



Maintenance and Upgrades

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Power Button Shut Down

The Threat Grid M5 runs in two modes:

- Main power mode—Power is supplied to all Threat Grid M5 components and all operating systems can run.
- Standby power mode—Power is supplied only to the service processor and certain components. You can safely remove power cords from the Threat Grid M5 in this mode.



Caution After you shut down the Threat Grid M5 to standby power, electric current is still present in the chassis. To completely remove power as directed in some maintenance procedures, you must disconnect all power cords from all power supplies on the Threat Grid M5.

You can shut down the Threat Grid M5 using the front panel Power button or use OpAdmin to initiate a reboot or shutdown.

Step 1 Check the Power LED:

- Amber—The Threat Grid M5 is already in standby mode and you can safely remove power.
- Green—The Threat Grid M5 is in main power mode and you must shut it down before you can safely remove power.

Step 2 Perform a graceful shutdown or a hard shutdown:

- Caution** To avoid data loss or damage to your operating system, perform a graceful shutdown of the operating system.
- Graceful shutdown—Press and release the Power button. The operating system performs a graceful shutdown and the Threat Grid M5 goes into standby mode. The power LED is amber.
 - Emergency shutdown—Press and hold the Power button for four seconds to force the main power off and immediately enter standby mode.

- Step 3** If a maintenance procedure instructs you to completely remove power from the Threat Grid M5, disconnect all power cords from the power supplies.
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Remove and Replace a Drive



Note The drives are hot-swappable. You do not have to shut down the Threat Grid M5 to remove or replace drives.



Note You cannot add more drives to the chassis. You can only replace the drives in the slots that shipped with your Threat Grid M5.

Before you begin

Take note of the following warnings:



Warning **Statement 1018**—Supply Circuit

To reduce risk of electric shock and fire, take care when connecting units to the supply circuit so that wiring is not overloaded.



Warning **Statement 1019**—Main Disconnecting Device

The plug-socket combination must be accessible at all times, because it serves as the main disconnecting device.



Warning **Statement 1024**—Ground Conductor

This equipment must be grounded. To reduce the risk of electric shock, never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.



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

There are no serviceable parts inside. To avoid risk of electric shock, do not open.



Warning Statement 1074—Comply with Local and National Electrical Codes

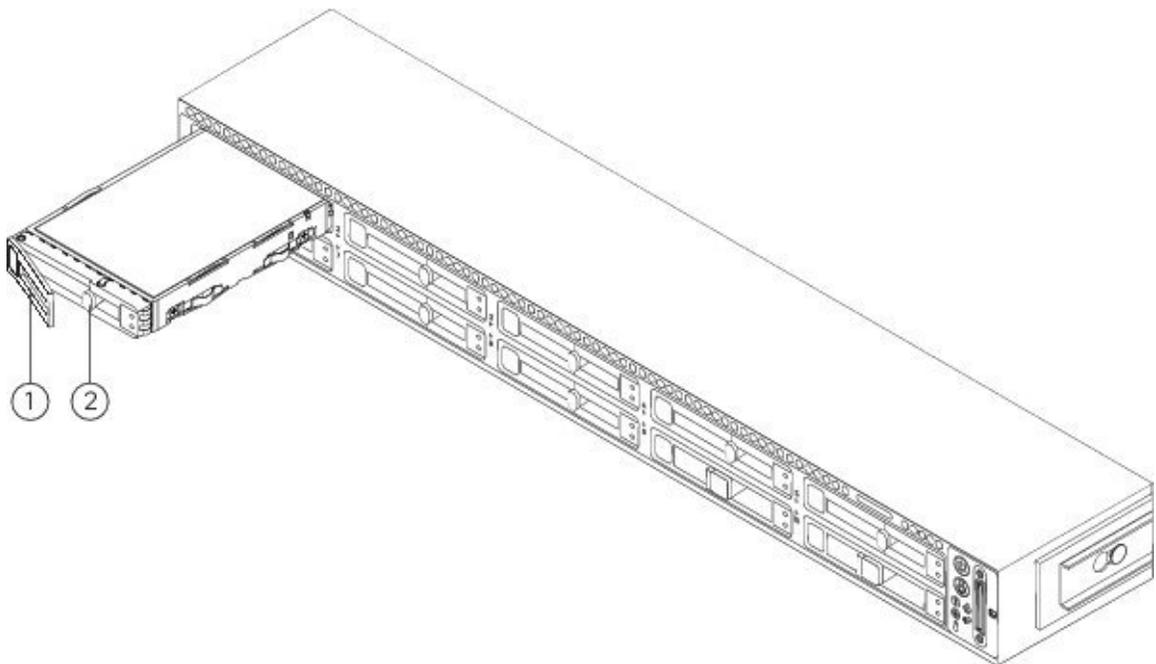
To reduce risk of electric shock or fire, installation of the equipment must comply with local and national electrical codes.

Step 1

Remove the drive that you are replacing:

- a) Press the release button on the face of the drive tray.
- b) Grasp and open the ejector lever and then pull the drive tray out of the slot.

Figure 1: Remove the Drive

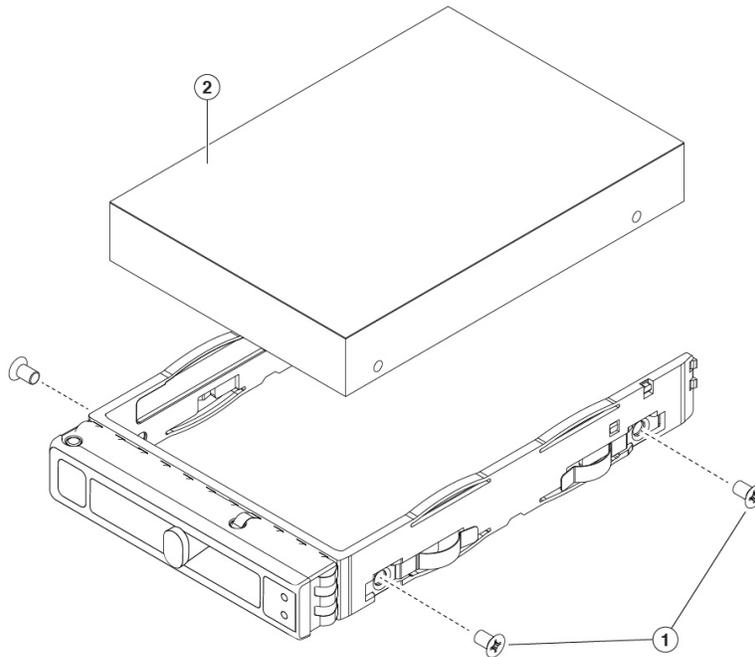


1	Ejector handle	2	Release button
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Step 2

Remove the four drive-tray screws that secure the drive to the tray and then lift the drive out of the tray.

Figure 2: Remove the Drive Tray



1	Drive tray screws (two on each side)	2	Drive removed from drive tray
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Step 3

Install a new drive:

- a) Place a new drive in the empty drive tray and install the four drive-tray screws.
- b) With the ejector lever on the drive tray open, insert the drive tray into the empty drive bay.
- c) Push the tray into the slot until it touches the backplane, and then close the ejector lever to lock the drive in place.

Remove and Replace a Power Supply

The Threat Grid M5 ships with two power supplies, which are redundant and hot-swappable. One is the active power supply and the other is the standby power supply (1+1).

The Threat Grid M5 also supports cold redundancy. Depending on the power being drawn by the Threat Grid M5, one power supply might actively provide all power to the system while the remaining power supply is put into a standby state. For example, if the power consumption can be satisfied by power supply 1, then power supply 2 is put into a standby state.

**Caution**

When you replace power supplies, do not mix power supply types in the Threat Grid M5. Both power supplies must be the same wattage and Cisco PID.



Trouble Power supply health monitoring notifies you if the power supply loses power or malfunctions so that redundancy is lost. Check the power supply cables to make sure they are functioning. If they are and errors are still occurring, replace the power supply.

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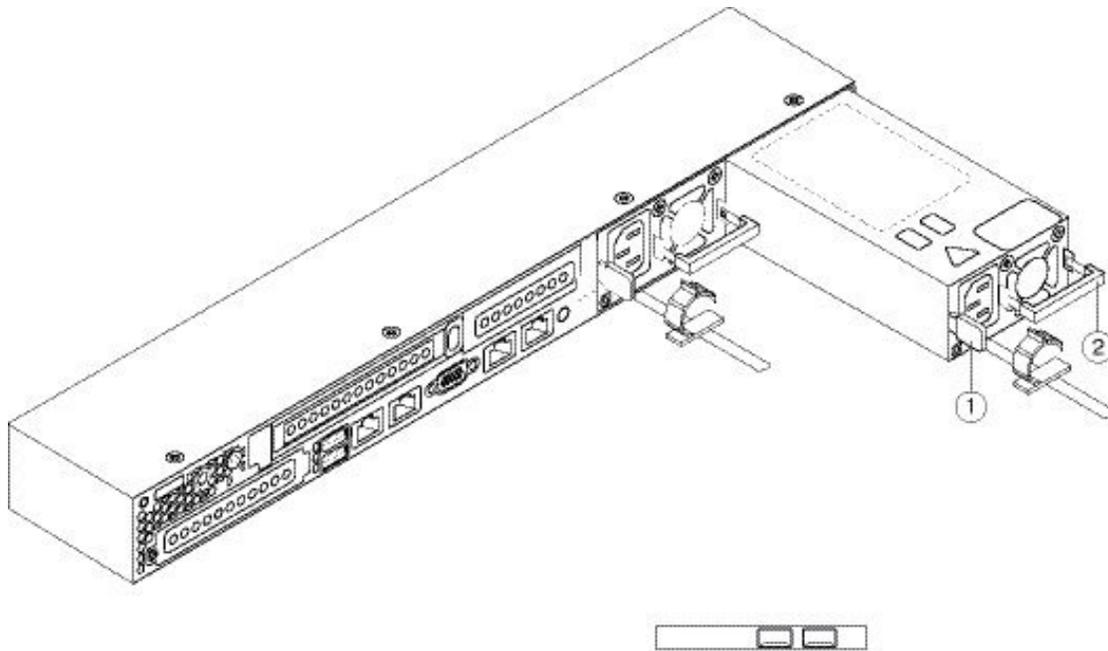
To reduce risk of electric shock or fire, installation of the equipment must comply with local and national electrical codes.

Step 1 Remove the power supply:

Remove and Replace a Power Supply

- a) Grasp the power supply handle while pinching the release lever toward the handle.
- b) Pull the power supply out of the bay.

Figure 3: Remove and Replace the AC Power Supply



1	Release lever	2	Handle
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Step 2

Install a new power supply:

- a) Grasp the power supply handle and insert the new power supply into the empty bay.
- b) Push the power supply into the bay until the release lever locks.
- c) Connect the power cord to the new power supply.
- d) If you shut down the Threat Grid M5, press the Power button to return it to main power mode.