



Extreme Security Intrusion Prevention System Hardware Replacement Guide

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Preface

Text Conventions

The following tables list text conventions that are used throughout this guide.

Table 1: Notice Icons

Icon	Notice Type	Alerts you to...
	Tip	Helpful tips for using the product.
	Note	Important features or instructions.
	Caution	Risk of personal injury, system damage, or loss of data.
	Warning	Risk of severe personal injury.
	New	This command or section is new for this release.

Table 2: Text Conventions

Convention	Description
Screen displays	This typeface indicates command syntax, or represents information as it appears on the screen.
The words enter and type	When you see the word “enter” in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says “type.”
[Key] names	Key names are written with brackets, such as [Return] or [Esc]. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press [Ctrl]+[Alt]+[Del]
Words in <i>italicized type</i>	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.

Providing Feedback to Us

We are always striving to improve our documentation and help you work better, so we want to hear from you! We welcome all feedback but especially want to know about:

- Content errors or confusing or conflicting information.
- Ideas for improvements to our documentation so you can find the information you need faster.
- Broken links or usability issues.

If you would like to provide feedback to the Extreme Networks Information Development team about this document, please contact us using our short [online feedback form](#). You can also email us directly at InternalInfoDev@extremenetworks.com.

Getting Help

If you require assistance, contact Extreme Networks Global Technical Assistance Center using one of the following methods:

Web	www.extremenetworks.com/support
Phone	1-800-872-8440 (toll-free in U.S. and Canada) or 1-603-952-5000 For the Extreme Networks support phone number in your country: www.extremenetworks.com/support/contact
Email	support@extremenetworks.com To expedite your message, enter the product name or model number in the subject line.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number
- A description of the failure
- A description of any action(s) already taken to resolve the problem (for example, changing mode switches or rebooting the unit)
- The serial and revision numbers of all involved Extreme Networks products in the network
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load and frame size at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any previous Return Material Authorization (RMA) numbers

Related Publications

The Extreme Security product documentation listed below can be downloaded from <http://documentation.extremenetworks.com>.

Extreme Security Analytics Threat Protection

- *Extreme Networks Security API Reference Guide*
- *Extreme Networks Security Application Configuration Guide*
- *Extreme Networks Security Ariel Query Language Guide*
- *Extreme Networks Security DSM Configuration Guide*
- *Extreme Security DSM Configuration Guide Addendum*
- *Extreme Networks Security Hardware Guide*
- *Extreme Networks Security Installation Guide*
- *Extreme Networks Security Juniper NSM Plug-in User Guide*
- *Extreme Networks Security Log Manager Administration Guide*

- *Extreme Networks Security Log Sources User Guide*
- *Extreme Networks Security Managing Log Sources Guide*
- *Extreme Networks Security Offboard Storage Guide*
- *Extreme Security Release Notes*
- *Extreme Networks Security Risk Manager Adapter Configuration Guide*
- *Extreme Networks Security Risk Manager Getting Started Guide*
- *Extreme Networks Security Risk Manager Installation Guide*
- *Extreme Networks Security Risk Manager Migration Guide*
- *Extreme Networks Security Risk Manager User Guide*
- *Extreme Networks Security Troubleshooting System Notifications Guide*
- *Extreme Networks Security Upgrade Guide*
- *Extreme Networks Security Vulnerability Manager Release Notes*
- *Extreme Networks Security Vulnerability Manager User Guide*
- *Extreme Networks Security WinCollect User Guide*
- *Extreme Networks SIEM Administration Guide*
- *Extreme Networks SIEM Getting Started Guide*
- *Extreme Networks SIEM High Availability Guide*
- *Extreme Networks SIEM Troubleshooting Guide*
- *Extreme Networks SIEM Tuning Guide*
- *Extreme Networks SIEM Users Guide*
- *Migrating Extreme Security Log Manager to Extreme SIEM*

Extreme Security Threat Protection

- *Extreme Security Intrusion Prevention System Hardware Replacement Guide*
- *Extreme Security Threat Protection Release Notes*

1 Rack Mount Guide

Installing the Appliance in a Rack

The slide rails are for a 19 inch (48.26 centimeter) rack. The appliance ships with a slide rail kit and a shipping bracket kit. The contents of the slide rail kit are required to install the appliance. You can use the shipping bracket kit if you plan to transport the rack cabinet to another location. If any of the following parts are not included in your shipment, contact your place of purchase.

The slide rail kit includes the following parts:

- Two slide rails
- Four screws (M6) to secure the brackets to the appliance
- Two screws (10-32)

The shipping bracket kit includes the following parts:

- Two shipping brackets (left and right)
- Four cage nuts
- Four clip nuts
- Four screws (M6)

Installing the Slide Rails in the Rack Frame



Note

If the slide rails in your rack installation kit came with shipping thumbscrews, remove them before you start installing the appliance.

Complete the following steps to install the slide rails in the rack frame:

- 1 Open the front slide rail latches, as shown in [Figure 1: View of the Slide Rails](#) on page 8.
 - a Notice that each slide rail is marked with either an **R** (right) or an **L** (left).
 - b Select one of the slide rails and push up on the front moveable tab **1**; then, pull out the front latch **2**.
 - c If a thumbscrew is installed in the slide rail **3**, remove the thumbscrew.

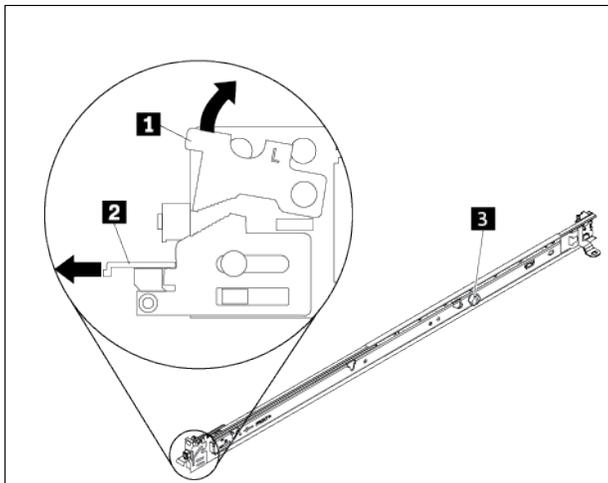


Figure 1: View of the Slide Rails

- 2 Install the rear end of the slide rails, as shown in [Figure 2: Install the Rear End of the Slide Rails](#) on page 8.
 - a From the front of the rack, line up the three pins on the rear of the slide rail with the three holes in the selected **U** on the rear of the rack.
 - b Push the rails so that the pins go into the holes **1**, and latch down into place **2** until it latches into place.



Note

If you are installing the slide rails into a space with devices already installed directly above and below, you must extend the slide rails to slide the rear of the slide rails into the rear of the rack.

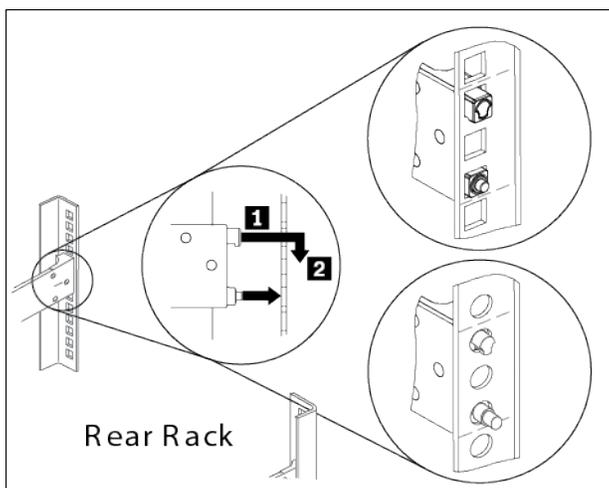


Figure 2: Install the Rear End of the Slide Rails

- 3 Install the front end of the slide rails, as shown in [Figure 3: Install the Front End of the Slide Rails](#) on page 9:
 - a Pull the slide rail forward and insert the two pins **1** on the front of the rail into the two lower holes in the **U** on the front of the rack.

- b Drop the rail into place until it clicks. Push the front latch **2** in all the way.
- c Repeat steps 1 through 3 to install the other rail into the rack. Make sure that each front latch is fully engaged.

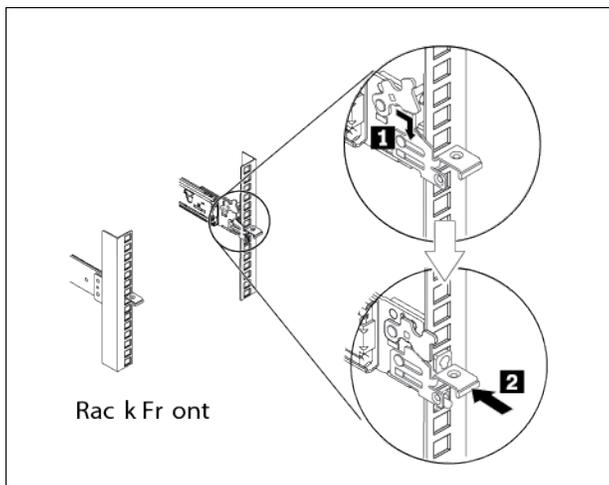


Figure 3: Install the Front End of the Slide Rails

- 4 Secure the appliance slide rails in the rack, as shown in [Figure 4: Secure the Appliance on Slide Rails in the Rack](#) on page 9:
 - a Install a 10-32 screw in the rear of the right slide.
 - b Install a 10-32 screw in the rear of the left slide.

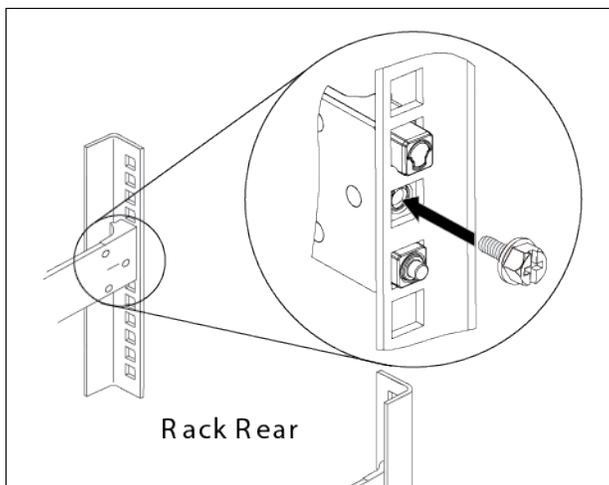


Figure 4: Secure the Appliance on Slide Rails in the Rack

Installing the Appliance on the Slide Rails

For 1U appliances:



Caution

The weight of this part or unit is heavy but has a weight smaller than 18 kg (39.7 lb). Use care when lifting, removing, or installing this part or unit. (C008)

For 2U appliances:



Caution

The weight of this part or unit is between 18 and 32 kg (39.7 and 70.5 lb). It takes two persons to safely lift this part or unit. (C009)



Danger

Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices. (R001 part 1 of 2)



Caution

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturers recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- (For *sliding drawers*) Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.
- (For *fixed drawers*) This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack. (R001 part 2 of 2)



To install the appliance on the slide rails, complete the following steps as shown in [Figure 5: Secure the Appliance in the Rack](#) on page 11:

- 1 Pull the slide rail forward 1.
- 2 Use one or two people (depending on your appliance model) to carefully lift the appliance 2 and tilt it into position over the slide rails so that the rear nail heads 3 on the appliance line up with the rear slots 4 on the slide rails.
- 3 Slide the appliance down until the rear nail heads slip into the two rear slots, and then slowly lower the front of the appliance 5 until the other nail heads slip into the other slots on the slide rails.
- 4 Make sure that the front latch 6 slides over the nail heads.

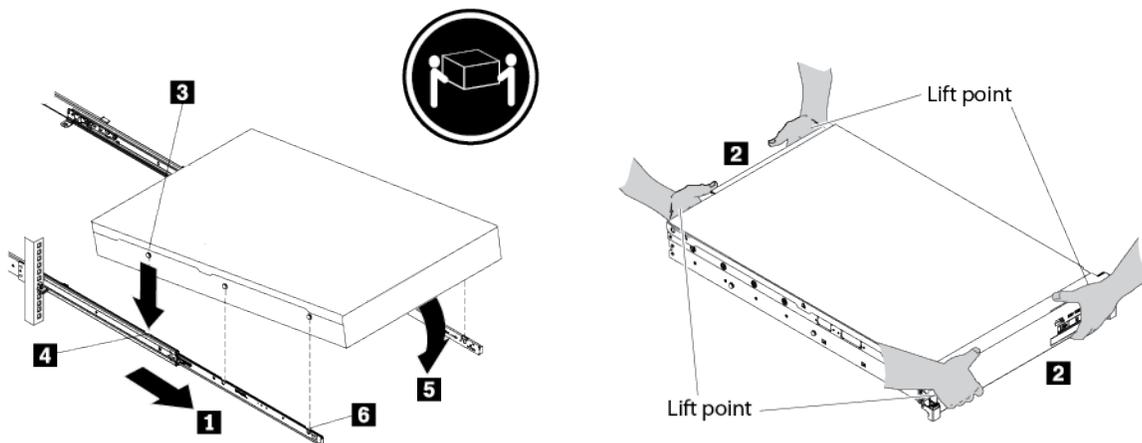


Figure 5: Secure the Appliance in the Rack

- 5 If the appliance is locked into place, slide the appliance toward you so that you can attach the brackets with the captive screws.
- 6 Slide the appliance into the rack, as shown in [the figure below](#).

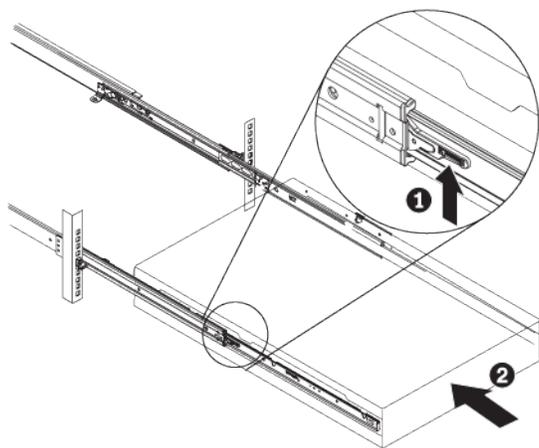


Figure 6: Slide the Appliance into the Rack

2 Replacing a Fan Assembly

Before You Begin

You must have the applicable replacement fan assembly before you can remove and replace the failed fan assembly.

Identifying a Failed Fan Assembly

The back panel of the appliance contains three user-accessible fan modules, as highlighted in yellow in [Figure 7: Location of the fan modules on the back of the appliance](#) on page 12. During normal operation, the LED for the fan module is not illuminated. If one of the fan modules experiences a failure, the LED for the failed fan module is illuminated in amber.

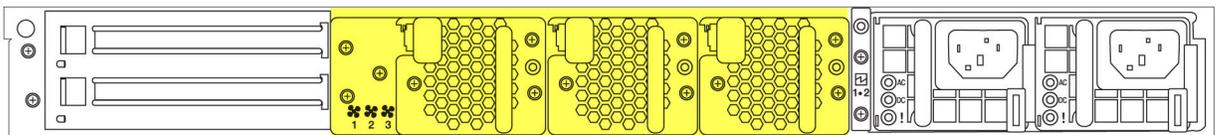


Figure 7: Location of the fan modules on the back of the appliance

Procedure

Complete the following steps to replace a fan assembly:

- 1 Pinch the orange retention clip on the fan module to release the fan assembly from the chassis.
- 2 Pull the fan assembly out of the chassis, as shown in [the following figure](#).

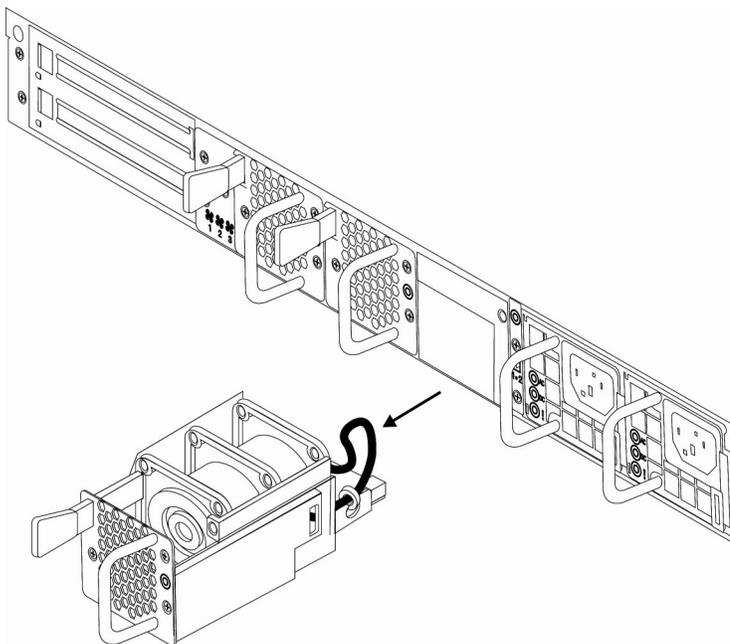


Figure 8: Removing a fan assembly from the back of the appliance

- 3 Slide the replacement fan assembly into the fan assembly bay. The fan assembly is secured in the chassis.

Results

The fan module LED is not illuminated in amber and the fan starts to circulate air.

3 Identifying a Failed Power Supply

Each power supply unit uses an LED that indicates whether the unit is working as expected. The following figure describes the LEDs that are displayed by the power supply units for the appliance:

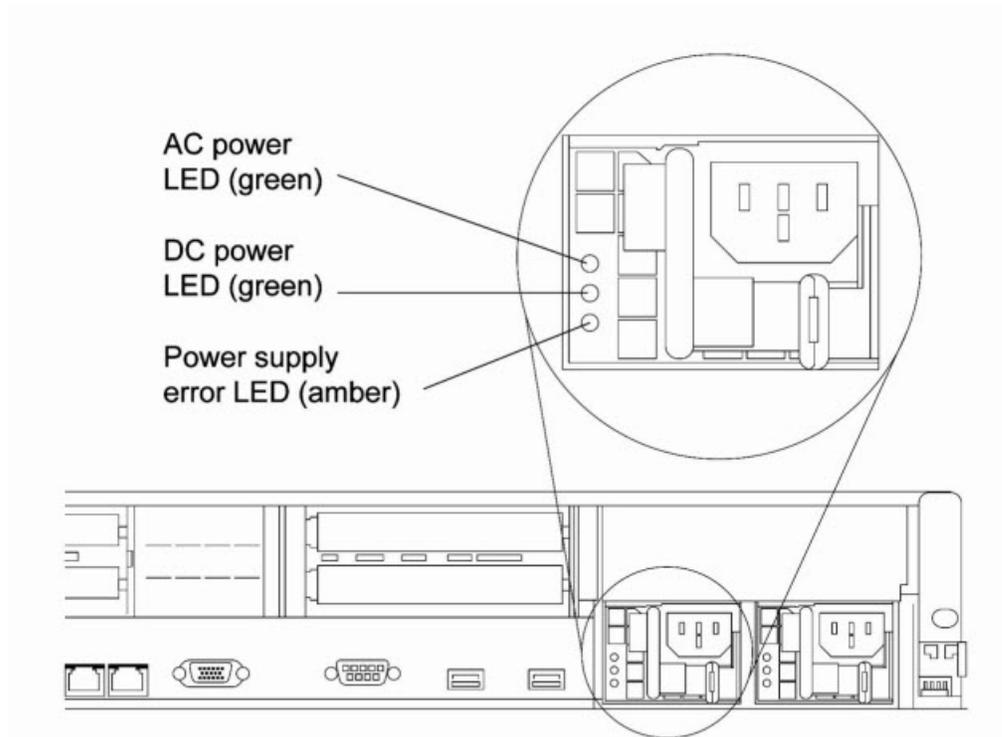


Figure 9: Power supply LEDs

The following table indicates the potential problems that can occur with the power supply and suggests actions for you to use to correct the detected problems:

Table 3: Power supply LED combinations for detecting potential problems

AC	DC	Error	Description	Action	Notes
Off	Off	Off	No AC power is going to the appliance, or there is a problem with the AC power source.	<ol style="list-style-type: none"> 1 Check the AC power that is going to the appliance. 2 Make sure that the power cord is connected to a functioning power source. 3 Turn off the appliance and then turn the appliance back on. 4 If the problem remains, replace the power supply. 	This condition is normal when no AC power is present.
Off	Off	On	No AC power is going to the appliance, or there is a problem with the AC power source and the power supply detected an internal problem.	<ol style="list-style-type: none"> 1 Replace the power supply. 2 Make sure that the power cord is connected to a functioning power source. 	This condition occurs when a second power supply is providing power to the appliance.
Off	On	Off	The power supply is faulty.	Replace the power supply.	N/A
Off	On	On	The power supply is faulty.	Replace the power supply.	N/A
On	Off	Off	The power supply is not fully seated.	<ol style="list-style-type: none"> 1 Reseat the power supply. 2 If a power channel error LED on the system board is not illuminated, replace the power supply. 	This condition usually indicates that a power supply is not fully seated.
On	Off or flashing	On	The power supply is faulty.	Replace the power supply.	N/A
On	On	Off	The power supply is operating normally.	N/A	N/A
On	On	On	The power supply is faulty but it is still operational.	Replace the power supply.	N/A

Replacing a Failed Power Supply

Before you begin: When you replace a failed power supply, make sure that you do not unplug the power supply unit that is working because this action disrupts service to the appliance.

Procedure

Complete the following steps to replace a failed power supply:

- 1 Remove the failed power supply from the power supply bay by pinching the side clip and pulling the failed power supply from the bay, as shown in [Figure 10: Removing the power supply from the back of the appliance](#) on page 16.

**Important**

During normal operation, each power supply bay must contain either a power supply or a power supply blank for proper cooling.

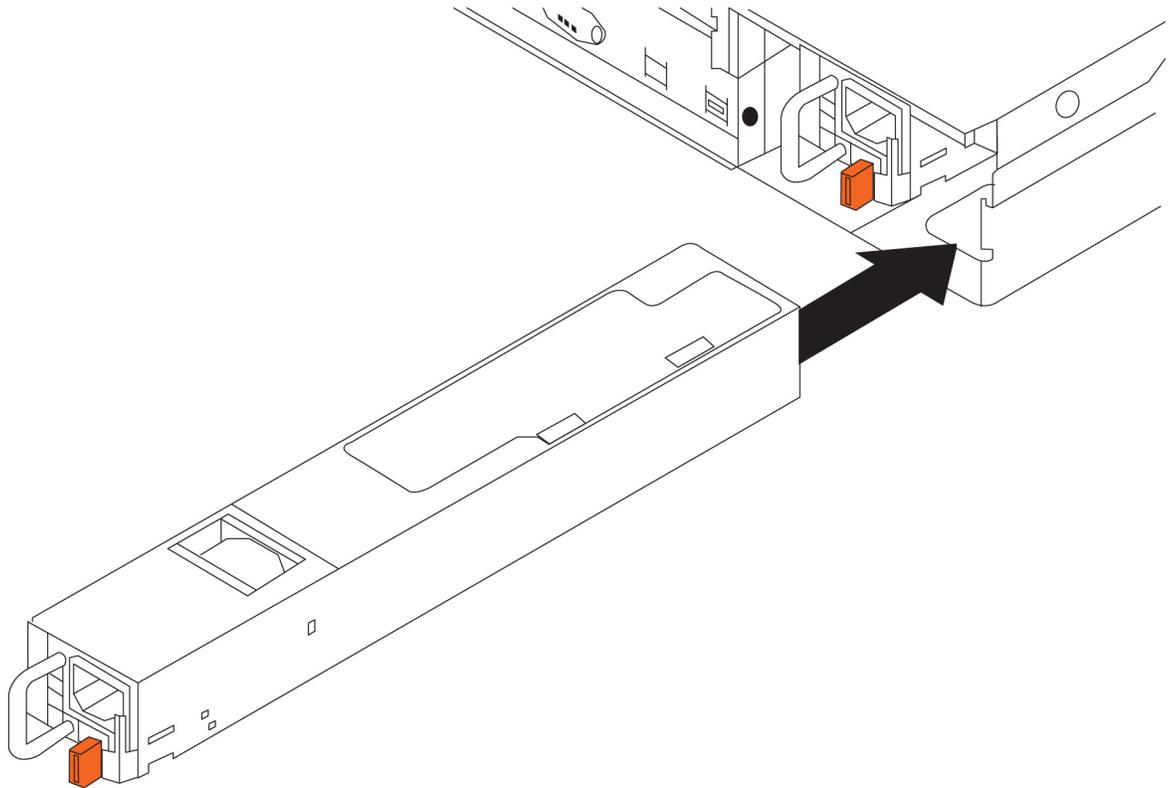


Figure 10: Removing the power supply from the back of the appliance

- 2 Slide the AC power supply into the bay until the retention latch clicks into place. Make sure that the power supply connects firmly to the power supply connector.
- 3 Connect the power cord for the new AC power supply to the power cord connector on the power supply. [The following figure](#) shows the AC power supply connectors on the back of the appliance:

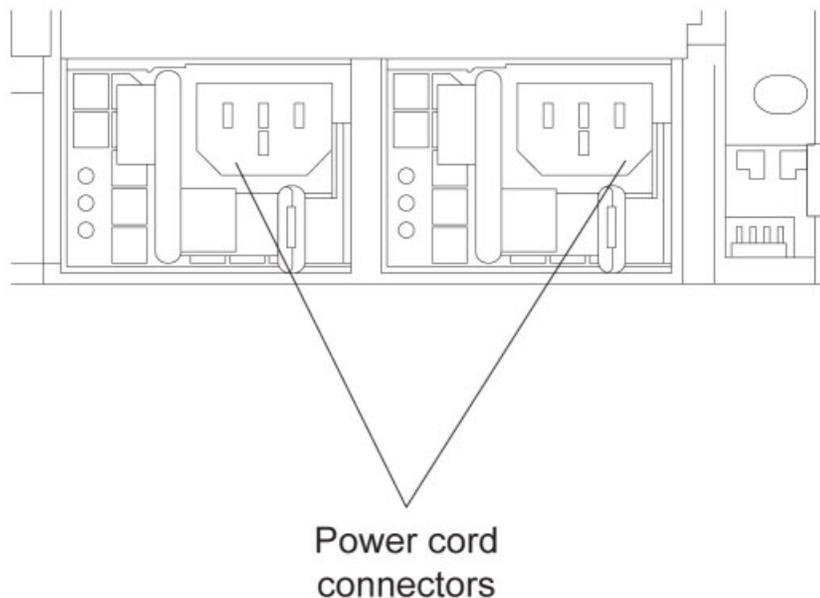


Figure 11: Identifying the power cord connectors

- 4 Route the power cord through the power supply handle and through any cable clamps on the back of the appliance to prevent the power cord from being accidentally pulled out when you slide the appliance into and out of the rack.
- 5 Connect the power cord to a properly grounded electrical outlet.

What to do Next

Make sure that the AC power LED and the DC power LED on the AC power supply are illuminated, which indicates that the power supply is operating correctly. The two power LEDs are to the left of the power cord connector.

- 5 Set aside the failed module.



Attention

Make sure that the gold connectors at the rear of the module do not come into contact with your hands or with the packing material as you unpack the replacement module. The gold connectors can be damaged if they touch the chassis as you insert the replacement module.

- 6 Unpack the replacement module.
- 7 Carefully align the replacement module, and fully insert and push the module forward into the chassis until the module is in place.
- 8 Push the blue latch on the front of appliance back into place.
- 9 Plug in all of the power cords that are attached to the appliance.
- 10 Turn on the appliance by pressing the power button on the front of the appliance.
- 11 Verify that the LCD panel on the front of the appliance is illuminated.

What to do Next

Check whether the new module is working correctly by logging in to the appliance LMI and verifying that the new module was recognized by the appliance.

5 Replacing a Disk Drive Assembly

Before you begin, you must have the applicable replacement disk drive assembly before you can remove and replace the failed disk drive assembly.

Identifying the Disk Drive Assembly

The front panel of the appliance contains the disk drive assembly, as highlighted in yellow in the following figure.

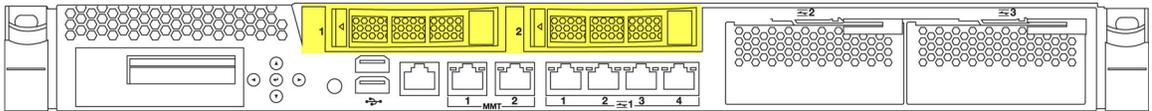


Figure 14: Location of the disk drive assembly on the front of the appliance

Procedure

Complete the following steps to replace a failed disk drive assembly:

- 1 Turn off the appliance by pressing the power button on the front of the appliance.
- 2 Unplug all of the power cords that are attached to the appliance.
- 3 Press the release button on the left of the disk drive assembly to release the assembly lock.
- 4 Pull the drive handle lever to the right to pull the disk drive assembly from the drive bay, as shown in the figure below.

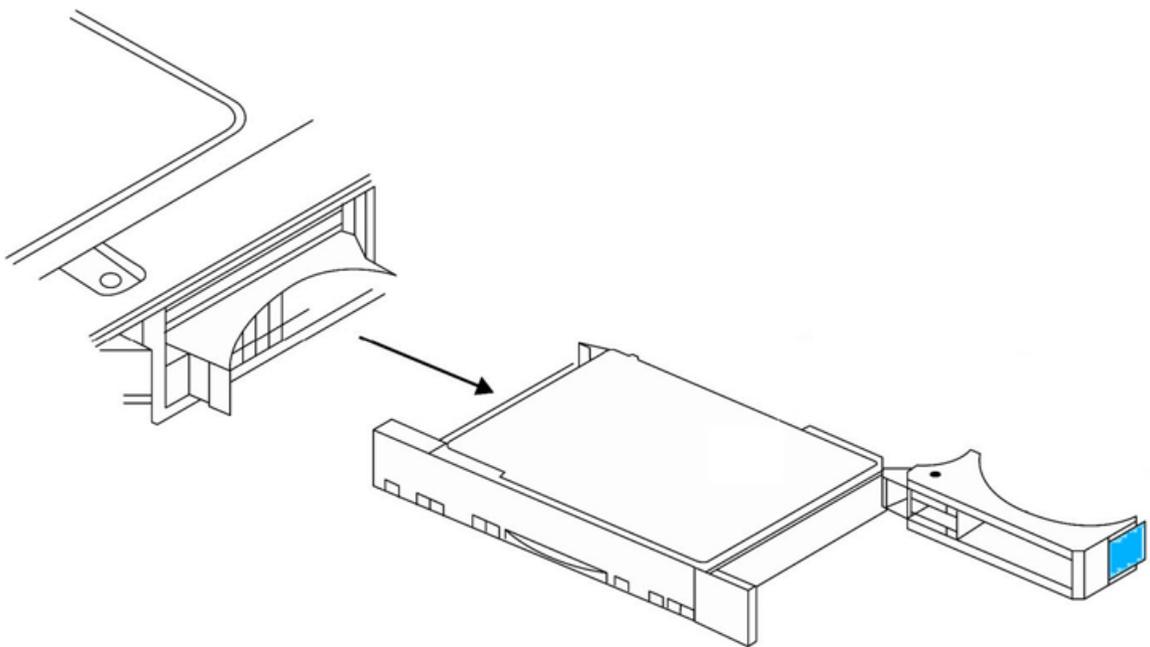


Figure 15: Removing the disk drive assembly from the drive bay

- 5 Place the new disk drive assembly in the drive bay.
- 6 Push the disk drive assembly into the drive bay until the lever locks into place.

What to do next

Turn on the appliance and re-image the appliance.



Important

You must re-image the appliance after you replace the drive in the appliance. If you do not re-image the appliance, the appliance might become inoperable.
