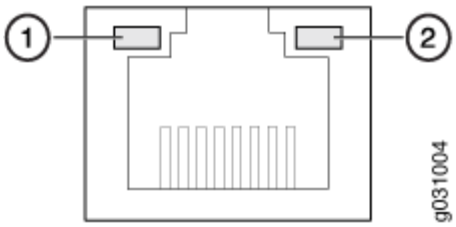

Table 7 on page 13 lists the JATP400 1-Gigabit Ethernet port LEDs.

Table 7: JATP400 1-Gigabit Ethernet Port LEDs

Callout	LEDs	Description
1	Activity	• Yellow (blinking)—Indicates that there is activity on this port. • Off—Indicates no activity.
2	Link	• Solid amber—Indicates that the speed of the connection is 1000 Mbps. • Solid green—Indicates that the speed of the connection is 100 Mbps.

Table 8 on page 13 lists the JATP400 IPMI port LEDs.

Table 8: JATP400 IPMI Port LEDs

LEDs	Description
Link (left)	• Solid green—Indicates that the speed of the connection is 100 Mbps. • Solid amber—Indicates that the speed of the connection is 1 Gbps.
Activity (right)	Yellow (blinking)—Indicates link activity.

Table 9 on page 14 lists the JATP400 SFP+ port LEDs.

Table 9: JATP400 SFP+ Port LEDs

LEDs	Description
Link (top)	• Green—Indicates that the speed of the connection is 10 Gb. • Yellow—Indicates that the speed of the connection is 1 Gb.
Activity (bottom)	Green (blinking)—Indicates link activity.

RELATED DOCUMENTATION

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JATP400 Site Guidelines and Requirements | 16

JATP400 Installation Overview | 24

CHAPTER 2

Site Planning, Preparation, and Specifications

Overview of Preparing the Site for the JATP400

To prepare a site for JATP400 appliance installation:

1. Verify that environmental factors such as temperature and humidity do not exceed JATP400 tolerances.
2. Verify that the site and installation plan meets all safety guidelines and requirements.
3. Locate sites for connection of system grounding.
4. Calculate the power consumption and requirements.
5. Plan rack location, including required space clearances.
6. Verify that the plan for power installation meets all electrical safety guidelines.
7. Verify that your rack meets the minimum requirements for the installation of the JATP400 appliance.
8. Plan to secure the rack to the floor and building structure.
9. Plan the cable routing and management.

RELATED DOCUMENTATION

JATP400 Site Guidelines and Requirements | 16

Connecting the JATP400 to Power | 33

JATP400 Installation Overview | 24

JATP400 Site Guidelines and Requirements

IN THIS SECTION

General Site Installation Guidelines for the JATP400 Appliance

The following precautions can help you plan an acceptable operating environment for your JATP400 appliance and avoid equipment failures caused by environmental factors:

- For the cooling system to function properly, the airflow around the chassis must be unrestricted. Allow sufficient clearance between the front and back of the chassis and adjacent equipment. Ensure that there is adequate circulation in the installation location.
- Follow the electrostatic discharge (ESD) procedures to avoid damaging the equipment. Static discharge can cause either components to fail, completely or intermittently over time.

NOTE: Install the appliance only in restricted areas, such as dedicated equipment rooms and equipment closets, in accordance with Articles 110–16, 110–17, and 110–18 of the National Electrical Code, ANSI/NFPA 70.

JATP400 Appliance Physical Specifications

Table 10 on page 17 lists the hardware specifications for the JATP400 appliance.

Table 10: JATP400 Appliance Physical Specifications

Specification	JATP400
Dimensions (H x W x D)	1.7 in. x 17.2 in. x 25.6 in. (43 x 437 x 650 mm)
Weight	36 lb (16.33 kg)
Fans	Five 40 x 40 x 56 mm 13K - 11K RPM, counter-rotating fans The air flow direction is front to rear.

Table 10: JATP400 Appliance Physical Specifications *(Continued)*

Specification	JATP400
Panel Display	• UID button • LEDs: Information, Network activity, Hard drive activity, and Power • Reset button • Power button
Rack mountable	Four-post
Ports	• Two RJ-45 10-Gigabit Ethernet LAN ports • Two 10-Gigabit Ethernet SFP+ LAN ports • Four RJ-45 1-Gigabit Ethernet LAN ports • One RJ-45 Dedicated IPMI LAN port • Two USB 2.0 ports and 2 USB 3.0 ports (rear) • One VGA port • One DB-9 COM port **NOTE**: This port is not supported.
Power	500 W AC-DC redundant power supply 650 W DC -DC redundant power supply
Environmental/Compliance specifications	
RoHS	RoHS Compliant
Operating temperature	32° F (0° C) to 104° F (40° C)
Non-operating temperature	-40° F (-40° C) to 158° F (70° C)

Table 10: JATP400 Appliance Physical Specifications *(Continued)*

Specification	JATP400
Operating relative humidity	8% - 90% noncondensing
Non-operating relative humidity	5% - 95% noncondensing
Operating altitude	6500 ft max.
Maximum thermal output	1002.2 BTU/hour

JATP400 Appliance Rack and Clearance Requirements

You can install the JATP400 appliance in a four-post rack.

Table 11 on page 19 provides the requirements for rack size, clearance, airflow, spacing of mounting brackets and flange holes, and connecting to the building structure.

Table 11: Rack and Clearance Requirements for the JATP400 Appliance

Rack Requirement	Specifications
Size	A 19-in. (48.3 cm) rack as defined in Cabinets, Racks, Panels, and Associated Equipment (document number EIA-310-D) published by the Electronics Industry Association (http://www.eia.org).
Clearance	• The outer edges of the mounting brackets extend the width of chassis on both sides to 19-in. (48.3 cm). • The front of the chassis extends approximately 1.5-in. (3.8 cm) beyond the mounting ears.

Table 11: Rack and Clearance Requirements for the JATP400 Appliance *(Continued)*

Rack Requirement	Specifications
Spacing of mounting bracket and flange holes	• The appliance can be mounted in any rack that provides holes or hole patterns spaced at 1-U [1.75-in. (4.45 cm)] increments. • The mounting brackets and front-mount flanges used to attach the chassis to a rack are designed to fasten to holes spaced at rack distances of 1-U (1.75-in.). • The mounting holes in the mounting brackets provided with the appliance are spaced 1.25-in. (3.2 cm) apart (top and bottom mounting hole).
Connecting to the building structure	Always secure the rack in which you are installing the JATP400 appliance to the structure of the building. If your geographical area is subject to earthquakes, bolt the rack to the floor. For maximum stability, also secure the rack to ceiling brackets.

Additional Hardware Requirements

We recommend that you install JATP on your LAN to ensure that it can communicate with your following applicable resources:

- Authentication servers
- DNS servers
- Internal webservers through HTTP/HTTPS
- External websites through HTTP/HTTPS (optional)
- The Juniper Networks update server through HTTPS
- network file system (NFS) file servers (optional)
- client/server applications (optional)

Table 12 on page 21 lists port information for the JATP400 appliance.

Table 12: Required Ports

Direction	Default Port	TCP/UDP	Description	LAN	Internet	Depends on Configuration
In	22	TCP	SSH command-line management	Yes	No	No
	443	TCP	Secure HTTP/HTTPS. Used for connecting Web interface and APIs	Yes	No	No
Out	22	TCP	SSH connection to new managed device	Yes	Yes	No
	53	TCP, UDP	DNS lookups	Yes	No	No
	443	TCP	System security updates from Juniper Networks	Yes	Yes	Yes
	123	UDP	NTP time synchronization	Yes	Yes	Yes
	514	UDP	SIEM/Syslog CEF server	Yes	No	No

Table 12: Required Ports *(Continued)*

Direction	Default Port	TCP/UDP	Description	LAN	Internet	Depends on Configuration
	830	TCP	Juniper SRX Firewall **NOTE**: For Mitigation through SRX Firewall	Yes	Yes	Yes

RELATED DOCUMENTATION

- Overview of Preparing the Site for the JATP400 | **16**
- JATP400 Installation Overview | **24**

CHAPTER 3

Initial Installation and Configuration

JATP400 Installation Overview

IN THIS SECTION

Overview of Installing the JATP400 Appliance in a Rack

You must proceed through the installation process in the following order:

- Review all safety guidelines and warnings for the JATP400 appliance. See, "General Safety Guidelines and Warnings" on page 66.
- Unpack the JATP400 and verify the parts received. See, "Unpacking the JATP400" on page 25.
- Install the JATP400 appliance in a 19-in. four-post rack. See, "Installing the JATP400 in a Rack" on page 28.
- Ground, connect the power, and power on the JATP400 appliance. See, "Connecting the JATP400 to Power" on page 33.
- Connect the JATP400 to external devices. See, "Connecting the JATP400 Appliance to a Management Device" on page 36.

Tools and Parts Required for Installing the JATP400 Appliance

Table 13 on page 25 lists the tools and parts required for installing and maintaining the JATP400 appliance.

Table 13: Required Tools and Parts for Installing the JATP400 Appliance

Task	Tools and Parts
Installing the JATP400 Appliance	• Phillips (+) screwdriver, number 1 • Phillips (+) screwdriver, number 3 • Tie wrap
Connecting the JATP400 Appliance	ESD grounding wrist strap
Grounding the JATP400 Appliance	Phillips (+) screwdriver, number 1
Packing and unpacking the JATP400 Appliance	• Electrostatic bag or antistatic mat • ESD grounding wrist strap

Unpacking the JATP400

IN THIS SECTION

Overview of Unpacking the JATP400

To unpack the JATP400:

1. Gather the tools required to unpack the JATP400.

2. Remove the JATP400 appliance and all items from the shipping container. See, "Unpacking the JATP400" on page 26.
3. Verify that all parts have been received. See, "Verifying the JATP400 Parts Received" on page 26.

Unpacking the JATP400

Gather the tools required to unpack the JATP400 appliance:

- Phillips (+) screwdriver, number 1
- Phillips (+) screwdriver, number 3

TIP: Save the shipping materials in case you need to move or ship the device later.

NOTE: Do not unpack the device until you are ready to begin installation.

To unpack the JATP400:

1. Move the cardboard carton to a staging area as close to the installation site as possible, where you have enough room to remove the components from the chassis.
2. Position the cardboard carton with the arrows pointing up.
3. Carefully open the top of the cardboard carton.
4. Remove the foam covering the top of the JATP400 appliance.
5. Remove the accessory box.
6. Verify the parts received against the lists in "Verifying the JATP400 Parts Received" on page 26.

Verifying the JATP400 Parts Received

The JATP400 appliance shipment package contains a packing list. Check the parts in the shipment against the items on the packing list. The packing list specifies the part numbers and carries a brief description of each part in your order.

If any part on the packing list is missing or damaged, contact your customer service representative or contact Juniper customer care from within the U.S. or Canada by telephone at 1-888-314-5822. For

international-dial or direct-dial options in countries without toll-free numbers, see https://www.juniper.net/support/requesting-support.html.

Table 14 on page 27 lists the JATP400 parts received through shipment.

Table 14: Parts List for a JATP400 Appliance

Part	Quantity
JATP400 appliance	1
End User License Agreement	1
Product registration information	1
Documentation roadmap card	1
Front bezel	1
Ethernet cable, 7 feet	2
DB-9 to RJ-45 adapter	1
Rail kit	1 set
Screws bag	1
Rail adapters	1
AC power cord	2

RELATED DOCUMENTATION

- JATP400 Site Guidelines and Requirements | 16
- JATP400 Installation Overview | 24
- Installing the JATP400 in a Rack | 28

Installing the JATP400 in a Rack

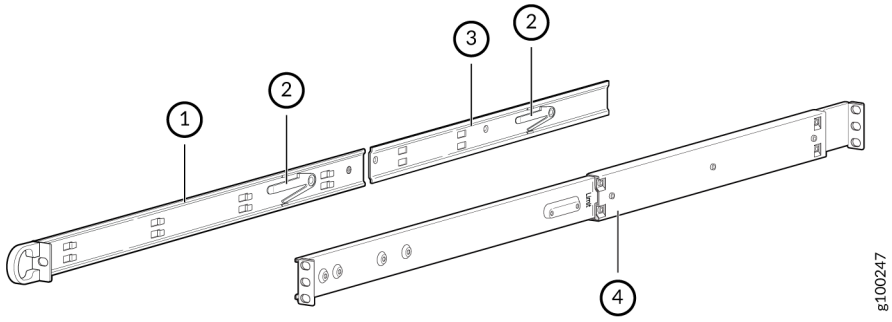
IN THIS SECTION

Installing the JATP400 Appliance

Place the shipping container on a flat surface and carefully remove the hardware components.

The chassis package includes a pair of rack rail assemblies and mounting screws required to install the chassis in a rack. Each rail assembly consists of an inner, a middle, and an outer rail, as shown in Figure 6 on page 28.

Figure 6: Identifying the Inner, Middle, and Outer Rails



1– Inner rail	3– Middle rail
2– Locking tab	4– Outer rail

To install the JATP400 appliance:

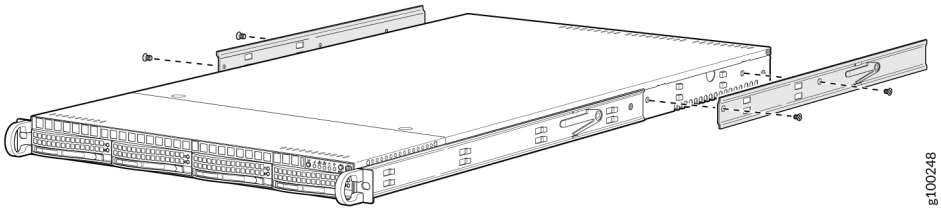
1. To mount the JATP400 appliance in a four-post rack:
   a. Install the inner rail extensions.
      i. Pull the inner rail out of the outer rail until it is fully extended as illustrated. Press the locking tab down to release the inner rail, as shown in Figure 6 on page 28. Each inner rail has a locking tab that secures the chassis when completely extended from the rack.

ii. Place the inner rails against the sides of the chassis, aligning the chassis hooks with the holes in the inner rails, as shown in Figure 7 on page 29.

iii. Slide the inner rail toward the front of the chassis until the inner rail clicks into the locked position.

iv. Secure the inner rails to the chassis with the screws provided.

Figure 7: Installing the Inner Rails



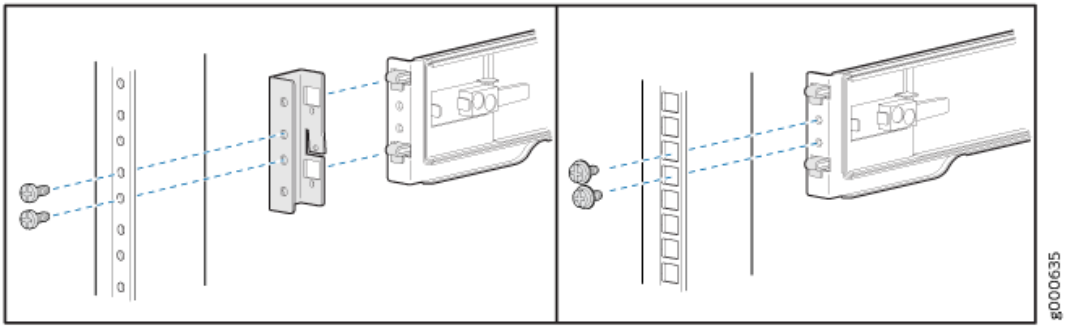
NOTE: Each inner rail of the JATP400 appliance has a locking tab. The locking tabs secure the chassis when either it is installed or completely extended from the rack.

b. Install the outer rails:

i. Press the locking tabs upward at the rear of the middle rails, and slide the middle rails into the outer rails.

ii. Insert the front hooks of the outer rails into the front slots of the rack, and use the M5 screws to secure the front of the outer rails to the rack, as shown in Figure 8 on page 29.

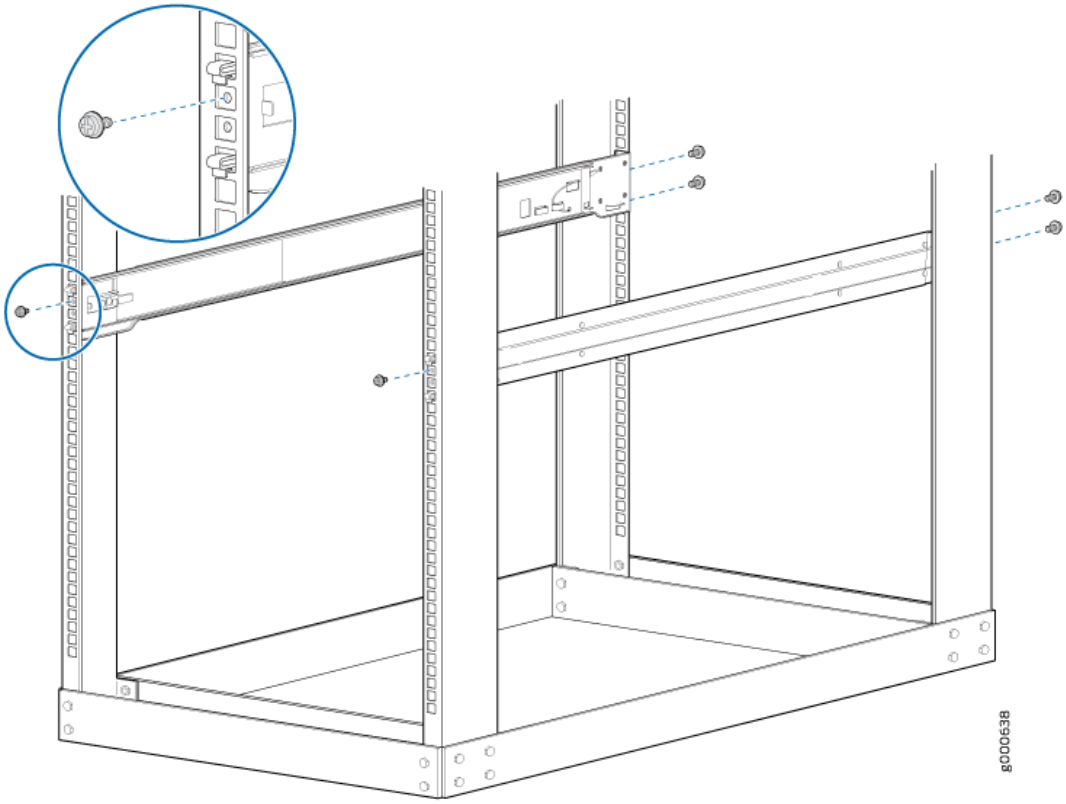
Figure 8: Inserting the Front Mounting Rails



iii. Extend the outer rails, and adjust the length to fit within the posts of the rack.

iv. Insert the rear hooks of the outer rails into the rear slots of the rack, and use the screws to secure the rear of the outer rails to the rack, as shown in Figure 9 on page 30.

Figure 9: Inserting the Front and Rear Mounting Rails

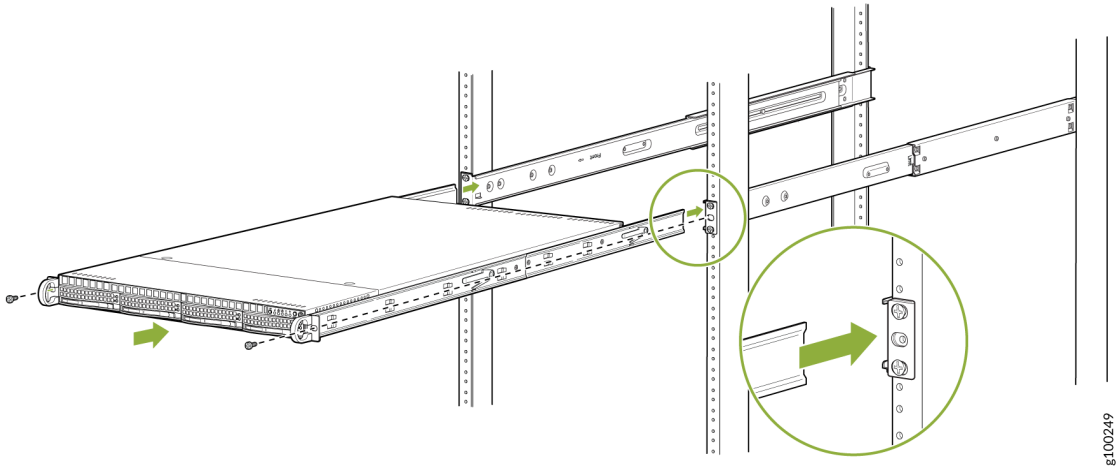


c. Slide the middle rails away from the rear of the outer rails.

d. Position the ball-bearing shuttle at the front of the middle rails.

e. Align the chassis inner rails with the ball-bearing shuttle, as shown in Figure 10 on page 31.

Figure 10: Aligning the Chassis Rails with the Ball-Bearing Shuttle

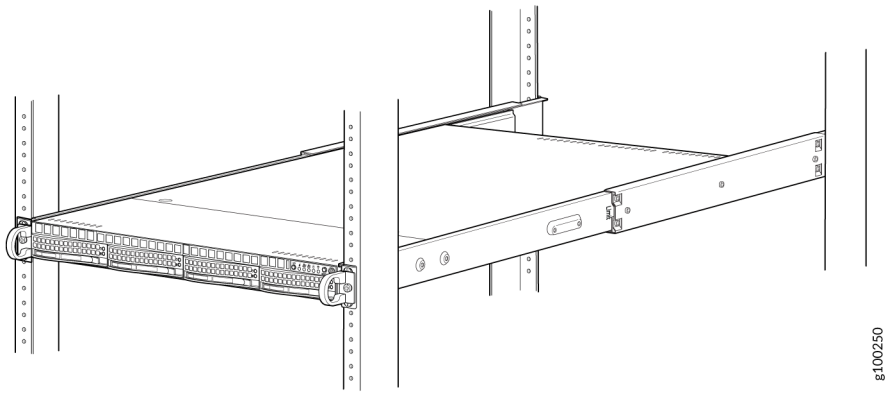


f. Apply even pressure on both sides; slide the chassis inner rails into the middle rails until the locking tab of the inner rail clicks into the front of the middle rail, locking the chassis into the fully extended position.

g. Depress the locking tabs on both sides simultaneously, and slide the chassis into the rear of the rack.

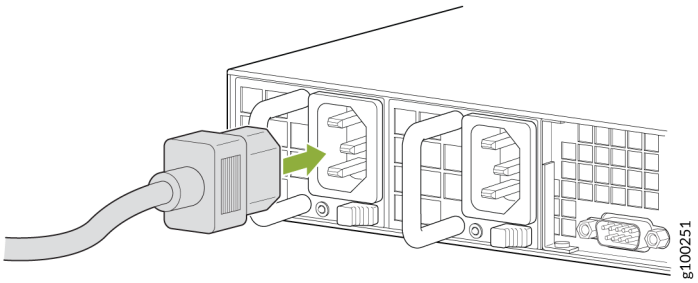
h. Use the screws to secure the chassis handles to the rack. See Figure 11 on page 31 for the installed chassis in a four-post rack.

Figure 11: Installing the Chassis in a Four-Post Rack



2. Plug each of the power cords into each of the AC receptacles on the rear panel. See Figure 12 on page 32.

Figure 12: Connecting the AC Power Cord



3. Plug the other end of the power cords into the wall socket.

> **NOTE**: Plug each power cord into a separate power circuit to ensure that the device continues to receive power if one of the power circuits fails.

4. Plug the Ethernet cable into the Ethernet port on the back panel.

   When you turn on the power, the internal port uses two LEDs to indicate the LAN connection status, as described in "JATP400 Chassis" on page 4.

5. Connect the monitor to VGA port and the keyboard to USB port on the back panel. For more information, see "Connecting the JATP400 Appliance to a Management Device" on page 36.

6. Push the power button on the front panel.

   The power LED on the chassis turns solid green.

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Connecting the JATP400 to Power | 33

Connecting the JATP400 to Power

IN THIS SECTION

Connecting the JATP400 Appliance to Earth Ground

To meet safety and electromagnetic interference (EMI) requirements and to ensure proper operation, you must connect the device chassis to earth ground, if required by your site guidelines or installation.

Grounding for the JATP400 appliance is provided through the power supply ground. Ensure that you connect the AC power supply module in the appliance to a grounded AC power outlet by using an AC power cord (with the grounding pin) appropriate for your geographical location.

Connecting AC Power Source to the JATP400 Appliance

Before you connect AC power to the JATP400 appliance:

- Ensure that you have taken the necessary precautions to prevent electrostatic discharge (ESD) damage.
- Ensure that you have connected the JATP400 appliance chassis to earth ground, if required by your site guidelines or installation.

> ⚠ **CAUTION**: For installations that require a separate grounding conductor to the chassis, have a licensed electrician complete this connection before you connect the appliance to power. For instructions on connecting earth ground, see "Connecting the JATP400 Appliance to Earth Ground" on page 33.

Required tools and parts:

- ESD grounding strap.
- Power cord or cords appropriate for your geographical location.

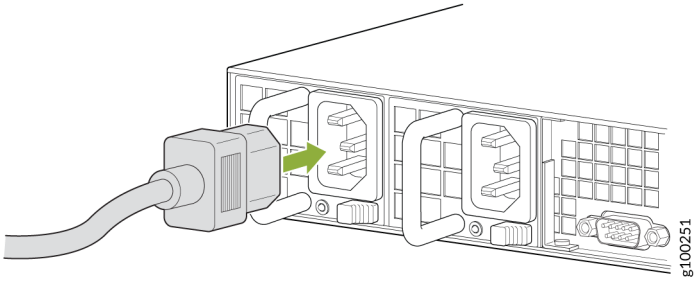
> **CAUTION**: Before you connect power to the JATP400 appliance, ensure both power supply ground terminals are grounded to meet the safety requirements and to ensure proper operation.

To connect AC power to a JATP400 appliance:

1. To prevent damage to the equipment caused by static discharge, attach one end of an ESD strap to an ESD point and fasten the other end around your bare wrist.
2. Ensure that the power supplies are fully inserted in the chassis and the latches are secure.
3. Locate the power cord or cords shipped with the JATP400 appliance.
4. Plug the power cord into the AC receptacle on the rear panel as shown in Figure 13 on page 34.

   If your appliance contains two power supplies, plug each of the power cords into each of the AC receptacles.

Figure 13: Connecting the AC Power Cord



> **NOTE**: Grounding for the appliances is provided through the power supply ground terminal. Ensure that you connect the AC power supply module in the appliance to a grounded AC power outlet by using an AC power cord (with the grounding pin) appropriate for your geographical location.

5. Plug the other end of the power cord into a wall socket.
6. Press the Power button on the front panel.
7. Verify that the status LEDs of the power supply is lit solid green.

Connecting DC Power to the JATP400 Appliance

Before connecting your JATP400 appliance to a DC power source:

- Ensure that you have taken the necessary precautions to prevent ESD damage.
- Ensure that you have connected the JATP400 appliance chassis to earth ground, if required by your site guidelines or installation.

> **CAUTION**: For installations that require a separate grounding conductor to the chassis, have a licensed electrician complete this connection before you connect the appliance to power. For instructions on connecting earth ground, see "Connecting the JATP400 Appliance to Earth Ground" on page 33.

Required tools and parts:

- DC power source cables (12-14 AWG) with ends of the wire stripped ~12 mm and twisted
- Phillips (+) screwdriver, number 1

> **CAUTION**: Before you connect power to the JATP400 appliance, ensure it is grounded in one of the below configurations to meet the safety requirements and to ensure proper operation:
>
> - Both power supply ground terminals
> - One or both of the chassis ground terminal(s) located to the left of the power supply modules
> - Both power supply ground terminals and one or both chassis ground terminals

You connect a DC power source to the JATP400 appliance by attaching power cables from the external DC power sources to the terminal studs on the DC power feed faceplates.

> **WARNING**: DC-powered JATP appliances are intended for installation only in restricted access locations.

> **WARNING**: Before you perform the following procedure, ensure that power is removed from the DC circuit. To ensure that all power is off, locate the circuit breaker on the

panel board that services the DC circuit, switch the circuit breaker to the OFF position, and tape the switch handle of the circuit breaker in the OFF position.

To connect the DC source power to the JATP400 appliance:

1. Ensure that the input circuit breaker is open so that the voltage across the DC power source cable leads is 0 V, and so that the cable leads will not become active while you are connecting DC power.
2. Connect the black wire to the -48 V terminal block and red wire to the RTN terminal block on the back panel of the JATP400 appliance.
3. Use the terminal screws to secure the power source cables to the power feed on the JATP400 appliance.
4. Attach the plastic safety cover.
5. Close the input circuit breaker.

   The device powers on as soon as power is provided to the power supply.

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Connecting the JATP400 Appliance to a Management Device

You can connect external devices to the JATP400 appliance using the ports on the back panel.

To connect a keyboard and monitor to the JATP400 appliance:

1. Connect the end of the keyboard cable to any of the USB ports on the back panel of the appliance.
2. Connect the end of the video monitor cable to the VGA port on the back panel of the appliance.

RELATED DOCUMENTATION

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Performing the Initial Software Configuration for the JATP400

IN THIS SECTION

Selecting the Form Factor

To select a form factor:

1. At the console prompt, log in to JATP with the following default credentials: username *admin* and the password *1JATP234*.

   NOTE: The username is case sensitive.

2. Enter a new password to change the default password.

   NOTE: The password must be at least eight characters long.

3. Press **Enter**.

   The End User License Agreement (EULA) appears.

4. Read the information and press the Spacebar to advance each window until you have reached the end of the agreement.

5. Type **Yes** to accept the agreement, and then press **Enter**.
6. Enter a new CLI admin password to change the default password and then press **Enter**.

   NOTE: The password must be at least eight characters long.

7. Reenter the new password and then press **Enter**.

   Juniper Networks Advanced Threat Prevention window appears. See Figure 14 on page 38.

   NOTE: By default, the JATP400 is installed as an All-In-One appliance.

Figure 14: Juniper Networks Advanced Threat Prevention Window

```
*********************************************************************
*      Juniper Networks Advanced Threat Prevention Appliance        *
*                                                                   *
*********************************************************************


****** Current Appliance form factor is All In One ******
        1. Core/Central Manager
        2. Traffic Collector
        3. Email Collector
        4. Return current form factor i.e All-In-One

Do you want to change the appliance form factor from an All-In-One to any of the above form factors (Yes/No)? Yes
Enter the number (1-2-3-4) to choose the desired form factor: 2
Are you sure you want to change the form factor to Traffic Collector (Yes/No)? Yes
****** Restarting services ******
****** Successfully changed the appliance form factor ******
Do you want to configure the system by using the configuration wizard (Yes/No)?
```

8. Type **Yes** if you want to change the appliance form factor.

   NOTE: If you type **No**, then:

   a. Type **Yes** to confirm that you do not want to change the appliance form factor.

   b. Proceed to Step 11.

9. Enter a number from 1-4 to choose your desired form factor. For example, enter **2** to change the All-In-One to Traffic Collector form factor.
10. Type **Yes** to reconfirm to change the current form factor of the appliance.

    Services are restarted and a successful confirmation message displays about the change of the form factor.
11. Type **Yes** to configure the system by using the configuration wizard.

Configuring the IP Address and Domain Name Servers

To configure the JATP network settings, enter the values for the following parameters:

> **NOTE**: Use the up or down arrow keys to navigate the fields.

1. Enter the IP address of the management interface (eth0).
2. Enter the network mask address for the eth0 interface.
3. Enter the default gateway for the eth0 interface.
4. Enter the primary DNS server for the eth0 interface.
5. (Optional) Type **Yes** and enter the secondary DNS server for the eth0 interface.
6. (Optional) Type **Yes** and enter the search domain for the eth0 interface. For example, example.com.

   > **NOTE**: Provide a space to enter multiple search domains.

7. Type **Yes** and press **Enter** to restart the management (eth0) interface.

   > **NOTE**: The network interface restart can take up to 60 seconds or more.

Configuring the Device Host Name

To configure the device host name:

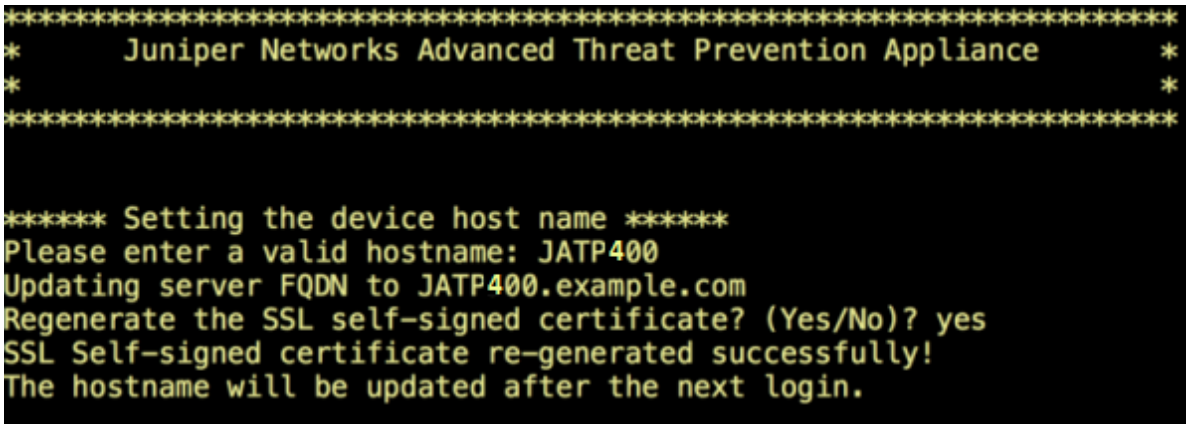
1. Enter a valid hostname. For example, JATP400.

   > **NOTE**: Enter a unique name for the host and do not include the domain.

   Updates server to JATP400.example.com.

2. Type **Yes** to create a new SSL certificate for the JATP Appliance Server Web UI. See Figure 15 on page 40.

Figure 15: Setting Device Host Name



NOTE: If you decline the self-signed certificate by entering **No**, the JATP400 appliance will continue to use the existing certificates. These certificates might contain an incorrect hostname or fully qualified domain name (FQDN). To resolve this issue on the Web UI, regenerate a new self-signed SSL certificate or upload your private key and certificate. For more information on the certificates, see the *Managing Certificates* section in the *Operator's Guide*.

SSL self-signed certificate is regenerated successfully and the hostname will be updated after the next login.

Configuring the Alternate Exhaust Interface

To configure the alternate exhaust interface:

(Optional) Type **No** to not to use the alternate exhaust interface for the analysis engine exhaust traffic. Alternate exhaust interface is used for external connectivity in threat detection.

NOTE: You can configure alternate exhaust interface only for Core or All-In-One appliance.

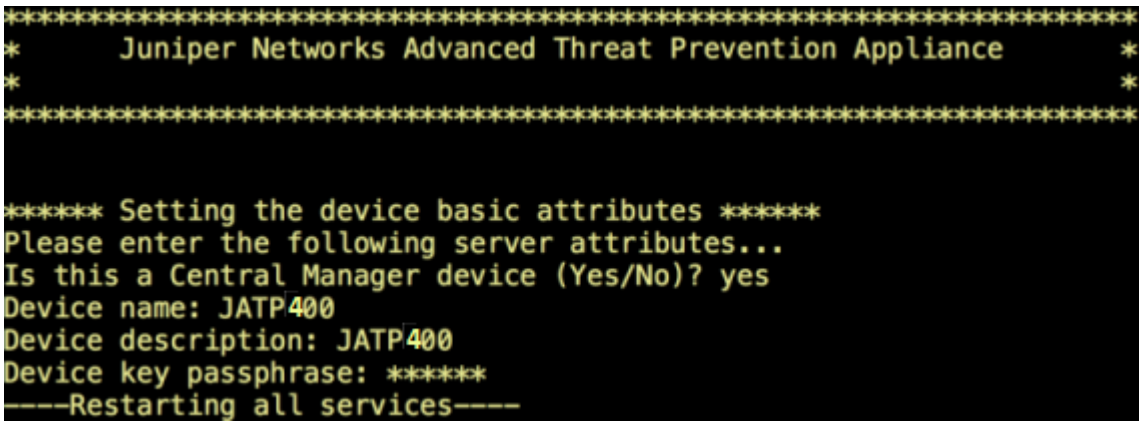
Configuring the Device Basic Attributes

To configure basic server attributes:

1. Type **Yes** if the device is a Core, an All-In-One, or a Manager of Central Managers (MCM) system. See Figure 16 on page 41.

> **NOTE**: If your device is a Traffic Collector, a Secondary Core, or an Email Collector, type **No** and enter the Core or All-In-One IP address.

Figure 16: Setting Device Basic Attributes



2. Enter the device name.
3. Enter the device description.
4. Enter the device key passphrase.

> **NOTE**: You must enclose the special characters white space and \ in double quotation marks.

5. Press **Enter** to complete the installation.

   All services are restarted. You are now ready to access JATP.
6. Type **exit** and press **Enter**.

Accessing the JATP Interface

IN THIS SECTION

Purpose

To access a Juniper Advanced Threat Prevention (JATP) interface:

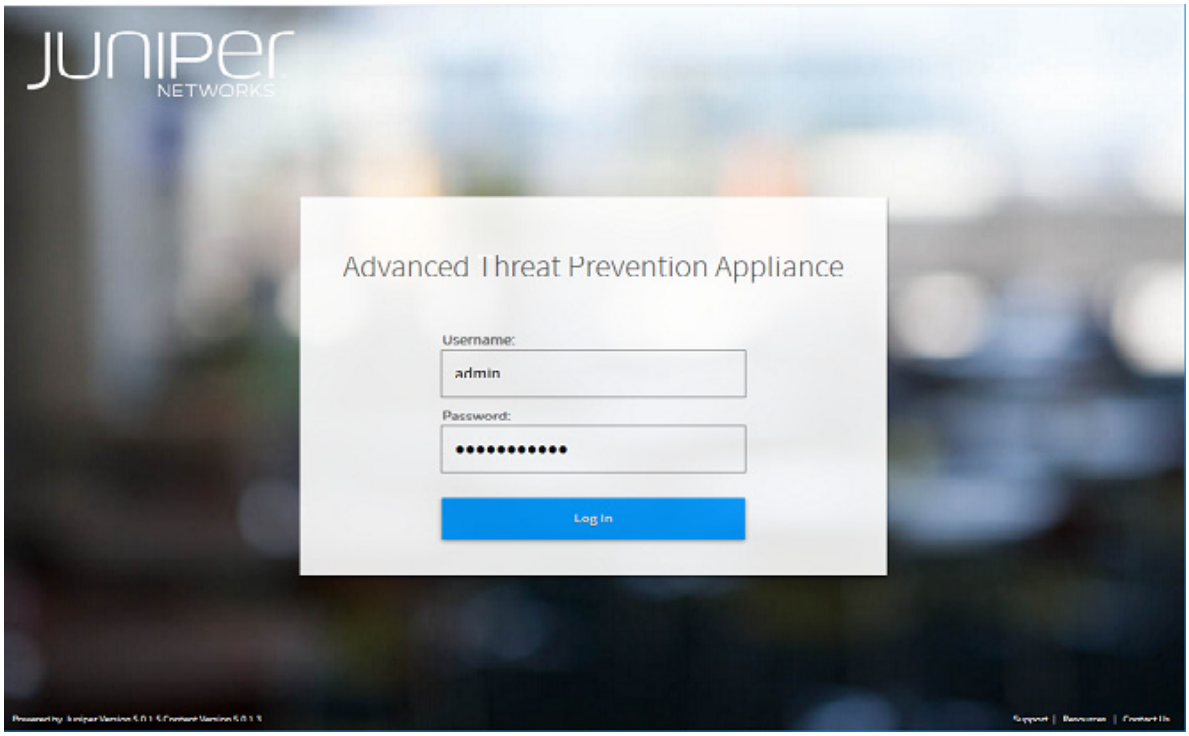
Action

1. Open your Web browser.
2. Log in to your JATP appliance: **https:// *<IP Address>***

   Where *<IP Address>* is the IP address of the JATP appliance.
3. Enter the default username **admin** and the default password **juniper**. See Figure 17 on page 43.

NOTE: Ensure to change the default password after the login. The password must be at least eight characters long.

Figure 17: Advanced Threat Prevention Appliance Login Screen



4. Click **Log In**.

   The JATP interface appears.

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Configuring IPMI

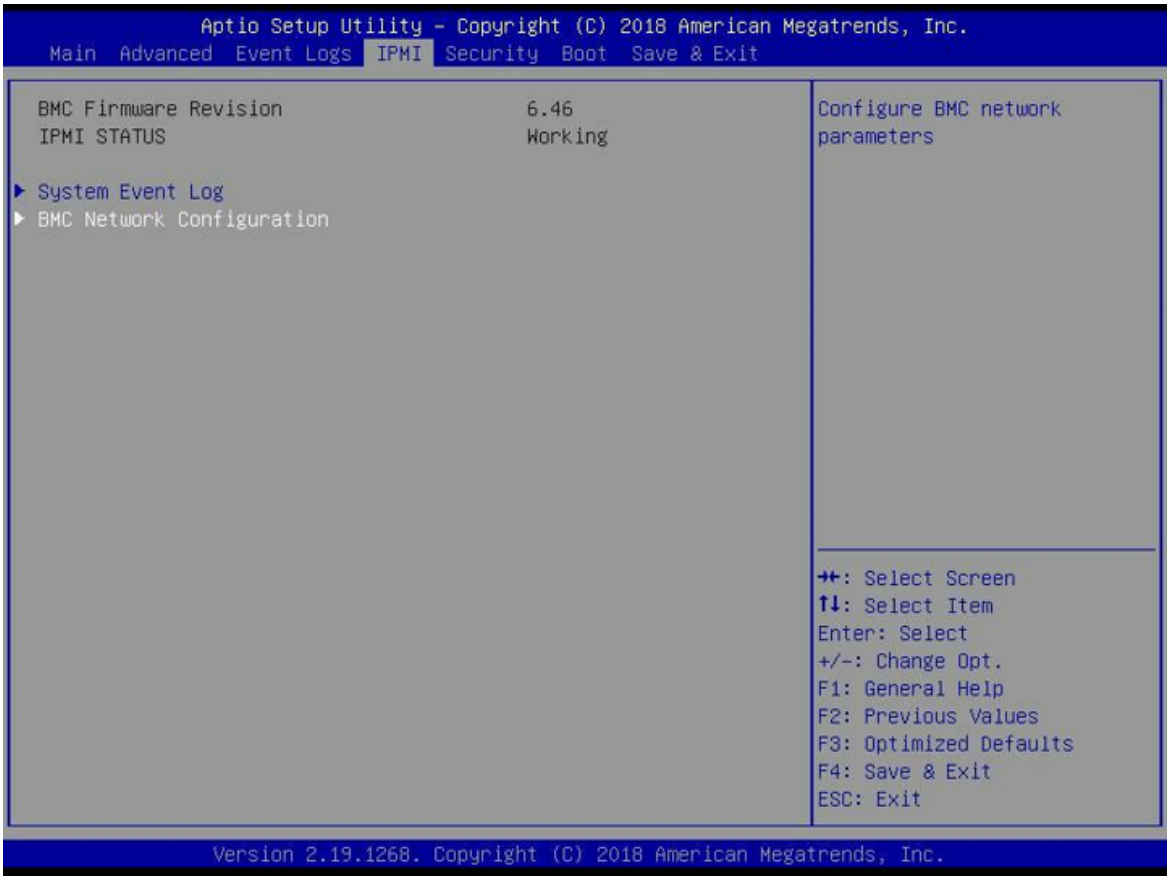
Intelligent Platform Management Interface (IPMI) is a message-based hardware management interface that enables remote monitoring, management, and recovery capabilities, regardless of the status of the server. It defines a set of interfaces that are common to computer hardware and firmware that you can use to monitor system health and manage the system.

IPMI operates independently of the operating system (OS) and allows you to manage a system remotely even in the absence of the OS or the system management software, or even if the monitored system is not powered on. IPMI can also function when the OS has started.

To configure IPMI:

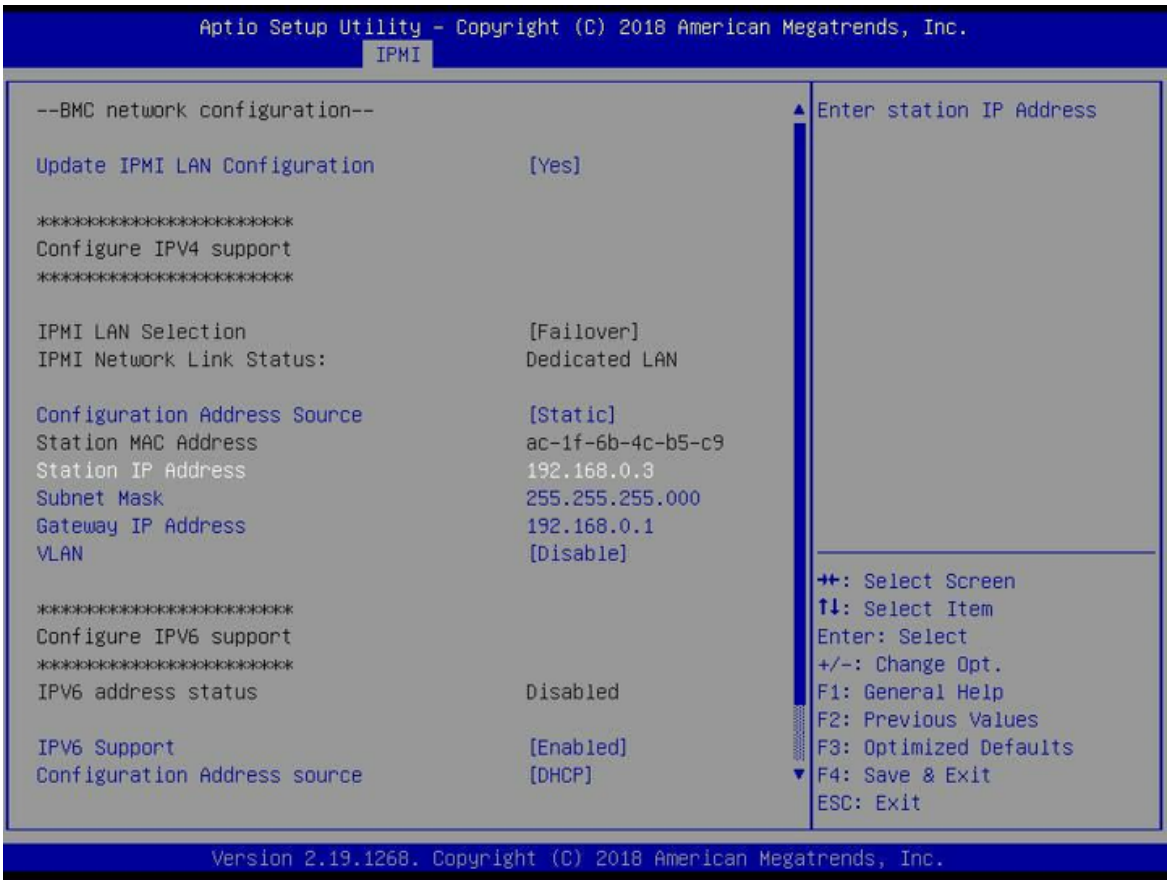
1. During the system bootup, press Delete to enter the BIOS.
2. To navigate in the BIOS, use your arrow keys and press Enter.
3. Select **IPMI** > **BMC Network Configuration**. See Figure 18 on page 44.

Figure 18: BMC Network Configuration



4. Select **Yes** for Update IPMI LAN Configuration and press Enter. See Figure 19 on page 45.

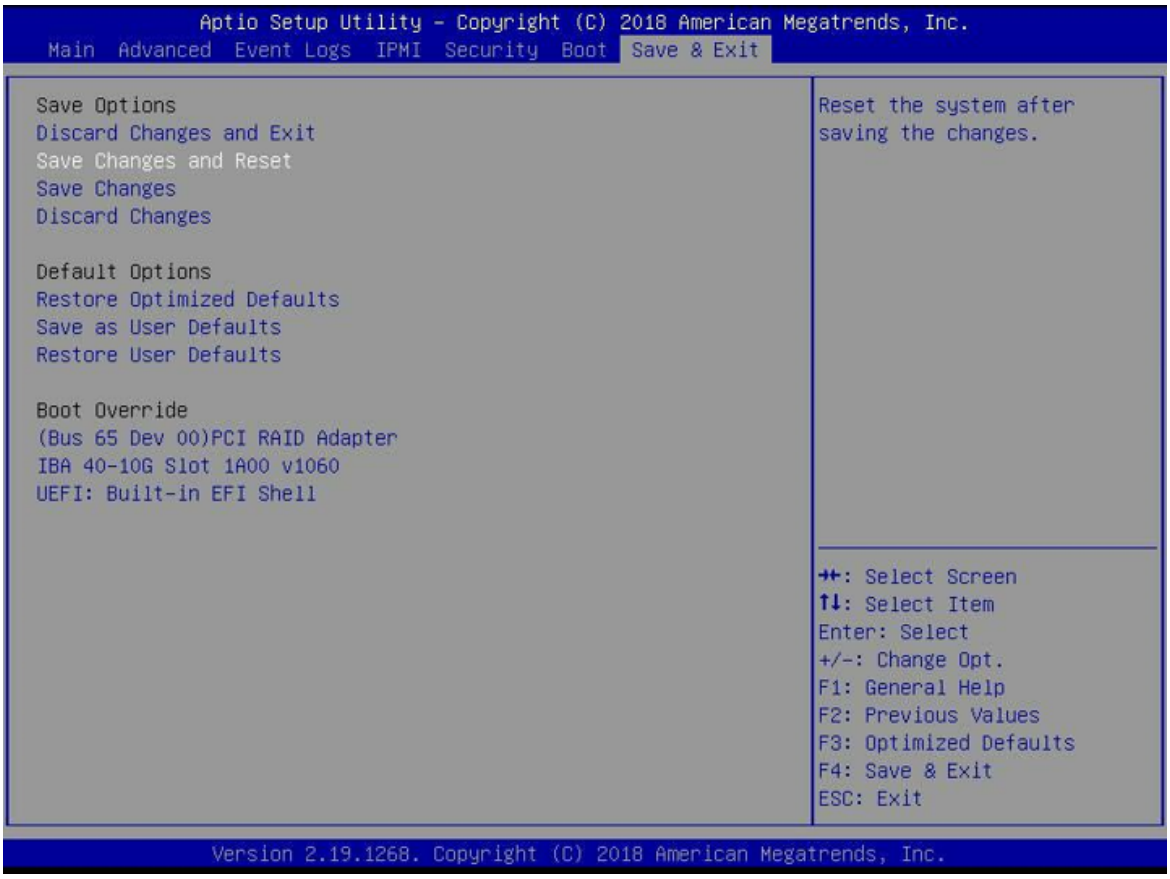
Figure 19: Updating IPMI LAN Configuration



5. Select **Static** for Configuration Address Source and press Enter. See Figure 19 on page 45.
6. Assign the values for the following fields:
   - Station IP Address
   - Subnet Mask
   - Gateway IP Address

7. Select **Save & Exit** > **Save Changes and Reset** and press Enter. See Figure 20 on page 46.

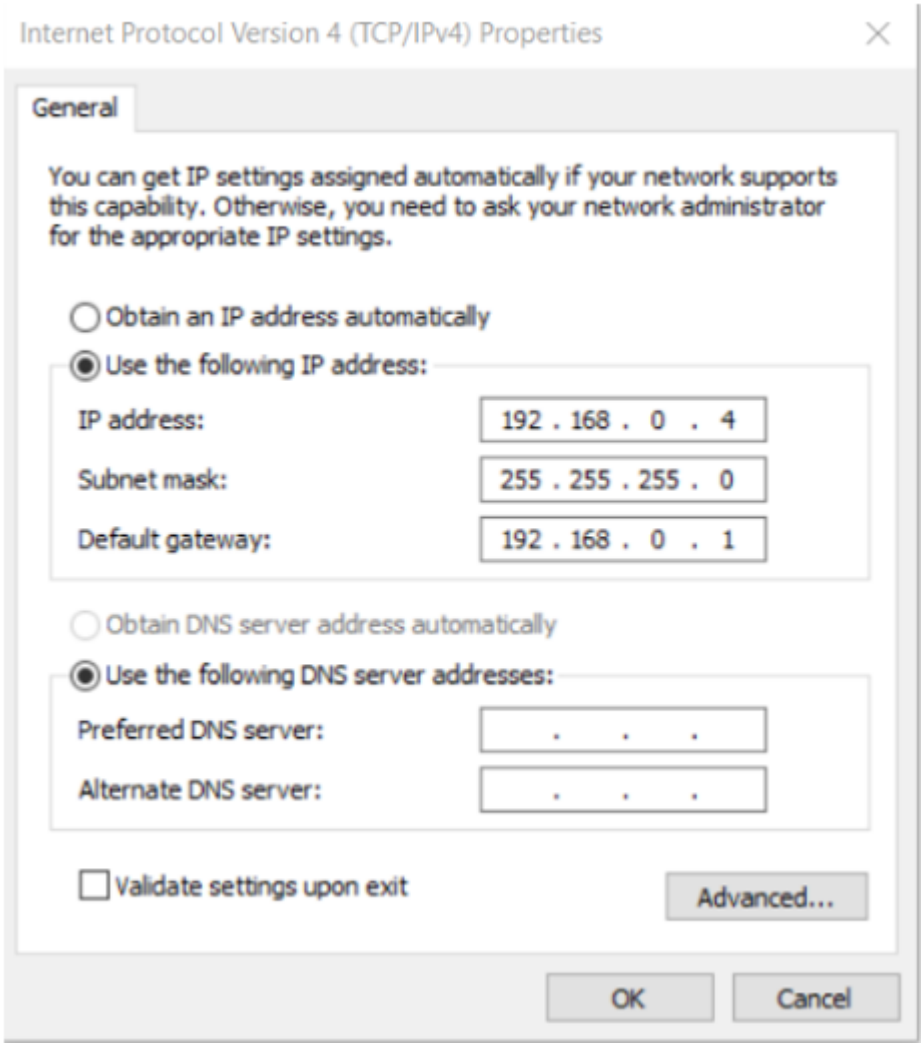
Figure 20: Saving IPMI Settings and Exiting the BIOS Setup



8. Configure your laptop IP address. For example, see Figure 21 on page 47.

Your laptop and the JATP400 IPMI are in the same subnet.

Figure 21: Configuring Laptop IPv4 Settings



9. Connect the IPMI port on the back panel of the JATP400 appliance and the laptop LAN port with a CAT5 Ethernet cable.
10. Open your Web browser.
11. Log in to your JATP appliance:**https:// *<IP Address>***

    Where *<IP Address>* is the IP address of the JATP appliance.
12. Enter the default username **ADMIN** and the default password **ADMIN**. See Figure 22 on page 48.

NOTE: Username and password are not case sensitive.

Figure 22: JATP IPMI Login Screen

13. Click **Login**.

    The JATP interface appears.

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4

CHAPTER

Maintaining Components

Maintaining JATP400 Power System

IN THIS SECTION

Maintaining the JATP400 Power Supply

The JATP400 appliances ship with redundant AC power supply modules. If one power supply fails, the second power supply takes over for the entire power load.

NOTE: The JATP400 appliance also supports optional DC power supply modules if you need DC power.

To maintain the power supplies, follow these guidelines:

- Ensure that the power and grounding cables for DC power supplies are arranged so that they do not obstruct access to other components.
- Routinely check the power LED on the power supply module. If the LED status is green, the power supply is functioning normally.
- Periodically inspect the site to ensure that the power cables connected to the JATP400 appliance are securely in place and moisture is not accumulating near the appliance.

Replacing an AC Power Supply on the JATP400 Appliance

To replace an AC power supply:

1. To remove the AC power supply:

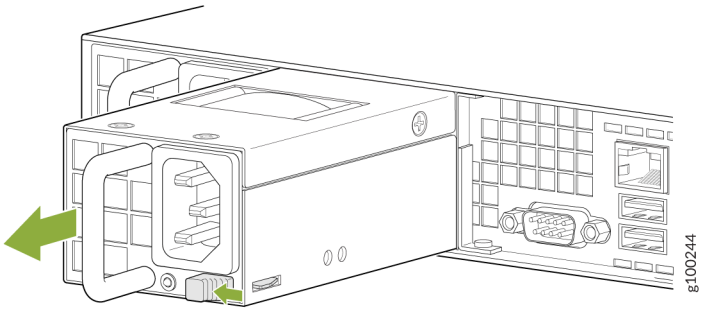
a. Attach an ESD grounding strap to your bare wrist and connect the strap to one of the ESD points on the chassis.

b. Remove the power cord from the power supply.

c. Push the release tab of the power supply on the back panel of the chassis.

d. Pull the power supply straight out of the chassis using the provided handle. Use one hand for support underneath the supply as you remove it. See Figure 23 on page 51.

Figure 23: Replacing an AC Power Supply



2. To install the AC power supply:

   a. Orient the replacement power supply.

   b. Using both hands, slide the replacement power supply straight into the chassis until the power supply is fully seated in the chassis slot. Make sure the tab on the power supply clicks into place.

   c. Attach the power cord to the power supply. If the power supply is correctly installed and functioning normally, the power supply powers up immediately.

Replacing AC Power Supply Cables on the JATP400 Appliance

To replace an AC power supply cord:

1. Attach an ESD grounding strap to your bare wrist and connect the strap to one of the ESD points on the chassis.
2. Unplug the power cord from the power source receptacle.
3. Unplug the power cord from the appliance inlet on the power supply.
4. Locate a replacement power cord with the type of plug appropriate for your geographical location.
5. Insert the power cord plug into an external AC power source receptacle.

6. Connect the power cord to the power supply.
7. Verify that the power cord does not block the air exhaust and access to device components, or drape where people could trip on it.
8. If the power supply is correctly installed and functioning normally, the supply automatically powers up.

Replacing a DC Power Supply on the JATP400 Appliance

To replace a DC power supply:

1. To remove the DC power supply:
   a. Switch off the dedicated facility circuit breaker for the power supply being removed.

      NOTE: Ensure that the voltage across the DC power source cable leads is 0 V and that there is no chance that the cables might become active during the removal process.

   b. Attach an ESD grounding strap to your bare wrist and connect the strap to one of the ESD points on the chassis.
   c. Remove the clear plastic cover protecting the terminal studs on the faceplate.
   d. Remove the screws from the terminals. Use a number-2 Phillips screwdriver to loosen and remove the screws.
   e. Remove the cable lugs from the terminals.
   f. Carefully move the power cables out of the way.
   g. Push the tab of the power supply.
   h. Pull the power supply straight out of the chassis.
2. To install the DC power supply:
   a. Orient the replacement power supply.
   b. Using both hands, slide the replacement power supply straight into the chassis until the power supply is fully seated in the chassis slot. Make sure the tab on the left edge of the power supply clicks into place.
   c. Attach the power cable to the DC power source. See "Connecting the JATP400 to Power" on page 33.

d. Replace the clear plastic cover over the terminal studs on the faceplate.

e. Close the input circuit breaker.

   The device powers on as soon as power is provided to the power supply.

Replacing DC Power Supply Cables on the JATP400 Appliance

To replace a DC power supply cable:

1. Attach an ESD grounding strap to your bare wrist and connect the strap to one of the ESD points on the chassis.
2. Switch off the external circuit breakers for all the cables attached to the power supply.

   NOTE: Ensure that the voltage across the DC power source cable leads is 0 V and that there is no chance that the cables might become active during the removal process.

3. Remove the clear plastic cover over the terminal studs on the faceplate.
4. Remove the power cable from the DC power source.

   NOTE: Ensure the cable is not touching or in the way of any components, and that it does not drape where people could trip on it.

5. Attach the power cable to the DC power source. See "Connecting the JATP400 to Power" on page 33.
6. Replace the clear plastic cover over the terminal studs on the faceplate.
7. Close the input circuit breaker.

   The device powers on as soon as power is provided to the power supply.

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Maintaining the JATP400 Hard Disk Drive

IN THIS SECTION

Maintaining the JATP400 RAID Array

Redundant array of inexpensive disk (RAID) is a method of storing large amounts of application data used for data redundancy, performance improvement, or both. There are different RAID levels designed to increase data reliability and I/O performance.

The key concepts in RAID are:

- Mirroring—Copy data to more than one disk
- Striping—Split data across more than one disk
- Error correction—Redundant data storage to detect and resolve problems

The JATP400 appliance ships with hot-swappable hard disks to offer component redundancy. The JATP400 appliance uses the RAID6 configuration. In RAID6, drives are duplicated for fault tolerance.

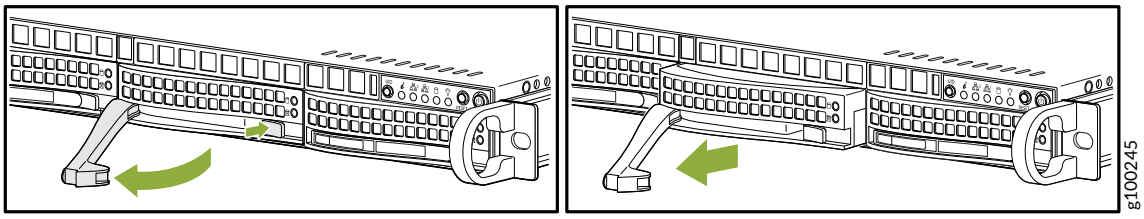
Replacing a Hard Drive on the JATP400 Appliance

To replace a hard drive from a driver carrier on the JATP400 appliance:

1. Place an electrostatic bag or antistatic mat on a flat, stable surface.
2. To remove a hard disk carrier:
   a. Attach an electrostatic discharge (ESD) grounding strap to your bare wrist, and connect the strap to one of the ESD points on the chassis.
   b. Press the eject button on the right side of the disk slot to release the hard drive. See Figure 24 on page 56.

The hard drive pops partially out of the slot.

Figure 24: Removing a Drive Carrier



c. Grasp the drive carefully and slide it completely out of the slot.

d. Place the hard drive carrier on the antistatic mat.

e. Remove the screws that secure the hard drive to the carrier and separate the hard drive from the carrier.

3. To reinstall a hard disk carrier:

a. With the front of the hard drive toward the front of the drive carrier, position the drive in the drive carrier and align the screw holes over the pins on the rails.

b. Secure the drive to the carrier with the screws provided,

c. Push the carrier completely into the drive bay until you hear a click when the hard drive is fully inserted.

   This indicates that the carrier has been fully seated and connected to the midplane, which automatically makes the power and logic connections to the hard drive.

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CHAPTER 5

Troubleshooting Hardware

Contacting Juniper Networks Technical Assistance Center

You can contact Juniper Networks Technical Assistance Center (JTAC) 24 hours a day, 7 days a week in one of the following ways:

- On the Web, using the Case Manager link at: https://www.juniper.net/support/
- By telephone:
  - From the US and Canada: 1-888-314-JTAC
  - From all other locations: 1-408-745-9500

  If contacting JTAC by phone, enter your 12-digit case number followed by the # key if this is an existing case, or press the * key to be routed to the next available support engineer.

When requesting support from JTAC by telephone, be prepared to provide the following information:

- Your existing case number, if you have one
- Details of the failure or problem
- Type of activity being performed on the platform when the problem occurred
- Configuration data using one or more of the show commands

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CHAPTER 6

Returning the Chassis or Components

Returning the JATP400 Chassis or Components

IN THIS SECTION

Locating the Serial Number on a JATP400 Chassis

If you are returning a JATP400 appliance to Juniper Networks for repair or replacement, you must locate the serial number of the appliance.

The serial number ID of the JATP400 appliance is located on a label on the back of the chassis. You must provide the serial number to the Juniper Networks Technical Assistance Center (JTAC) when you contact them to obtain a Return Materials Authorization (RMA). See "Contacting Customer Support to Obtain Return Material Authorization" on page 61.

You can also locate the serial number using the following command-line interface (CLI) command:

```
user@host> show system-information
```

Contacting Customer Support to Obtain Return Material Authorization

If you are returning the JATP400 appliance to Juniper Networks for repair or replacement, obtain a Return Material Authorization (RMA) number from Juniper Networks Technical Assistance Center (JTAC).

After locating the serial number of the appliance you want to return, open a Case with Juniper Networks Technical Assistance Center (JTAC) on the Web or by telephone.

Before you request an RMA number from JTAC, be prepared to provide the following information:

- Your existing case number, if you have one
- Serial number of the appliance

- Your name, organization name, telephone number, fax number, and shipping address
- Details of the failure or problem
- Type of activity being performed on the device when the problem occurred

You can contact JTAC 24 hours a day, seven days a week on the Web or by telephone:

- Case Manager at CSC: https://www.juniper.net/cm/
- Telephone: +1-888-314-JTAC1-888-314-5822, toll free in U.S., Canada, and Mexico

NOTE: For international or direct-dial options in countries without toll free numbers, see https://www.juniper.net/support/requesting-support.html.

If you are contacting JTAC by telephone, enter your 12-digit case number followed by the pound (#) key for an existing case, or press the star (*) key to be routed to the next available support engineer.

The support representative validates your request and issues an RMA number for return of the component.

Packing a JATP400 for Shipping

To pack a JATP400 appliance for shipping:

1. Power off the JATP400 appliance and remove the AC power cords or DC power cables.
2. Remove the cables that connect the JATP400 appliance to all external devices.
3. Remove the JATP400 appliance from the rack.
4. Place the JATP400 appliance in an antistatic bag.
5. Place the JATP400 appliance in the shipping carton.
6. Place the packing foam on top of and around the JATP400 appliance.
7. Close the top of the cardboard shipping box and seal it with packing tape.
8. Write the return materials authorization (RMA) number on the exterior of the box to ensure proper tracking.

RELATED DOCUMENTATION

Contacting Juniper Networks Technical Assistance Center | 59

Maintaining JATP400 Power System | 50

CHAPTER 7

Safety and Compliance Information

General Safety Guidelines and Warnings

The following guidelines help ensure your safety and protect the device from damage. The list of guidelines might not address all potentially hazardous situations in your working environment, so be alert and exercise good judgment at all times.

- Perform only the procedures explicitly described in the hardware documentation for this device. Make sure that only authorized service personnel perform other system services.
- Keep the area around the device clear and free from dust before, during, and after installation.
- Keep tools away from areas where people could trip over them while walking.
- Do not wear loose clothing or jewelry, such as rings, bracelets, or chains, which could become caught in the device.
- Wear safety glasses if you are working under any conditions that could be hazardous to your eyes.
- Do not perform any actions that create a potential hazard to people or make the equipment unsafe.
- Never attempt to lift an object that is too heavy for one person to handle.
- Never install or manipulate wiring during electrical storms.
- Never install electrical jacks in wet locations unless the jacks are specifically designed for wet environments.
- Operate the device only when it is properly grounded.
- Follow the instructions in this guide to properly ground the device to earth.
- Replace fuses only with fuses of the same type and rating.
- Do not open or remove chassis covers or sheet-metal parts unless instructions are provided in the hardware documentation for this device. Such an action could cause severe electrical shock.
- Do not push or force any objects through any opening in the chassis frame. Such an action could result in electrical shock or fire.
- Avoid spilling liquid onto the chassis or onto any device component. Such an action could cause electrical shock or damage the device.
- Avoid touching uninsulated electrical wires or terminals that have not been disconnected from their power source. Such an action could cause electrical shock.

- Some parts of the chassis, including AC and DC power supply surfaces, power supply unit handles, SFB card handles, and fan tray handles might become hot. The following label provides the warning of the hot surfaces on the chassis:

- Always ensure that all modules, power supplies, and cover panels are fully inserted and that the installation screws are fully tightened.

Definitions of Safety Warning Levels

The documentation uses the following levels of safety warnings (there are two *Warning* formats):

NOTE: You might find this information helpful in a particular situation, or you might overlook this important information if it was not highlighted in a Note.

CAUTION: You need to observe the specified guidelines to prevent minor injury or discomfort to you or severe damage to the device.

Attention Veillez à respecter les consignes indiquées pour éviter toute incommodité ou blessure légère, voire des dégâts graves pour l'appareil.

LASER WARNING: This symbol alerts you to the risk of personal injury from a laser.

Avertissement Ce symbole signale un risque de blessure provoquée par rayon laser.

WARNING: This symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

Waarschuwing Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken,

dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen.

Varoitus Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista.

Avertissement Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant causer des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents.

Warnung Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewußt.

Avvertenza Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti.

Advarsel Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du vare oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker.

Aviso Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes.

¡Atención! Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes.

Varning! Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador.

Qualified Personnel Warning

WARNING: Only trained and qualified personnel should install or replace the device.
Waarschuwing Installatie en reparaties mogen uitsluitend door getraind en bevoegd personeel uitgevoerd worden.

Varoitus Ainoastaan koulutettu ja pätevä henkilökunta saa asentaa tai vaihtaa tämän laitteen.

Avertissement Tout installation ou remplacement de l'appareil doit être réalisé par du personnel qualifié et compétent.

Warnung Gerät nur von geschultem, qualifiziertem Personal installieren oder auswechseln lassen.

Avvertenza Solo personale addestrato e qualificato deve essere autorizzato ad installare o sostituire questo apparecchio.

Advarsel Kun kvalifisert personell med riktig opplæring bør montere eller bytte ut dette utstyret.

Aviso Este equipamento deverá ser instalado ou substituído apenas por pessoal devidamente treinado e qualificado.

¡Atención! Estos equipos deben ser instalados y reemplazados exclusivamente por personal técnico adecuadamente preparado y capacitado.

Varning! Denna utrustning ska endast installeras och bytas ut av utbildad och kvalificerad personal.

Warning Statement for Norway and Sweden

WARNING: The equipment must be connected to an earthed mains socket-outlet.
Advarsel Apparatet skal kobles til en jordet stikkontakt.

Varning! Apparaten skall anslutas till jordat nätuttag.

Fire Safety Requirements

IN THIS SECTION

In the event of a fire emergency, the safety of people is the primary concern. You should establish procedures for protecting people in the event of a fire emergency, provide safety training, and properly provision fire-control equipment and fire extinguishers.

In addition, you should establish procedures to protect your equipment in the event of a fire emergency. Juniper Networks products should be installed in an environment suitable for electronic equipment. We recommend that fire suppression equipment be available in the event of a fire in the vicinity of the equipment and that all local fire, safety, and electrical codes and ordinances be observed when you install and operate your equipment.

Fire Suppression

In the event of an electrical hazard or an electrical fire, you should first turn power off to the equipment at the source. Then use a Type C fire extinguisher, which uses noncorrosive fire retardants, to extinguish the fire.

Fire Suppression Equipment

Type C fire extinguishers, which use noncorrosive fire retardants such as carbon dioxide and Halotron™, are most effective for suppressing electrical fires. Type C fire extinguishers displace oxygen from the point of combustion to eliminate the fire. For extinguishing fire on or around equipment that draws air from the environment for cooling, you should use this type of inert oxygen displacement extinguisher instead of an extinguisher that leaves residues on equipment.

Do not use multipurpose Type ABC chemical fire extinguishers (dry chemical fire extinguishers). The primary ingredient in these fire extinguishers is monoammonium phosphate, which is very sticky and

difficult to clean. In addition, in the presence of minute amounts of moisture, monoammonium phosphate can become highly corrosive and corrodes most metals.

Any equipment in a room in which a chemical fire extinguisher has been discharged is subject to premature failure and unreliable operation. The equipment is considered to be irreparably damaged.

NOTE: To keep warranties effective, do not use a dry chemical fire extinguisher to control a fire at or near a Juniper Networks device. If a dry chemical fire extinguisher is used, the unit is no longer eligible for coverage under a service agreement.

We recommend that you dispose of any irreparably damaged equipment in an environmentally responsible manner.

Installation Instructions Warning

WARNING: Read the installation instructions before you connect the device to a power source.

Waarschuwing Raadpleeg de installatie-aanwijzingen voordat u het systeem met de voeding verbindt.

Varoitus Lue asennusohjeet ennen järjestelmän yhdistämistä virtalähteeseen.

Avertissement Avant de brancher le système sur la source d'alimentation, consulter les directives d'installation.

Warnung Lesen Sie die Installationsanweisungen, bevor Sie das System an die Stromquelle anschließen.

Avvertenza Consultare le istruzioni di installazione prima di collegare il sistema all'alimentatore.

Advarsel Les installasjonsinstruksjonene før systemet kobles til strømkilden.

Aviso Leia as instruções de instalação antes de ligar o sistema à sua fonte de energia.

¡Atención! Ver las instrucciones de instalación antes de conectar el sistema a la red de alimentación.

Varning! Läs installationsanvisningarna innan du kopplar systemet till dess strömförsörjningsenhet.

Chassis Lifting Guidelines for the JATP400 Appliance

The weight of a fully loaded JATP400 appliance is approximately 36 lb (16.33 kg). Observe the following guidelines for lifting and moving a JATP400 appliance:

- Before installing the appliance, read the guidelines in "JATP400 Site Guidelines and Requirements" on page 16.
- Before lifting or moving the JATP appliance, disconnect all external cables.
- As when lifting any heavy object, lift most of the weight with your legs rather than your back. Keep your knees bent and your back relatively straight and avoid twisting your body as you lift. Balance the load evenly and be sure that your footing is solid.

RELATED DOCUMENTATION

General Safety Guidelines and Warnings | 66

JATP400 Installation Overview | 24

JATP400 Chassis | 4

Restricted Access Warning

WARNING: This unit is intended for installation in restricted access areas. A restricted access area is an area to which access can be gained only by service personnel through the use of a special tool, lock and key, or other means of security, and which is controlled by the authority responsible for the location.

Waarschuwing Dit toestel is bedoeld voor installatie op plaatsen met beperkte toegang. Een plaats met beperkte toegang is een plaats waar toegang slechts door servicepersoneel verkregen kan worden door middel van een speciaal instrument, een slot en sleutel, of een ander veiligheidsmiddel, en welke beheerd wordt door de overheidsinstantie die verantwoordelijk is voor de locatie.

Varoitus Tämä laite on tarkoitettu asennettavaksi paikkaan, johon pääsy on rajoitettua. Paikka, johon pääsy on rajoitettua, tarkoittaa paikkaa, johon vain huoltohenkilöstö pääsee jonkin erikoistyökalun, lukkoon sopivan avaimen tai jonkin muun turvalaitteen avulla ja joka on paikasta vastuussa olevien toimivaltaisten henkilöiden valvoma.

Avertissement Cet appareil est à installer dans des zones d'accès réservé. Ces dernières sont des zones auxquelles seul le personnel de service peut accéder en utilisant un outil spécial, un mécanisme de verrouillage et une clé, ou tout autre moyen de sécurité. L'accès aux zones de sécurité est sous le contrôle de l'autorité responsable de l'emplacement.

Warnung Diese Einheit ist zur Installation in Bereichen mit beschränktem Zutritt vorgesehen. Ein Bereich mit beschränktem Zutritt ist ein Bereich, zu dem nur Wartungspersonal mit einem Spezialwerkzeugs, Schloß und Schlüssel oder anderer Sicherheitsvorkehrungen Zugang hat, und der von dem für die Anlage zuständigen Gremium kontrolliert wird.

Avvertenza Questa unità deve essere installata in un'area ad accesso limitato. Un'area ad accesso limitato è un'area accessibile solo a personale di assistenza tramite un'attrezzo speciale, lucchetto, o altri dispositivi di sicurezza, ed è controllata dall'autorità responsabile della zona.

Advarsel Denne enheten er laget for installasjon i områder med begrenset adgang. Et område med begrenset adgang gir kun adgang til servicepersonale som bruker et spesielt verktøy, lås og nøkkel, eller en annen sikkerhetsanordning, og det kontrolleres av den autoriteten som er ansvarlig for området.

Aviso Esta unidade foi concebida para instalação em áreas de acesso restrito. Uma área de acesso restrito é uma área à qual apenas tem acesso o pessoal de serviço autorizado, que possua uma ferramenta, chave e fechadura especial, ou qualquer outra forma de segurança. Esta área é controlada pela autoridade responsável pelo local.

¡Atención! Esta unidad ha sido diseñada para instalarse en áreas de acceso restringido. Área de acceso restringido significa un área a la que solamente tiene acceso el personal de servicio mediante la utilización de una herramienta especial, cerradura con llave, o algún otro medio de seguridad, y que está bajo el control de la autoridad responsable del local.

Varning! Denna enhet är avsedd för installation i områden med begränsat tillträde. Ett område med begränsat tillträde får endast tillträdas av servicepersonal med ett speciellt verktyg, lås och nyckel, eller annan säkerhetsanordning, och kontrolleras av den auktoritet som ansvarar för området.

Ramp Warning

WARNING: When installing the device, do not use a ramp inclined at more than 10 degrees.

Waarschuwing Gebruik een oprijplaat niet onder een hoek van meer dan 10 graden.

Varoitus Älä käytä sellaista kaltevaa pintaa, jonka kaltevuus ylittää 10 astetta.

Avertissement Ne pas utiliser une rampe dont l'inclinaison est supérieure à 10 degrés.

Warnung Keine Rampen mit einer Neigung von mehr als 10 Grad verwenden.

Avvertenza Non usare una rampa con pendenza superiore a 10 gradi.

Advarsel Bruk aldri en rampe som heller mer enn 10 grader.

Aviso Não utilize uma rampa com uma inclinação superior a 10 graus.

¡Atención! No usar una rampa inclinada más de 10 grados.

Varning! Använd inte ramp med en lutning på mer än 10 grader.

Rack-Mounting and Cabinet-Mounting Warnings

Ensure that the rack or cabinet in which the device is installed is evenly and securely supported. Uneven mechanical loading could lead to a hazardous condition.

WARNING: To prevent bodily injury when mounting or servicing the device in a rack, take the following precautions to ensure that the system remains stable. The following directives help maintain your safety:

- The device must be installed in a rack that is secured to the building structure.
- The device should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting the device on a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.

- If the rack is provided with stabilizing equipment, install the stabilizers before mounting or servicing the device in the rack.

Waarschuwing Om lichamelijk letsel te voorkomen wanneer u dit toestel in een rek monteert of het daar een servicebeurt geeft, moet u speciale voorzorgsmaatregelen nemen om ervoor te zorgen dat het toestel stabiel blijft. De onderstaande richtlijnen worden verstrekt om uw veiligheid te verzekeren:

- De Juniper Networks switch moet in een stellage worden geïnstalleerd die aan een bouwsel is verankerd.
- Dit toestel dient onderaan in het rek gemonteerd te worden als het toestel het enige in het rek is.
- Wanneer u dit toestel in een gedeeltelijk gevuld rek monteert, dient u het rek van onderen naar boven te laden met het zwaarste onderdeel onderaan in het rek.
- Als het rek voorzien is van stabiliseringshulpmiddelen, dient u de stabilisatoren te monteren voordat u het toestel in het rek monteert of het daar een servicebeurt geeft.

Varoitus Kun laite asetetaan telineeseen tai huolletaan sen ollessa telineessä, on noudatettava erityisiä varotoimia järjestelmän vakavuuden säilyttämiseksi, jotta vältytään loukkaantumiselta. Noudata seuraavia turvallisuusohjeita:

- Juniper Networks switch on asennettava telineeseen, joka on kiinnitetty rakennukseen.
- Jos telineessä ei ole muita laitteita, aseta laite telineen alaosaan.
- Jos laite asetetaan osaksi täytettyyn telineeseen, aloita kuormittaminen sen alaosasta kaikkein raskaimmalla esineellä ja siirry sitten sen yläosaan.
- Jos telinettä varten on vakaimet, asenna ne ennen laitteen asettamista telineeseen tai sen huoltamista siinä.

Avertissement Pour éviter toute blessure corporelle pendant les opérations de montage ou de réparation de cette unité en casier, il convient de prendre des précautions spéciales afin de maintenir la stabilité du système. Les directives ci-dessous sont destinées à assurer la protection du personnel:

- Le rack sur lequel est monté le Juniper Networks switch doit être fixé à la structure du bâtiment.

- Si cette unité constitue la seule unité montée en casier, elle doit être placée dans le bas.
- Si cette unité est montée dans un casier partiellement rempli, charger le casier de bas en haut en plaçant l'élément le plus lourd dans le bas.
- Si le casier est équipé de dispositifs stabilisateurs, installer les stabilisateurs avant de monter ou de réparer l'unité en casier.

Warnung Zur Vermeidung von Körperverletzung beim Anbringen oder Warten dieser Einheit in einem Gestell müssen Sie besondere Vorkehrungen treffen, um sicherzustellen, daß das System stabil bleibt. Die folgenden Richtlinien sollen zur Gewährleistung Ihrer Sicherheit dienen:

- Der Juniper Networks switch muß in einem Gestell installiert werden, das in der Gebäudestruktur verankert ist.
- Wenn diese Einheit die einzige im Gestell ist, sollte sie unten im Gestell angebracht werden.
- Bei Anbringung dieser Einheit in einem zum Teil gefüllten Gestell ist das Gestell von unten nach oben zu laden, wobei das schwerste Bauteil unten im Gestell anzubringen ist.
- Wird das Gestell mit Stabilisierungszubehör geliefert, sind zuerst die Stabilisatoren zu installieren, bevor Sie die Einheit im Gestell anbringen oder sie warten.

Avvertenza Per evitare infortuni fisici durante il montaggio o la manutenzione di questa unità in un supporto, occorre osservare speciali precauzioni per garantire che il sistema rimanga stabile. Le seguenti direttive vengono fornite per garantire la sicurezza personale:

- Il Juniper Networks switch deve essere installato in un telaio, il quale deve essere fissato alla struttura dell'edificio.
- Questa unità deve venire montata sul fondo del supporto, se si tratta dell'unica unità da montare nel supporto.
- Quando questa unità viene montata in un supporto parzialmente pieno, caricare il supporto dal basso all'alto, con il componente più pesante sistemato sul fondo del supporto.
- Se il supporto è dotato di dispositivi stabilizzanti, installare tali dispositivi prima di montare o di procedere alla manutenzione dell'unità nel supporto.

Advarsel Unngå fysiske skader under montering eller reparasjonsarbeid på denne enheten når den befinner seg i et kabinett. Vær nøye med at systemet er stabilt. Følgende retningslinjer er gitt for å verne om sikkerheten:

- Juniper Networks switch må installeres i et stativ som er forankret til bygningsstrukturen.
- Denne enheten bør monteres nederst i kabinettet hvis dette er den eneste enheten i kabinettet.
- Ved montering av denne enheten i et kabinett som er delvis fylt, skal kabinettet lastes fra bunnen og opp med den tyngste komponenten nederst i kabinettet.
- Hvis kabinettet er utstyrt med stabiliseringsutstyr, skal stabilisatorene installeres før montering eller utføring av reparasjonsarbeid på enheten i kabinettet.

Aviso Para se prevenir contra danos corporais ao montar ou reparar esta unidade numa estante, deverá tomar precauções especiais para se certificar de que o sistema possui um suporte estável. As seguintes directrizes ajudá-lo-ão a efectuar o seu trabalho com segurança:

- O Juniper Networks switch deverá ser instalado numa prateleira fixa à estrutura do edificio.
- Esta unidade deverá ser montada na parte inferior da estante, caso seja esta a única unidade a ser montada.
- Ao montar esta unidade numa estante parcialmente ocupada, coloque os itens mais pesados na parte inferior da estante, arrumando-os de baixo para cima.
- Se a estante possuir um dispositivo de estabilização, instale-o antes de montar ou reparar a unidade.

¡Atención! Para evitar lesiones durante el montaje de este equipo sobre un bastidor, oeriormente durante su mantenimiento, se debe poner mucho cuidado en que el sistema quede bien estable. Para garantizar su seguridad, proceda según las siguientes instrucciones:

- El Juniper Networks switch debe instalarse en un bastidor fijado a la estructura del edificio.
- Colocar el equipo en la parte inferior del bastidor, cuando sea la única unidad en el mismo.

- Cuando este equipo se vaya a instalar en un bastidor parcialmente ocupado, comenzar la instalación desde la parte inferior hacia la superior colocando el equipo más pesado en la parte inferior.
- Si el bastidor dispone de dispositivos estabilizadores, instalar éstos antes de montar o proceder al mantenimiento del equipo instalado en el bastidor.

Varning! För att undvika kroppsskada när du installerar eller utför underhållsarbete på denna enhet på en ställning måste du vidta särskilda försiktighetsåtgärder för att försäkra dig om att systemet står stadigt. Följande riktlinjer ges för att trygga din säkerhet:

- Juniper Networks switch måste installeras i en ställning som är förankrad i byggnadens struktur.
- Om denna enhet är den enda enheten på ställningen skall den installeras längst ned på ställningen.
- Om denna enhet installeras på en delvis fylld ställning skall ställningen fyllas nedifrån och upp, med de tyngsta enheterna längst ned på ställningen.
- Om ställningen är försedd med stabiliseringsdon skall dessa monteras fast innan enheten installeras eller underhålls på ställningen.

Grounded Equipment Warning

WARNING: This device must be properly grounded at all times. Follow the instructions in this guide to properly ground the device to earth.

Waarschuwing Dit apparaat moet altijd goed geaard zijn. Volg de instructies in deze gids om het apparaat goed te aarden.

Varoitus Laitteen on oltava pysyvästi maadoitettu. Maadoita laite asianmukaisesti noudattamalla tämän oppaan ohjeita.

Avertissement L'appareil doit être correctement mis à la terre à tout moment. Suivez les instructions de ce guide pour correctement mettre l'appareil à la terre.

Warnung Das Gerät muss immer ordnungsgemäß geerdet sein. Befolgen Sie die Anweisungen in dieser Anleitung, um das Gerät ordnungsgemäß zu erden.

Avvertenza Questo dispositivo deve sempre disporre di una connessione a massa. Seguire le istruzioni indicate in questa guida per connettere correttamente il dispositivo a massa.

Advarsel Denne enheten på jordes skikkelig hele tiden. Følg instruksjonene i denne veiledningen for å jorde enheten.

Aviso Este equipamento deverá estar ligado à terra. Siga las instrucciones en esta guía para conectar correctamente este dispositivo a tierra.

¡Atención! Este dispositivo debe estar correctamente conectado a tierra en todo momento. Siga las instrucciones en esta guía para conectar correctamente este dispositivo a tierra.

Varning! Den här enheten måste vara ordentligt jordad. Följ instruktionerna i den här guiden för att jorda enheten ordentligt.

Radiation from Open Port Apertures Warning

LASER WARNING: Because invisible radiation might be emitted from the aperture of the port when no fiber cable is connected, avoid exposure to radiation and do not stare into open apertures.

Waarschuwing Aangezien onzichtbare straling vanuit de opening van de poort kan komen als er geen fiberkabel aangesloten is, dient blootstelling aan straling en het kijken in open openingen vermeden te worden.

Varoitus Koska portin aukosta voi emittoitua näkymätöntä säteilyä, kun kuitukaapelia ei ole kytkettynä, vältä säteilylle altistumista äläkä katso avoimiin aukkoihin.

Avertissement Des radiations invisibles à l'il nu pouvant traverser l'ouverture du port lorsqu'aucun câble en fibre optique n'y est connecté, il est recommandé de ne pas regarder fixement l'intérieur de ces ouvertures.

Warnung Aus der Port-Öffnung können unsichtbare Strahlen emittieren, wenn kein Glasfaserkabel angeschlossen ist. Vermeiden Sie es, sich den Strahlungen auszusetzen, und starren Sie nicht in die Öffnungen!

Avvertenza Quando i cavi in fibra non sono inseriti, radiazioni invisibili possono essere emesse attraverso l'apertura della porta. Evitate di esporvi alle radiazioni e non guardate direttamente nelle aperture.

Advarsel Unngå utsettelse for stråling, og stirr ikke inn i åpninger som er åpne, fordi usynlig stråling kan emiteres fra portens åpning når det ikke er tilkoblet en fiberkabel.

Aviso Dada a possibilidade de emissão de radiação invisível através do orifício da via de acesso, quando esta não tiver nenhum cabo de fibra conectado, deverá evitar an EXposição à radiação e não deverá olhar fixamente para orifícios que se encontrarem a descoberto.

¡Atención! Debido a que la apertura del puerto puede emitir radiación invisible cuando no existe un cable de fibra conectado, evite mirar directamente a las aperturas para no exponerse a la radiación.

Varning! Osynlig strålning kan avges från en portöppning utan ansluten fiberkabel och du bör därför undvika att bli utsatt för strålning genom att inte stirra in i oskyddade öppningar.

Laser and LED Safety Guidelines and Warnings

IN THIS SECTION

Juniper Networks devices are equipped with laser transmitters, which are considered a Class 1 Laser Product by the U.S. Food and Drug Administration and are evaluated as a Class 1 Laser Product per EN 60825-1 requirements.

Observe the following guidelines and warnings:

General Laser Safety Guidelines

When working around ports that support optical transceivers, observe the following safety guidelines to prevent eye injury:

- Do not look into unterminated ports or at fibers that connect to unknown sources.
- Do not examine unterminated optical ports with optical instruments.
- Avoid direct exposure to the beam.

LASER WARNING: Unterminated optical connectors can emit invisible laser radiation. The lens in the human eye focuses all the laser power on the retina, so focusing the eye directly on a laser source—even a low-power laser—could permanently damage the eye.

Avertissement Les connecteurs à fibre optique sans terminaison peuvent émettre un rayonnement laser invisible. Le cristallin de l'œil humain faisant converger toute la puissance du laser sur la rétine, toute focalisation directe de l'œil sur une source laser, — même de faible puissance—, peut entraîner des lésions oculaires irréversibles.

Class 1 Laser Product Warning

LASER WARNING: Class 1 laser product.
Waarschuwing Klasse-1 laser produkt.

Varoitus Luokan 1 lasertuote.

Avertissement Produit laser de classe I.

Warnung Laserprodukt der Klasse 1.

Avvertenza Prodotto laser di Classe 1.

Advarsel Laserprodukt av klasse 1.

Aviso Produto laser de classe 1.

¡Atención! Producto láser Clase I.

Varning! Laserprodukt av klass 1.

Class 1 LED Product Warning

LASER WARNING: Class 1 LED product.
Waarschuwing Klasse 1 LED-product.

Varoitus Luokan 1 valodiodituote.

Avertissement Alarme de produit LED Class I.

Warnung Class 1 LED-Produktwarnung.

Avvertenza Avvertenza prodotto LED di Classe 1.

Advarsel LED-produkt i klasse 1.

Aviso Produto de classe 1 com LED.

¡Atención! Aviso sobre producto LED de Clase 1.

Varning! Lysdiodprodukt av klass 1.

Laser Beam Warning

LASER WARNING: Do not stare into the laser beam or view it directly with optical instruments.
Waarschuwing Niet in de straal staren of hem rechtstreeks bekijken met optische instrumenten.

Varoitus Älä katso säteeseen äläkä tarkastele sitä suoraan optisen laitteen avulla.

Avertissement Ne pas fixer le faisceau des yeux, ni l'observer directement à l'aide d'instruments optiques.

Warnung Nicht direkt in den Strahl blicken und ihn nicht direkt mit optischen Geräten prüfen.

Avvertenza Non fissare il raggio con gli occhi né usare strumenti ottici per osservarlo direttamente.

Advarsel Stirr eller se ikke direkte p strlen med optiske instrumenter.

Aviso Não olhe fixamente para o raio, nem olhe para ele directamente com instrumentos ópticos.

¡Atención! No mirar fijamente el haz ni observarlo directamente con instrumentos ópticos.

Varning! Rikta inte blicken in mot strålen och titta inte direkt på den genom optiska instrument.

Maintenance and Operational Safety Guidelines and Warnings

IN THIS SECTION

While performing the maintenance activities for devices, observe the following guidelines and warnings:

Battery Handling Warning

WARNING: Replacing a battery incorrectly might result in an explosion. Replace a battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Waarschuwing Er is ontploffingsgevaar als de batterij verkeerd vervangen wordt. Vervang de batterij slechts met hetzelfde of een equivalent type dat door de fabrikant

aanbevolen is. Gebruikte batterijen dienen overeenkomstig fabrieksvoorschriften weggeworpen te worden.

Varoitus Räjähdyksen vaara, jos akku on vaihdettu väärään akkuun. Käytä vaihtamiseen ainoastaan saman- tai vastaavantyyppistä akkua, joka on valmistajan suosittelema. Hävitä käytetyt akut valmistajan ohjeiden mukaan.

Avertissement Danger d'explosion si la pile n'est pas remplacée correctement. Ne la remplacer que par une pile de type semblable ou équivalent, recommandée par le fabricant. Jeter les piles usagées conformément aux instructions du fabricant.

Warnung Bei Einsetzen einer falschen Batterie besteht Explosionsgefahr. Ersetzen Sie die Batterie nur durch den gleichen oder vom Hersteller empfohlenen Batterietyp. Entsorgen Sie die benutzten Batterien nach den Anweisungen des Herstellers.

Advarsel Det kan være fare for eksplosjon hvis batteriet skiftes på feil måte. Skift kun med samme eller tilsvarende type som er anbefalt av produsenten. Kasser brukte batterier i henhold til produsentens instruksjoner.

Avvertenza Pericolo di esplosione se la batteria non è installata correttamente. Sostituire solo con una di tipo uguale o equivalente, consigliata dal produttore. Eliminare le batterie usate secondo le istruzioni del produttore.

Aviso Existe perigo de explosão se a bateria for substituída incorrectamente. Substitua a bateria por uma bateria igual ou de um tipo equivalente recomendado pelo fabricante. Destrua as baterias usadas conforme as instruções do fabricante.

¡Atención! Existe peligro de explosión si la batería se reemplaza de manera incorrecta. Reemplazar la baterían EXclusivamente con el mismo tipo o el equivalente recomendado por el fabricante. Desechar las baterías gastadas según las instrucciones del fabricante.

Varning! Explosionsfara vid felaktigt batteribyte. Ersätt endast batteriet med samma batterityp som rekommenderas av tillverkaren eller motsvarande. Följ tillverkarens anvisningar vid kassering av använda batterier.

Jewelry Removal Warning

WARNING: Before working on equipment that is connected to power lines, remove jewelry, including rings, necklaces, and watches. Metal objects heat up when connected to power and ground and can cause serious burns or can be welded to the terminals.

Waarschuwing Alvorens aan apparatuur te werken die met elektrische leidingen is verbonden, sieraden (inclusief ringen, kettingen en horloges) verwijderen. Metalen voorwerpen worden warm wanneer ze met stroom en aarde zijn verbonden, en kunnen ernstige brandwonden veroorzaken of het metalen voorwerp aan de aansluitklemmen lassen.

Varoitus Ennen kuin työskentelet voimavirtajohtoihin kytkettyjen laitteiden parissa, ota pois kaikki korut (sormukset, kaulakorut ja kellot mukaan lukien). Metalliesineet kuumenevat, kun ne ovat yhteydessä sähkövirran ja maan kanssa, ja ne voivat aiheuttaa vakavia palovammoja tai hitsata metalliesineet kiinni liitäntänapoihin.

Avertissement Avant d'accéder à cet équipement connecté aux lignes électriques, ôter tout bijou (anneaux, colliers et montres compris). Lorsqu'ils sont branchés à l'alimentation et reliés à la terre, les objets métalliques chauffent, ce qui peut provoquer des blessures graves ou souder l'objet métallique aux bornes.

Warnung Vor der Arbeit an Geräten, die an das Netz angeschlossen sind, jeglichen Schmuck (einschließlich Ringe, Ketten und Uhren) abnehmen. Metallgegenstände erhitzen sich, wenn sie an das Netz und die Erde angeschlossen werden, und können schwere Verbrennungen verursachen oder an die Anschlußklemmen angeschweißt werden.

Avvertenza Prima di intervenire su apparecchiature collegate alle linee di alimentazione, togliersi qualsiasi monile (inclusi anelli, collane, braccialetti ed orologi). Gli oggetti metallici si riscaldano quando sono collegati tra punti di alimentazione e massa: possono causare ustioni gravi oppure il metallo può saldarsi ai terminali.

Advarsel Fjern alle smykker (inkludert ringer, halskjeder og klokker) før du skal arbeide på utstyr som er koblet til kraftledninger. Metallgjenstander som er koblet til kraftledninger og jord blir svært varme og kan forårsake alvorlige brannskader eller smelte fast til polene.

Aviso Antes de trabalhar em equipamento que esteja ligado a linhas de corrente, retire todas as jóias que estiver a usar (incluindo anéis, fios e relógios). Os objectos metálicos aquecerão em contacto com a corrente e em contacto com a ligação à terra, podendo causar queimaduras graves ou ficarem soldados aos terminais.

¡Atención! Antes de operar sobre equipos conectados a líneas de alimentación, quitarse las joyas (incluidos anillos, collares y relojes). Los objetos de metal se calientan cuando se conectan a la alimentación y a tierra, lo que puede ocasionar quemaduras graves o que los objetos metálicos queden soldados a los bornes.

Varning! Tag av alla smycken (inklusive ringar, halsband och armbandsur) innan du arbetar på utrustning som är kopplad till kraftledningar. Metallobjekt hettas upp när de kopplas ihop med ström och jord och kan förorsaka allvarliga brännskador; metallobjekt kan också sammansvetsas med kontakterna.

Lightning Activity Warning

WARNING: Do not work on the system or connect or disconnect cables during periods of lightning activity.

Waarschuwing Tijdens onweer dat gepaard gaat met bliksem, dient u niet aan het systeem te werken of kabels aan te sluiten of te ontkoppelen.

Varoitus Älä työskentele järjestelmän parissa äläkä yhdistä tai irrota kaapeleita ukkosilmalla.

Avertissement Ne pas travailler sur le système ni brancher ou débrancher les câbles pendant un orage.

Warnung Arbeiten Sie nicht am System und schließen Sie keine Kabel an bzw. trennen Sie keine ab, wenn es gewittert.

Avvertenza Non lavorare sul sistema o collegare oppure scollegare i cavi durante un temporale con fulmini.

Advarsel Utfør aldri arbeid på systemet, eller koble kabler til eller fra systemet når det tordner eller lyner.

Aviso Não trabalhe no sistema ou ligue e desligue cabos durante períodos de mau tempo (trovoada).

¡Atención! No operar el sistema ni conectar o desconectar cables durante el transcurso de descargas eléctricas en la atmósfera.

Varning! Vid åska skall du aldrig utföra arbete på systemet eller ansluta eller koppla loss kablar.

Operating Temperature Warning

WARNING: To prevent the device from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature. To prevent airflow restriction, allow at least 6 in. (15.2 cm) of clearance around the ventilation openings.

Waarschuwing Om te voorkomen dat welke switch van de Juniper Networks router dan ook oververhit raakt, dient u deze niet te bedienen op een plaats waar de maximale aanbevolen omgevingstemperatuur van 40° C wordt overschreden. Om te voorkomen dat de luchtstroom wordt beperkt, dient er minstens 15,2 cm speling rond de ventilatie-openingen te zijn.

Varoitus Ettei Juniper Networks switch-sarjan reititin ylikuumentuisi, sitä ei saa käyttää tilassa, jonka lämpötila ylittää korkeimman suositellun ympäristölämpötilan 40° C. Ettei ilmanvaihto estyisi, tuuletusaukkojen ympärille on jätettävä ainakin 15,2 cm tilaa.

Avertissement Pour éviter toute surchauffe des routeurs de la gamme Juniper Networks switch, ne l'utilisez pas dans une zone où la température ambiante est supérieure à 40° C. Pour permettre un flot d'air constant, dégagez un espace d'au moins 15,2 cm autour des ouvertures de ventilations.

Warnung Um einen Router der switch vor Überhitzung zu schützen, darf dieser nicht in einer Gegend betrieben werden, in der die Umgebungstemperatur das empfohlene Maximum von 40° C überschreitet. Um Lüftungsverschluß zu verhindern, achten Sie darauf, daß mindestens 15,2 cm lichter Raum um die Lüftungsöffnungen herum frei bleibt.

Avvertenza Per evitare il surriscaldamento dei switch, non adoperateli in un locale che ecceda la temperatura ambientale massima di 40° C. Per evitare che la circolazione dell'aria sia impedita, lasciate uno spazio di almeno 15.2 cm di fronte alle aperture delle ventole.

Advarsel Unngå overoppheting av eventuelle rutere i Juniper Networks switch Disse skal ikke brukes på steder der den anbefalte maksimale omgivelsestemperaturen overstiger 40° C (104° F). Sørg for at klaringen rundt lufteåpningene er minst 15,2 cm (6 tommer) for å forhindre nedsatt luftsirkulasjon.

Aviso Para evitar o sobreaquecimento do encaminhador Juniper Networks switch, não utilize este equipamento numa área que exceda a temperatura máxima recomendada de 40° C. Para evitar a restrição à circulação de ar, deixe pelo menos um espaço de 15,2 cm à volta das aberturas de ventilação.

¡Atención! Para impedir que un encaminador de la serie Juniper Networks switch se recaliente, no lo haga funcionar en un área en la que se supere la temperatura ambiente máxima recomendada de 40° C. Para impedir la restricción de la entrada de aire, deje un espacio mínimo de 15,2 cm alrededor de las aperturas para ventilación.

Varning! Förhindra att en Juniper Networks switch överhettas genom att inte använda den i ett område där den maximalt rekommenderade omgivningstemperaturen på 40° C överskrids. Förhindra att luftcirkulationen inskränks genom att se till att det finns fritt utrymme på minst 15,2 cm omkring ventilationsöppningarna.

Product Disposal Warning

WARNING: Disposal of this device must be handled according to all national laws and regulations.

Waarschuwing Dit produkt dient volgens alle landelijke wetten en voorschriften te worden afgedankt.

Varoitus Tämän tuotteen lopullisesta hävittämisestä tulee huolehtia kaikkia valtakunnallisia lakeja ja säännöksiä noudattaen.

Avertissement La mise au rebut définitive de ce produit doit être effectuée conformément à toutes les lois et réglementations en vigueur.

Warnung Dieses Produkt muß den geltenden Gesetzen und Vorschriften entsprechend entsorgt werden.

Avvertenza L'eliminazione finale di questo prodotto deve essere eseguita osservando le normative italiane vigenti in materia

Advarsel Endelig disponering av dette produktet må skje i henhold til nasjonale lover og forskrifter.

Aviso A descartagem final deste produto deverá ser efectuada de acordo com os regulamentos e a legislação nacional.

¡Atención! El desecho final de este producto debe realizarse según todas las leyes y regulaciones nacionales

Varning! Slutlig kassering av denna produkt bör skötas i enlighet med landets alla lagar och föreskrifter.

General Electrical Safety Guidelines and Warnings

WARNING: Certain ports on the device are designed for use as intrabuilding (within-the-building) interfaces only (Type 2 or Type 4 ports as described in *GR-1089-CORE*) and require isolation from the exposed outside plant (OSP) cabling. To comply with NEBS requirements and protect against lightning surges and commercial power disturbances, the intrabuilding ports *must not* be metallically connected to interfaces that connect to the OSP or its wiring. The intrabuilding ports on the device are suitable for connection to intrabuilding or unexposed wiring or cabling only. The addition of primary protectors is not sufficient protection for connecting these interfaces metallically to OSP wiring.

Avertissement Certains ports de l'appareil sont destinés à un usage en intérieur uniquement (ports Type 2 ou Type 4 tels que décrits dans le document *GR-1089-CORE*) et doivent être isolés du câblage de l'installation extérieure exposée. Pour respecter les exigences NEBS et assurer une protection contre la foudre et les perturbations de tension secteur, les ports pour intérieur *ne doivent pas* être raccordés physiquement aux interfaces prévues pour la connexion à l'installation extérieure ou à son câblage. Les ports pour intérieur de l'appareil sont réservés au raccordement de câbles pour intérieur ou non exposés uniquement. L'ajout de protections ne constitue pas une précaution suffisante pour raccorder physiquement ces interfaces au câblage de l'installation extérieure.

CAUTION: Before removing or installing components of a device, connect an electrostatic discharge (ESD) grounding strap to an ESD point and wrap and fasten the other end of the strap around your bare wrist. Failure to use an ESD grounding strap could result in damage to the device.

Attention Avant de retirer ou d'installer des composants d'un appareil, raccordez un bracelet antistatique à un point de décharge électrostatique et fixez le bracelet à votre poignet nu. L'absence de port d'un bracelet antistatique pourrait provoquer des dégâts sur l'appareil.

- Install the device in compliance with the following local, national, and international electrical codes:
  - United States—National Fire Protection Association (NFPA 70), United States National Electrical Code.
  - Other countries—International Electromechanical Commission (IEC) 60364, Part 1 through Part 7.
  - Evaluated to the TN power system.

  - Canada—Canadian Electrical Code, Part 1, CSA C22.1.
  - Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75.

    Peut être installé dans des salles de matériel de traitement de l'information conformément à l'article 645 du National Electrical Code et à la NFPA 75.

- Locate the emergency power-off switch for the room in which you are working so that if an electrical accident occurs, you can quickly turn off the power.
- Make sure that grounding surfaces are cleaned and brought to a bright finish before grounding connections are made.
- Do not work alone if potentially hazardous conditions exist anywhere in your workspace.
- Never assume that power is disconnected from a circuit. Always check the circuit before starting to work.
- Carefully look for possible hazards in your work area, such as moist floors, ungrounded power extension cords, and missing safety grounds.
- Operate the device within marked electrical ratings and product usage instructions.
- To ensure that the device and peripheral equipment function safely and correctly, use the cables and connectors specified for the attached peripheral equipment, and make certain they are in good condition.

You can remove and replace many device components without powering off or disconnecting power to the device, as detailed elsewhere in the hardware documentation for this device. Never install equipment that appears to be damaged.

Action to Take After an Electrical Accident

If an electrical accident results in an injury, take the following actions in this order:

1. Use caution. Be aware of potentially hazardous conditions that could cause further injury.
2. Disconnect power from the device.
3. If possible, send another person to get medical aid. Otherwise, assess the condition of the victim, then call for help.

Prevention of Electrostatic Discharge Damage

Device components that are shipped in antistatic bags are sensitive to damage from static electricity. Some components can be impaired by voltages as low as 30 V. You can easily generate potentially damaging static voltages whenever you handle plastic or foam packing material or if you move components across plastic or carpets. Observe the following guidelines to minimize the potential for electrostatic discharge (ESD) damage, which can cause intermittent or complete component failures:

- Always use an ESD wrist strap when you are handling components that are subject to ESD damage, and make sure that it is in direct contact with your skin.

  If a grounding strap is not available, hold the component in its antistatic bag (see Figure 25 on page 92) in one hand and touch the exposed, bare metal of the device with the other hand immediately before inserting the component into the device.

  WARNING: For safety, periodically check the resistance value of the ESD grounding strap. The measurement must be in the range 1 through 10 Mohms.

  Avertissement Par mesure de sécurité, vérifiez régulièrement la résistance du bracelet antistatique. Cette valeur doit être comprise entre 1 et 10 mégohms (Mohms).

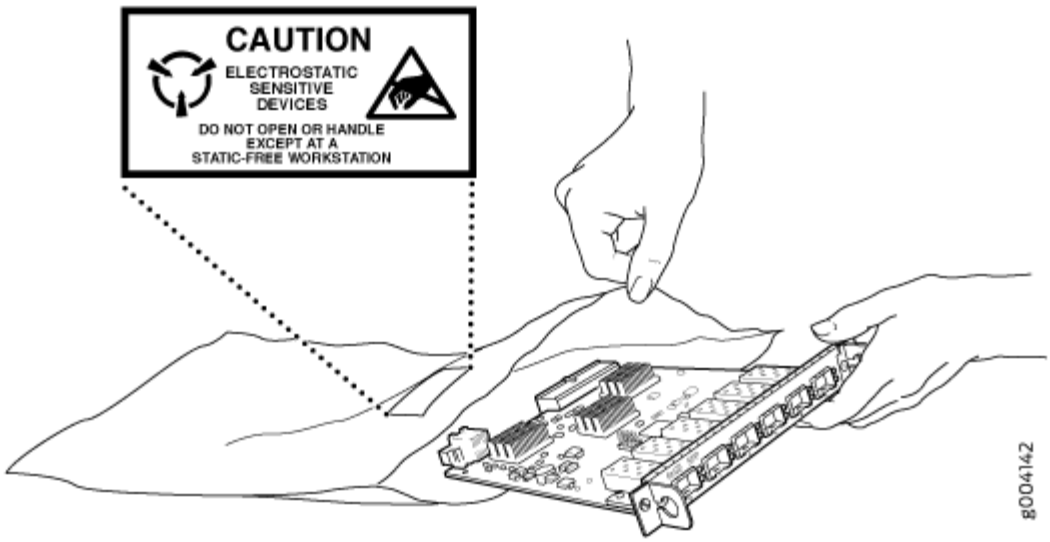
- When handling any component that is subject to ESD damage and that is removed from the device, make sure the equipment end of your ESD wrist strap is attached to the ESD point on the chassis.

  If no grounding strap is available, touch the exposed, bare metal of the device to ground yourself before handling the component.

- Avoid contact between the component that is subject to ESD damage and your clothing. ESD voltages emitted from clothing can damage components.

- When removing or installing a component that is subject to ESD damage, always place it component-side up on an antistatic surface, in an antistatic card rack, or in an antistatic bag (see Figure 25 on page 92). If you are returning a component, place it in an antistatic bag before packing it.

Figure 25: Placing a Component into an Antistatic Bag



CAUTION: ANSI/TIA/EIA-568 cables such as Category 5e and Category 6 can get electrostatically charged. To dissipate this charge, always ground the cables to a suitable and safe earth ground before connecting them to the system.

Attention Les câbles ANSI/TIA/EIA-568, par exemple Cat 5e et Cat 6, peuvent emmagasiner des charges électrostatiques. Pour évacuer ces charges, reliez toujours les câbles à une prise de terre adaptée avant de les raccorder au système.

AC Power Electrical Safety Guidelines

The following electrical safety guidelines apply to AC-powered devices:

- Note the following warnings printed on the device:

  "**CAUTION:** THIS UNIT HAS MORE THAN ONE POWER SUPPLY CORD. DISCONNECT ALL POWER SUPPLY CORDS BEFORE SERVICING TO AVOID ELECTRIC SHOCK."

"**ATTENTION:** CET APPAREIL COMPORTE PLUS D'UN CORDON D'ALIMENTATION. AFIN DE PRÉVENIR LES CHOCS ÉLECTRIQUES, DÉBRANCHER TOUT CORDON D'ALIMENTATION AVANT DE FAIRE LE DÉPANNAGE."

- AC-powered devices are shipped with a three-wire electrical cord with a grounding-type plug that fits only a grounding-type power outlet. Do not circumvent this safety feature. Equipment grounding must comply with local and national electrical codes.
- You must provide an external certified circuit breaker (2-pole circuit breaker or 4-pole circuit breaker based on your device) rated minimum 20 A in the building installation.
- The power cord serves as the main disconnecting device for the AC-powered device. The socket outlet must be near the AC-powered device and be easily accessible.
- For devices that have more than one power supply connection, you must ensure that all power connections are fully disconnected so that power to the device is completely removed to prevent electric shock. To disconnect power, unplug all power cords (one for each power supply).

Power Cable Warning (Japanese)

WARNING: The attached power cable is only for this product. Do not use the cable for another product.

注意

附属の電源コードセットはこの製品専用です。
他の電気機器には使用しないでください。

AC Power Disconnection Warning

WARNING: Before working on the device or near power supplies, unplug all the power cords from an AC-powered device.

Waarschuwing Voordat u aan een frame of in de nabijheid van voedingen werkt, dient u bij wisselstroom toestellen de stekker van het netsnoer uit het stopcontact te halen.

Varoitus Kytke irti vaihtovirtalaitteiden virtajohto, ennen kuin teet mitään asennuspohjalle tai työskentelet virtalähteiden läheisyydessä.

Avertissement Avant de travailler sur un châssis ou à proximité d'une alimentation électrique, débrancher le cordon d'alimentation des unités en courant alternatif.

Warnung Bevor Sie an einem Chassis oder in der Nähe von Netzgeräten arbeiten, ziehen Sie bei Wechselstromeinheiten das Netzkabel ab bzw.

Avvertenza Prima di lavorare su un telaio o intorno ad alimentatori, scollegare il cavo di alimentazione sulle unità CA.

Advarsel Før det utføres arbeid på kabinettet eller det arbeides i nærheten av strømforsyningsenheter, skal strømledningen trekkes ut på vekselstrømsenheter.

Aviso Antes de trabalhar num chassis, ou antes de trabalhar perto de unidades de fornecimento de energia, desligue o cabo de alimentação nas unidades de corrente alternada.

¡Atención! Antes de manipular el chasis de un equipo o trabajar cerca de una fuente de alimentación, desenchufar el cable de alimentación en los equipos de corriente alterna (CA).

Varning! Innan du arbetar med ett chassi eller nära strömförsörjningsenheter skall du för växelströmsenheter dra ur nätsladden.

DC Power Disconnection Warning

WARNING: Before performing any of the DC power procedures, ensure that power is removed from the DC circuit. To ensure that all power is off, locate the circuit breaker on the panel board that services the DC circuit, switch the circuit breaker to the OFF position, and tape the device handle of the circuit breaker in the OFF position.

Waarschuwing Voordat u een van de onderstaande procedures uitvoert, dient u te controleren of de stroom naar het gelijkstroom circuit uitgeschakeld is. Om u ervan te verzekeren dat alle stroom UIT is geschakeld, kiest u op het schakelbord de stroomverbreker die het gelijkstroom circuit bedient, draait de stroomverbreker naar de UIT positie en plakt de schakelaarhendel van de stroomverbreker met plakband in de UIT positie vast.

Varoitus Varmista, että tasavirtapiirissä ei ole virtaa ennen seuraavien toimenpiteiden suorittamista. Varmistaaksesi, että virta on KATKAISTU täysin, paikanna tasavirrasta

huolehtivassa kojetaulussa sijaitseva suojakytkin, käännä suojakytkin KATKAISTU-asentoon ja teippaa suojakytkimen varsi niin, että se pysyy KATKAISTU-asennossa.

Avertissement Avant de pratiquer l'une quelconque des procédures ci-dessous, vérifier que le circuit en courant continu n'est plus sous tension. Pour en être sûr, localiser le disjoncteur situé sur le panneau de service du circuit en courant continu, placer le disjoncteur en position fermée (OFF) et, à l'aide d'un ruban adhésif, bloquer la poignée du disjoncteur en position OFF.

Warnung Vor Ausführung der folgenden Vorgänge ist sicherzustellen, daß die Gleichstromschaltung keinen Strom erhält. Um sicherzustellen, daß sämtlicher Strom abgestellt ist, machen Sie auf der Schalttafel den Unterbrecher für die Gleichstromschaltung ausfindig, stellen Sie den Unterbrecher auf AUS, und kleben Sie den Schaltergriff des Unterbrechers mit Klebeband in der AUS-Stellung fest.

Avvertenza Prima di svolgere una qualsiasi delle procedure seguenti, verificare che il circuito CC non sia alimentato. Per verificare che tutta l'alimentazione sia scollegata (OFF), individuare l'interruttore automatico sul quadro strumenti che alimenta il circuito CC, mettere l'interruttore in posizione OFF e fissarlo con nastro adesivo in tale posizione.

Advarsel Før noen av disse prosedyrene utføres, kontroller at strømmen er frakoblet likestrømkretsen. Sørg for at all strøm er slått AV. Dette gjøres ved å lokalisere strømbryteren på brytertavlen som betjener likestrømkretsen, slå strømbryteren AV og teipe bryterhåndtaket på strømbryteren i AV-stilling.

Aviso Antes de executar um dos seguintes procedimentos, certifique-se que desligou a fonte de alimentação de energia do circuito de corrente contínua. Para se assegurar que toda a corrente foi DESLIGADA, localize o disjuntor no painel que serve o circuito de corrente contínua e coloque-o na posição OFF (Desligado), segurando nessa posição a manivela do interruptor do disjuntor com fita isoladora.

¡Atención! Antes de proceder con los siguientes pasos, comprobar que la alimentación del circuito de corriente continua (CC) esté cortada (OFF). Para asegurarse de que toda la alimentación esté cortada (OFF), localizar el interruptor automático en el panel que alimenta al circuito de corriente continua, cambiar el interruptor automático a la posición de Apagado (OFF), y sujetar con cinta la palanca del interruptor automático en posición de Apagado (OFF).

Varning! Innan du utför någon av följande procedurer måste du kontrollera att strömförsörjningen till likströmskretsen är bruten. Kontrollera att all strömförsörjning är BRUTEN genom att slå AV det överspänningsskydd som skyddar likströmskretsen och tejpa fast överspänningsskyddets omkopplare i FRÅN-läget.

DC Power Grounding Requirements and Warning

An insulated grounding conductor that is identical in size to the grounded and ungrounded branch circuit supply conductors but is identifiable by green and yellow stripes is installed as part of the branch circuit that supplies the device. The grounding conductor is a separately derived system at the supply transformer or motor generator set.

WARNING: When you install the device, the ground connection must always be made first and disconnected last.

Waarschuwing Bij de installatie van het toestel moet de aardverbinding altijd het eerste worden gemaakt en het laatste worden losgemaakt.

Varoitus Laitetta asennettaessa on maahan yhdistäminen aina tehtävä ensiksi ja maadoituksen irti kytkeminen viimeiseksi.

Avertissement Lors de l'installation de l'appareil, la mise à la terre doit toujours être connectée en premier et déconnectée en dernier.

Warnung Der Erdanschluß muß bei der Installation der Einheit immer zuerst hergestellt und zuletzt abgetrennt werden.

Avvertenza In fase di installazione dell'unità, eseguire sempre per primo il collegamento a massa e disconnetterlo per ultimo.

Advarsel Når enheten installeres, må jordledningen alltid tilkobles først og frakobles sist.

Aviso Ao instalar a unidade, a ligação à terra deverá ser sempre a primeira a ser ligada, e a última a ser desligada.

¡Atención! Al instalar el equipo, conectar la tierra la primera y desconectarla la última.

Varning! Vid installation av enheten måste jordledningen alltid anslutas först och kopplas bort sist.

DC Power Wiring Sequence Warning

WARNING: Wire the DC power supply using the appropriate lugs. When connecting power, the proper wiring sequence is ground to ground, +RTN to +RTN, then –48 V to –

48 V. When disconnecting power, the proper wiring sequence is –48 V to –48 V, +RTN to +RTN, then ground to ground. Note that the ground wire must always be connected first and disconnected last.

Waarschuwing De juiste bedradingsvolgorde verbonden is aarde naar aarde, +RTN naar +RTN, en –48 V naar – 48 V. De juiste bedradingsvolgorde losgemaakt is en –48 naar – 48 V, +RTN naar +RTN, aarde naar aarde.

Varoitus Oikea yhdistettava kytkentajarjestys on maajohto maajohtoon, +RTN varten +RTN, –48 V varten – 48 V. Oikea irrotettava kytkentajarjestys on –48 V varten – 48 V, +RTN varten +RTN, maajohto maajohtoon.

Avertissement Câblez l'approvisionnement d'alimentation CC En utilisant les crochets appropriés à l'extrémité de câblage. En reliant la puissance, l'ordre approprié de câblage est rectifié pour rectifier, +RTN à +RTN, puis –48 V à –48 V. En débranchant la puissance, l'ordre approprié de câblage est –48 V à –48 V, +RTN à +RTN, a alors rectifié pour rectifier. Notez que le fil de masse devrait toujours être relié d'abord et débranché pour la dernière fois. Notez que le fil de masse devrait toujours être relié d'abord et débranché pour la dernière fois.

Warnung Die Stromzufuhr ist nur mit geeigneten Ringösen an das DC Netzteil anzuschliessen. Die richtige Anschlusssequenz ist: Erdanschluss zu Erdanschluss, +RTN zu +RTN und dann -48V zu -48V. Die richtige Sequenz zum Abtrennen der Stromversorgung ist -48V zu -48V, +RTN zu +RTN und dann Erdanschluss zu Erdanschluss. Es ist zu beachten dass der Erdanschluss immer zuerst angeschlossen und als letztes abgetrennt wird.

Avvertenza Mostra la morsettiera dell alimentatore CC. Cablare l'alimentatore CC usando i connettori adatti all'estremità del cablaggio, come illustrato. La corretta sequenza di cablaggio è da massa a massa, da positivo a positivo (da linea ad L) e da negativo a negativo (da neutro a N). Tenere presente che il filo di massa deve sempre venire collegato per primo e scollegato per ultimo.

Advarsel Riktig tilkoples tilkoplingssekvens er jord til jord, +RTN til +RTN, –48 V til – 48 V. Riktig frakoples tilkoplingssekvens er –48 V til – 48 V, +RTN til +RTN, jord til jord.

Aviso Ate con alambre la fuente de potencia cc Usando los terminales apropiados en el extremo del cableado. Al conectar potencia, la secuencia apropiada del cableado se muele para moler, +RTN a +RTN, entonces –48 V a –48 V. Al desconectar potencia, la secuencia apropiada del cableado es –48 V a –48 V, +RTN a +RTN, entonces molió para moler. Observe que el alambre de tierra se debe conectar siempre primero y desconectar por último. Observe que el alambre de tierra se debe conectar siempre primero y desconectar por último.

¡Atención! Wire a fonte de alimentação de DC Usando os talões apropriados nan EXtremidade da fiação. Ao conectar a potência, a seqüência apropriada da fiação é moída para moer, +RTN a +RTN, então −48 V a −48 V. Ao desconectar a potência, a seqüência apropriada da fiação é −48 V a −48 V, +RTN a +RTN, moeu então para moer. Anote que o fio à terra deve sempre ser conectado primeiramente e desconectado por último. Anote que o fio à terra deve sempre ser conectado primeiramente e desconectado por último.

Varning! Korrekt kopplingssekvens ar jord till jord, +RTN till +RTN, −48 V till −48 V. Korrekt kopplas kopplingssekvens ar −48 V till −48 V, +RTN till +RTN, jord till jord.

DC Power Wiring Terminations Warning

WARNING: When stranded wiring is required, use approved wiring terminations, such as closed-loop or spade-type with upturned lugs. These terminations must be the appropriate size for the wires and must clamp both the insulation and conductor.

Waarschuwing Wanneer geslagen bedrading vereist is, dient u bedrading te gebruiken die voorzien is van goedgekeurde aansluitingspunten, zoals het gesloten-lus type of het grijperschop type waarbij de aansluitpunten omhoog wijzen. Deze aansluitpunten dienen de juiste maat voor de draden te hebben en dienen zowel de isolatie als de geleider vast te klemmen.

Varoitus Jos säikeellinen johdin on tarpeen, käytä hyväksyttyä johdinliitäntää, esimerkiksi suljettua silmukkaa tai kourumaista liitäntää, jossa on ylöspäin käännetyt kiinnityskorvat. Tällaisten liitäntöjen tulee olla kooltaan johtimiin sopivia ja niiden tulee puristaa yhteen sekä eristeen että johdinosan.

Avertissement Quand des fils torsadés sont nécessaires, utiliser des douilles terminales homologuées telles que celles à circuit fermé ou du type à plage ouverte avec cosses rebroussées. Ces douilles terminales doivent être de la taille qui convient aux fils et doivent être refermées sur la gaine isolante et sur le conducteur.

Warnung Wenn Litzenverdrahtung erforderlich ist, sind zugelassene Verdrahtungsabschlüsse, z.B. für einen geschlossenen Regelkreis oder gabelförmig, mit nach oben gerichteten Kabelschuhen zu verwenden. Diese Abschlüsse sollten die angemessene Größe für die Drähte haben und sowohl die Isolierung als auch den Leiter festklemmen.

Avvertenza Quando occorre usare trecce, usare connettori omologati, come quelli a occhiello o a forcella con linguette rivolte verso l'alto. I connettori devono avere la misura adatta per il cablaggio e devono serrare sia l'isolante che il conduttore.

Advarsel Hvis det er nødvendig med flertrådede ledninger, brukes godkjente ledningsavslutninger, som for eksempel lukket sløyfe eller spadetype med oppoverbøyde kabelsko. Disse avslutningene skal ha riktig størrelse i forhold til ledningene, og skal klemme sammen både isolasjonen og lederen.

Aviso Quando forem requeridas montagens de instalação eléctrica de cabo torcido, use terminações de cabo aprovadas, tais como, terminações de cabo em circuito fechado e planas com terminais de orelha voltados para cima. Estas terminações de cabo deverão ser do tamanho apropriado para os respectivos cabos, e deverão prender simultaneamente o isolamento e o fio condutor.

¡Atención! Cuando se necesite hilo trenzado, utilizar terminales para cables homologados, tales como las de tipo "bucle cerrado" o "espada", con las lengüetas de conexión vueltas hacia arriba. Estos terminales deberán ser del tamaño apropiado para los cables que se utilicen, y tendrán que sujetar tanto el aislante como el conductor.

Varning! När flertrådiga ledningar krävs måste godkända ledningskontakter användas, t.ex. kabelsko av sluten eller öppen typ med uppåtvänd tapp. Storleken på dessa kontakter måste vara avpassad till ledningarna och måste kunna hålla både isoleringen och ledaren fastklämda.

Multiple Power Supplies Disconnection Warning

WARNING: The network device has more than one power supply connection. All connections must be removed completely to remove power from the unit completely.

Waarschuwing Deze eenheid heeft meer dan één stroomtoevoerverbinding; alle verbindingen moeten volledig worden verwijderd om de stroom van deze eenheid volledig te verwijderen.

Varoitus Tässä laitteessa on useampia virtalähdekytkentöjä. Kaikki kytkennät on irrotettava kokonaan, jotta virta poistettaisiin täysin laitteesta.

Avertissement Cette unité est équipée de plusieurs raccordements d'alimentation. Pour supprimer tout courant électrique de l'unité, tous les cordons d'alimentation doivent être débranchés.

Warnung Diese Einheit verfügt über mehr als einen Stromanschluß; um Strom gänzlich von der Einheit fernzuhalten, müssen alle Stromzufuhren abgetrennt sein.

Avvertenza Questa unità ha più di una connessione per alimentatore elettrico; tutte le connessioni devono essere completamente rimosse per togliere l'elettricità dall'unità.

Advarsel Denne enheten har mer enn én strømtilkobling. Alle tilkoblinger må kobles helt fra for å eliminere strøm fra enheten.

Aviso Este dispositivo possui mais do que uma conexão de fonte de alimentação de energia; para poder remover a fonte de alimentação de energia, deverão ser desconectadas todas as conexões existentes.

¡Atención! Esta unidad tiene más de una conexión de suministros de alimentación; para eliminar la alimentación por completo, deben desconectarse completamente todas las conexiones.

Varning! Denna enhet har mer än en strömförsörjningsanslutning; alla anslutningar måste vara helt avlägsnade innan strömtillförseln till enheten är fullständigt bruten.

TN Power Warning

WARNING: The device is designed to work with a TN power system.
Waarschuwing Het apparaat is ontworpen om te functioneren met TN energiesystemen.

Varoitus Koje on suunniteltu toimimaan TN-sähkövoimajärjestelmien yhteydessä.

Avertissement Ce dispositif a été conçu pour fonctionner avec des systèmes d'alimentation TN.

Warnung Das Gerät ist für die Verwendung mit TN-Stromsystemen ausgelegt.

Avvertenza Il dispositivo è stato progettato per l'uso con sistemi di alimentazione TN.

Advarsel Utstyret er utfomet til bruk med TN-strømsystemer.

Aviso O dispositivo foi criado para operar com sistemas de corrente TN.

¡Atención! El equipo está diseñado para trabajar con sistemas de alimentación tipo TN.

Varning! Enheten är konstruerad för användning tillsammans med elkraftssystem av TN-typ.

JATP400 Agency Approvals and Compliance Statements

IN THIS SECTION

Agency Approvals for the JATP400 Appliance

JATP400 comply with the following standards:

- Safety
  - CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10
  - EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
  - EN 60825-1 Safety of Laser Products - Part 1: Equipment Classification, Requirements and User's Guide
  - EN 60825-2 Safety of Laser Products - Part 2: Safety of Optical Fiber Communication Systems
  - UL 60950-1, 2nd Edition, 2014-10-14: Information Technology Equipment - Safety (U.S.)
  - TUV/GS to EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
  - IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013

All 60950-based standards to be evaluated using 2000m altitude

- CE

- EMC
  - FCC Part 15 Class A (2007) USA Radiated Emissions
  - EN 55022 Class A (2006) European Radiated Emissions
  - VCCI Class A (2007) Japanese Radiated Emissions
  - BSMI Class A (Taiwan)
  - EN 300 386 V1.3.3 (2005) Telecom Network Equipment— EMC requirements
  - ICES-003 Class A
  - AS/NZS CISPR 22 Class A
  - CISPR 22 Class A
- Immunity
  - EN-61000-3-2 Power Line Harmonics
  - EN-61000-3-3 Voltage Fluctuations and Flicker
  - EN-61000-4-2 ESD
  - EN-61000-4-3 Radiated Immunity
  - EN-61000-4-4 EFT
  - EN-61000-4-5 Surge
  - EN-61000-4-6 conducted Immunity
  - EN-61000-4-11 Voltage Dips and Sags
  - EN 55024 +A1+A2 (1998) Information Technology
  - 1KV / 2KV surge required (no 4KV / DT)
- Environmental
  - Reduction of Hazardous Substances (ROHS) 6
- Telco
  - Common Language Equipment Identifier (CLEI) code

- FIPS requirements
  - FIPS 140-2 Level 1
- Regional country certifications
  - USA
    - Safety Certification - UL 60950-1
    - EMC – FCC Class A
    - Network homologation –TIA-966
  - Canada
    - Safety Certification - CSA 60950-1
    - EMC – ICES Class A
    - Network homologation –CS-03
  - Australia
    - Safety Certification - AS / NZS 60950-1
    - EMC – AS / NZS CISPR22 Class A
    - Network homologation – AS / ACIF S 002, S 016, S 0431, S043.2
  - New Zealand
    - Safety Certification - AS / NZS 60950-1
    - EMC – AS / NZS CISPR22 Class A
    - Network homologation – PTC217, PTC273
  - Japan
    - Safety Certification - CB Scheme
    - EMC – VCC1 Class A
    - Network homologation – Certificate for Technical Conditions
  - Europe
    - Safety Certification - EN 60950-1
    - EMC – EN 55022 Class A

    - Network homologation – CTR 12 /13, CTR21, DOC
- NEBS — Not compliant

Compliance Statements for Acoustic Noise for the JATP400 Appliance

The maximum emitted sound pressure level is 65 dB(A) or less per EN ISO 7779.

German Translation:

Maschinenlärminformations-Verordnung - 3. GPSGV, der höchste Schalldruckpegel beträgt 65 dB(A) oder weniger gemäss EN ISO 7779.

Compliance Statement for Argentina

EQUIPO DE USO IDÓNEO.

RELATED DOCUMENTATION

General Safety Guidelines and Warnings | 66

Chassis Lifting Guidelines for the JATP400 Appliance | 72