Maintenance and Upgrade

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Remove and Replace the Network Module

Take note of the following warnings:

⚠️ Warning
Statement 1030—Equipment Installation
Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

⚠️ Warning
Statement 1073—No User-Serviceable Parts
No user-serviceable parts inside. Do not open.

You can remove and replace the network module in the Firepower 2130 and 2140. Although the hardware supports removing and replacing the network module while the system is running, the software does not currently support hot swapping. You must power down the chassis to remove and replace network modules. See Network Modules for more information about Firepower network modules.

Step 1
Save your configuration.

Step 2
Power down the appliance by moving the power switch to the OFF position. See Rear Panel for more information about the power switch.

Step 3
To remove a network module, loosen the captive screw on the lower left side of the network module and pull out the handle that is connected to the screw. This mechanically ejects the network module from the slot.
If the slot is to remain empty, install a blank faceplate to ensure proper airflow and to keep dust out of the chassis; otherwise, install another network module.

**Step 4** To replace a network module, hold the network module in front of the network module slot on the right of the chassis and pull the network module handle out.

**Step 5** Slide the network module into the slot and push it firmly into place until the handle is flush with the front of the network module.

**Step 6** Tighten the captive screw on the lower left side of the network module.

**Step 7** Power on the chassis so that the new network module is recognized.

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**What to do next**

Follow the procedures in the FXOS Configuration Guide to connect to the network module and make sure that it has been discovered correctly by the security appliance.

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**Remove and Replace the SSD**

Take note of the following warnings:

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**Warning** **Statement 1030**—Equipment Installation

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.
**Warning**

**Statement 1073—No User-Serviceable Parts**

No user-serviceable parts inside. Do not open.

Although the hardware supports removing and replacing SSDs while the system is running, the software does not currently support hot swapping. You must power down the chassis to remove and replace SSDs.

**Note**

The 100-GB SSD is restricted to the 2110 and 2120 models. The 200-GB SSD is restricted to the 2130 and 2140 models. Do not mix them.

You can install a Malware Storage Pack (MSP) in slot 2. The MSP stores threat detection data for use in future analysis. It supports the Advanced Malware Protection (AMP) software feature. It is used as both storage and as the Malware application repository. RAID is not supported.

**Caution**

Do not switch the two SSDs. You MUST install the MSP in slot 2. If you remove it and install it in slot 1, all stored capture data are lost.

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**Step 1**

Save your configuration.

**Step 2**

Power down the chassis by moving the power switch to the OFF position. See Rear Panel for more information on the power switch.

**Step 3**

To remove the SSD in slot 1, face the front of the chassis, loosen the two captive screws on the SSD, and gently pull it out of the chassis.
Remove and Replace the Power Supply Module

Take note of the following warnings:

⚠️ Warning  Statement 1002—DC Power Supply

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

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Step 4
To replace the SSD in slot 1, make sure the power switch is still in the OFF position, and then hold the SSD in front of slot 1 and push it in gently until it is seated.

Step 5
To install the MSP SSD, make sure the power switch is still in the OFF position, and then remove the blank faceplate in Slot 2 by loosening the captive screws on either side of the faceplate.

Step 6
Hold the MSP SSD in front of slot 2 and push it in gently until it is seated.

⚠️ Caution   Do not switch the two SSDs. The MSP MUST be installed in slot 2. If you remove it and install it in slot 1, all stored file capture data are lost.

Step 7
Tighten the captive screws on either side of the SSD.

Step 8
Check the SSD LED to make sure the SSD is operative. See Front Panel LEDs for a description of the SSD LEDs.
Before performing any of the following procedures, ensure that power is removed from the DC circuit.

There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

A readily accessible two-poled disconnect device must be incorporated in the fixed wiring.

Use copper conductors only.

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

When installing or replacing the unit, the ground connection must always be made first and disconnected last.

No user-serviceable parts inside. Do not open.

Power supply modules are hot swappable. You can remove and replace power supply modules while the system is running.

**Step 1**
Unplug the power supply cable before removing the power supply module. You cannot disengage the power supply module latch without first removing the cable.

**Step 2**
To remove a power supply module, face the back of the chassis and grasp the handle.

**Step 3**
Press the latch found on the middle of the power supply to disengage the power supply.

**Step 4**
Place your other hand under the power supply module to support it while you slide it out of the chassis.
If the slot is to remain empty, install a blank faceplate to ensure proper airflow and to keep dust out of the chassis; otherwise, install another power supply module.

**Step 5**  To replace a power supply module, hold the power supply module with both hands and slide it into the power supply module bay.

**Step 6**  Push in the power supply module gently until you hear the latch engage and it is seated.

**Step 7**  Plug in the power supply cable.

**Step 8**  Check the LED on the power supply to make sure the power supply is operative. See Power Supply Modules

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**Connect the DC Power Supply Module**

Take note of the following warnings:

**⚠️ Warning**  **Statement 1030**—Equipment Installation

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

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**⚠️ Warning**  **Statement 1073**—No User-Serviceable Parts

No user-serviceable parts inside. Do not open.

For the Cisco 2130 and 2140, the input connector and plug must be UL recognized under UL 486 for field wiring. The connection polarity is from left to right: negative (−), positive (+), and ground.

Use the handle on the power supply installation and removal. You must support the module with one hand because of its length.
Before you begin

• The color coding of the DC input power supply leads depends on the color coding of the DC power source at your site. Make sure that the lead color coding you choose for the DC input power supply matches the lead color coding used at the DC power source and verify that the power source is connected to the negative (–) terminal and to the positive (+) terminal on the power supply.

• Make sure that the chassis ground is connected on the chassis before you begin installing the DC power supply. See Ground the Chassis for the procedure.

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**Step 1**
Verify that the power is off to the DC circuit on the power supply module that you are installing.

**Step 2**
While supporting the power supply module with one hand, insert the power supply module into the power supply bay and gently push it in. See the illustration above for the location of the handle.

**Step 3**
Use a wire-stripping tool to strip each of the 2 wires coming from the DC input power source. Strip the wires to approximately 0.39 inch (10 mm) + 0.02 inch (0.5 mm). We recommend you use 14 AWG insulated wire.

**Note**
Do not strip more than the recommended length of wire because doing so could leave the wire exposed from the terminal block.
Step 4  Insert the exposed wire into the terminal block. Ensure that you cannot see any wire lead outside the plastic cover. Only wires with insulation should extend from the terminal block.

Step 5  Use a screwdriver to tighten the terminal block captive screws.

**Caution**  Do not overtorque the terminal block captive screws. Make sure that the connection is snug, but the wire is not crushed. Verify by tugging lightly on each wire to make sure that they do not move.
## Secure the Power Cord on the Power Supply Module

To secure the power supply module against accidental removal and thus prevent disrupting system performance, use the tie wrap and clamp provided in the accessories kit that ships with your Firepower 2100 security appliance.

Take note of the following warnings:

### Warning

**Statement 1030—Equipment Installation**

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

### Warning

**Statement 1073—No User-Serviceable Parts**

No user-serviceable parts inside. Do not open.

### Step 1

Attach the clamp to the tie wrap by holding the clamp with the loop side on the bottom and sliding the tie wrap through the box-shaped channel above the clamp (see the following figure).

One side of the tie wrap has evenly spaced ridges and the other is smooth. Be sure the ridged side is face up and that you slide it through the open side of the channel. You will hear a click as the tie slides through—it moves in one direction only. To remove the tie wrap from the clamp, push the lever on the closed side of the box-shaped channel and slide out the tie wrap.
Step 2

Attach the clamp to the power supply module:

a) Locate the hexagonal ventilation hole on the power supply module at the center of the plug just below the power connector body (see the following figures).

b) Plug the snapping portion of the tie wrap into the hexagonal hole.

c) With the clamp side facing up, push the tie wrap in until it is fully engaged.

**Caution**  Make sure you have the correct location because you cannot remove the tie wrap from the power supply module once you have installed it without damaging the tie wrap.
Secure the Power Cord on the Power Supply Module

**Step 3**

Secure the clamp:

a) Plug in the power supply power cord and wrap the clamp around the over mold portion of the power cord.
b) Squeeze the clamp ends together to the power supply so that the annular teeth engage with the mate on the clamp.
c) Make sure the clamp fits snugly into the over mold.
d) Adjust the clamp position on the tie wrap so that the clamp is tight against the front of the over mold and the power cord cannot be removed by lightly pulling on it.

*Figure 9: Clamp on Over Mold of Power Cord*
Step 4  If you need to remove the power cord, push the release tab on the clamp to force the annular clamp teeth to disengage and the clamp opens up. You can then remove the clamp from the power cord.

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Remove and Replace the Fan Tray

You can remove and replace the fan tray while the 2130 and 2140 are running. The air flow moves from front to back. All fan modules are integrated in a single fan tray.

⚠️ Caution
Removing the fan tray exposes the appliance to no airflow. Replace the fan tray within 30 seconds after removal to avoid overheating the appliance. If you wait longer than 30 seconds, the appliance may power off automatically to prevent damage to components. The appliance does not power up and boot properly if the fan tray is missing.

Take note of the following warnings:

⚠️ Warning
**Statement 1030**—Equipment Installation
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⚠️ Warning
**Statement 1073**—No User-Serviceable Parts
No user-serviceable parts inside. Do not open.

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Step 1  Have the fan tray ready for immediate insertion and near the appliance so that you can reinstall the fan tray within 30 seconds.

Step 2  To remove a fan tray, face the rear of the chassis, and loosen the two captive screws on the fan tray.

Step 3  Pull the fan tray out of the chassis.
Step 4  To replace a fan tray, hold the fan tray in front of the fan slot.

Step 5  Push the fan tray into the chassis until it is properly seated.
If the system is powered on, listen for the fans. You should immediately hear the fans operating. If you do not hear the fans, make sure the fan tray is inserted completely into the chassis and the faceplate is flush with the outside surface of the chassis.

Step 6  Verify that the fan is operational by checking the fan tray LED. See Front Panel LEDs for a description of the fan LEDs.
Remove and Replace the Fan Tray