



Maintenance and Upgrade

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Power Button Shut Down

The Secure Endpoint PC4000 runs in two modes:

- Main power mode—Power is supplied to all Secure Endpoint PC4000 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 Secure Endpoint PC4000 in this mode.



Caution

After you shut down the Secure Endpoint PC4000 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 Secure Endpoint PC4000.

You can shut down the Secure Endpoint PC4000 using the front panel Power button or software management. See [Private Cloud Administration Portal User Guide](#) for the software procedures.

Step 1 Check the Power LED:

- Amber—The Secure Endpoint PC4000 is already in standby mode and you can safely remove power.
- Green—The Secure Endpoint PC4000 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 Secure Endpoint PC4000 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 Secure Endpoint PC4000, disconnect all power cords from the power supplies.

Remove and Replace a Drive



Note The drives are hot-swappable. You do not have to shut down the PC4000 to remove or replace drives.



Note You cannot add more drives to your PC4000. You can only replace the drives in the slots that are supported for your model.

Before you begin



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



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



Warning Only a skilled person should be allowed to install, replace, or service this equipment. See statement 1089 for the definition of a skilled person.

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

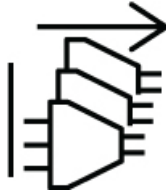


Warning Only an instructed person or skilled person should be allowed to install, replace, or service this equipment. See statement 1089 for the definition of an instructed or skilled person.

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

**Warning**

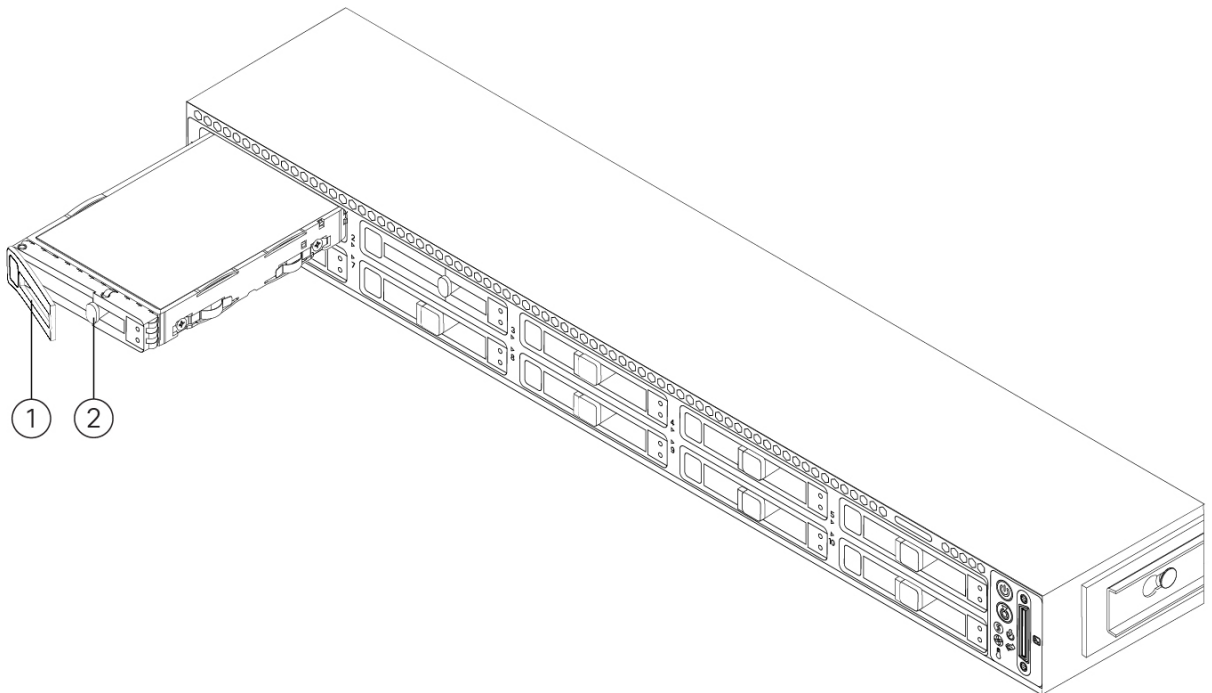
This unit might have more than one power supply connection. To reduce risk of electric shock, remove all connections to de-energize the unit.

**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

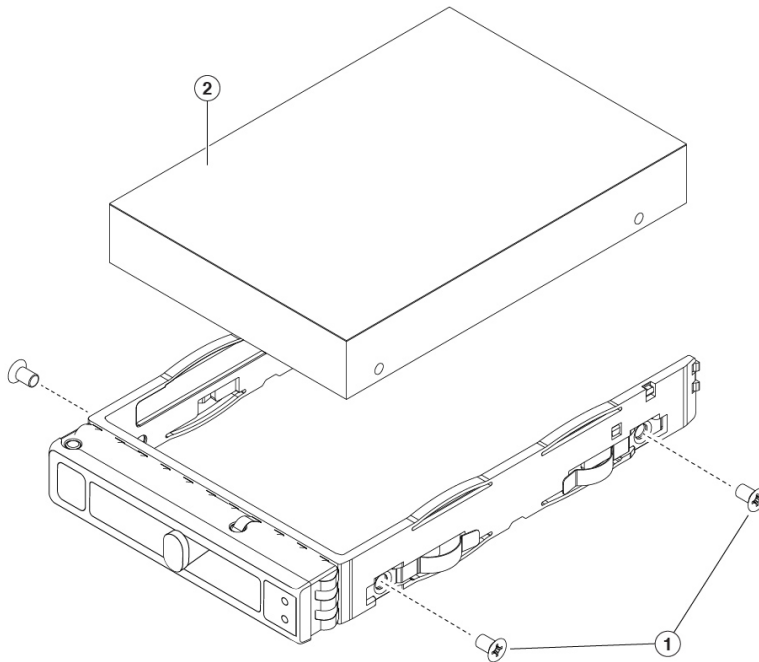


1	Ejector handle	2	Release button
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Step 2

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



3	Drive tray screws (two on each side)	4	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 Private Cloud appliance 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 Private Cloud appliance also supports cold redundancy. Depending on the power being drawn by the Private Cloud appliance, 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 Private Cloud appliance. 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.

Before you begin

Take note of the following warnings:



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



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



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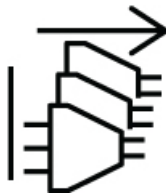


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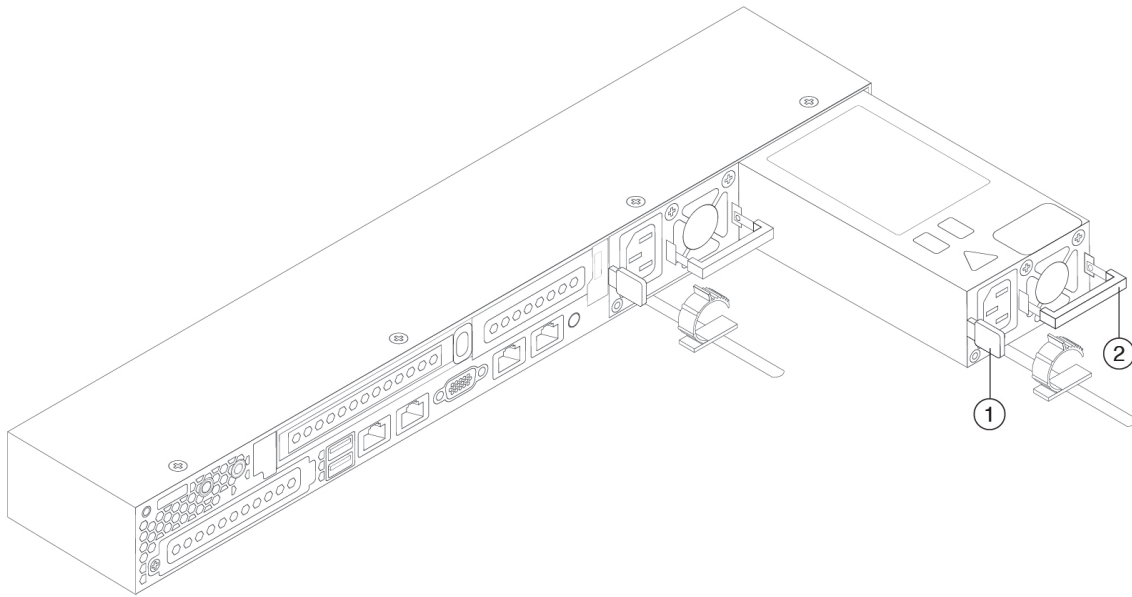


Warning This unit might have more than one power supply connection. To reduce risk of electric shock, remove all connections to de-energize the unit.



Step 1 Remove the 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 Private Cloud appliance, press the Power button to return it to main power mode.