

Figure 25. Installing caster wheels

Next steps

1. Follow the procedure listed in Before working inside your system.

Drives

Removing a drive blank

The procedure for removing 2.5 inch and 3.5 inch drive blanks is identical.

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. If installed, remove the front bezel.

CAUTION: To maintain proper system cooling, drive blanks must be installed in all empty drive slots.

CAUTION: Mixing drive blanks from previous generations of PowerEdge servers is not supported.

Steps

Press the release button, and slide the drive blank out of the drive slot.

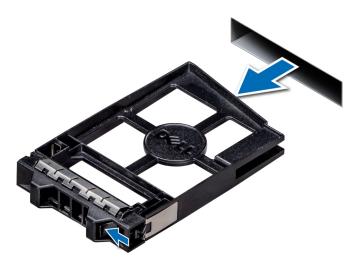


Figure 26. Removing a drive blank

Next steps

1. Install a drive or drive blank.

Installing a drive blank

The procedure for installing 2.5 inch and 3.5 inch drive blanks is identical.

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. If installed, remove the front bezel.

CAUTION: Mixing drive blanks from previous generations of PowerEdge servers is not supported.

Steps

Insert the drive blank into the drive slot, and push the blank until the release button clicks into place.

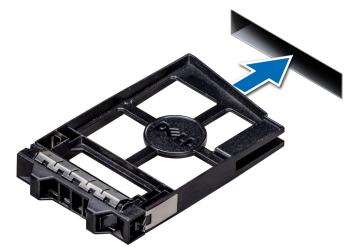


Figure 27. Installing a drive blank

If removed, install the front bezel.

Removing a drive carrier

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. If applicable, remove the front bezel
- 3. Using the management software, prepare the drive for removal.

If the drive is online, the green activity or fault indicator flashes while the drive is turning off. When the drive indicators are off, the drive is ready for removal. For more information, see the documentation for the storage controller.

CAUTION: Before attempting to remove or install a drive while the system is running, see the documentation for the storage controller card to ensure that the host adapter is configured correctly to support drive removal and insertion.

CAUTION: Mixing drives from previous generations of PowerEdge servers is not supported.

CAUTION: To prevent data loss, ensure that your operating system supports drive installation. See the documentation supplied with your operating system.

Steps

- 1. Press the release button to open the drive carrier release handle.
- 2. Holding the handle, slide the drive carrier out of the drive slot.

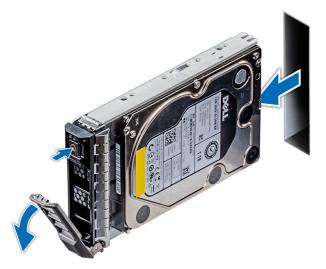


Figure 28. Removing a drive carrier

Next steps

- 1. Installing a drive carrier.
- 2. If you are not replacing the drive immediately, insert a drive blank in the empty drive slot to maintain proper system cooling.

Installing a drive carrier

Prerequisites

- CAUTION: Before attempting to remove or install a drive while the system is running, see the documentation for the storage controller card to ensure that the host adapter is configured correctly to support drive removal and insertion.
- \triangle CAUTION: Mixing drives from previous generations of PowerEdge servers is not supported.
- CAUTION: Combining SAS and SATA drives in the same RAID volume is not supported.
- CAUTION: When installing a drive, ensure that the adjacent drives are fully installed. Inserting a drive carrier and attempting to lock its handle next to a partially installed carrier can damage the partially installed carrier's shield spring and make it unusable.
- CAUTION: To prevent data loss, ensure that your operating system supports hot-swap drive installation. See the documentation supplied with your operating system.
- CAUTION: When a replacement hot swappable drive is installed and the system is powered on, the drive automatically begins to rebuild. Ensure that the replacement drive is blank or contains data that you wish to overwrite. Any data on the replacement drive is immediately lost after the drive is installed.
- 1. Follow the safety guidelines listed in Safety instructions.
- 2. If installed, remove the drive blank.

Steps

- 1. Press the release button on the front of the drive carrier to open the release handle.
- 2. Insert the drive carrier into the drive slot and slide until the drive connects with the backplane.
- **3.** Close the drive carrier release handle to lock the drive in place.

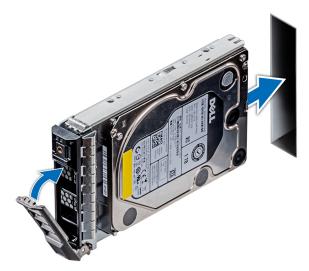


Figure 29. Installing a drive carrier

Next steps

1. If removed, install the front bezel.

Removing the drive from the drive carrier

Prerequisites

Follow the safety guidelines listed in Safety instructions.

CAUTION: Mixing drives from previous generations of PowerEdge servers is not supported.

Steps

- 1. Using a Phillips #1 screwdriver, remove the screws from the slide rails on the drive carrier.
 - NOTE: If the hard drive or SSD carrier has Torx screw, use Torx 6 (for 2.5-inch drive) or Torx 8 (for 3.5-inch drive)
 screwdriver to remove the drive.
- 2. Lift the drive out of the drive carrier.

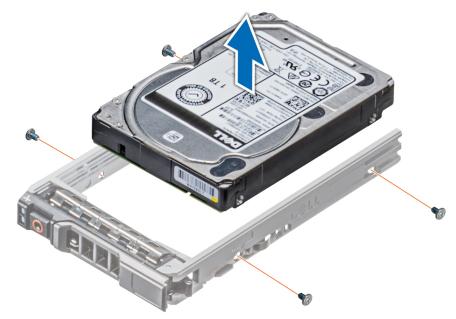


Figure 30. Removing the drive from the drive carrier

Next steps

1. Installing the drive into the drive carrier.

Installing a drive into the drive carrier

Prerequisites

Follow the safety guidelines listed in Safety instructions.

CAUTION: Mixing drive carriers from other generations of PowerEdge servers is not supported.

(i) NOTE: When installing a drive into the drive carrier, ensure that the screws are torqued to 4 in-lbs.

Steps

- 1. Insert the drive into the drive carrier with the connector end of the drive towards the back of the carrier.
- Align the screw holes on the drive with the screws holes on the drive carrier.
 When aligned correctly, the back of the drive is flush with the back of the drive carrier.

3. Using a Phillips #1 screwdriver, secure the drive to the drive carrier with screws.

(i) NOTE: If the hard drive or SSD carrier has Torx screw, use Torx 6 (for 2.5-inch drive) or Torx 8 (for 3.5-inch drive) screwdriver to install the drive.

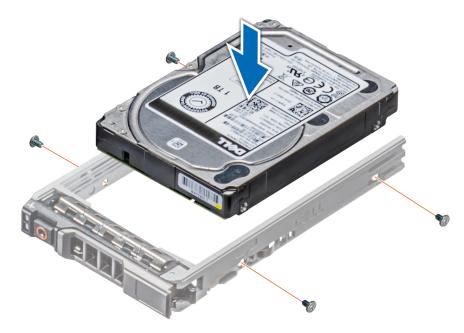


Figure 31. Installing a drive into the drive carrier

Removing a 3.5 inch drive adapter from a 3.5 inch drive carrier

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. If installed, remove the front bezel.
- **3.** Remove the drive carrier.

Steps

- 1. Using a Phillips #1 screwdriver, remove the screws from the rails on the drive carrier.
 - (i) NOTE: If the hard drive or SSD carrier has Torx screw, use Torx 6 (for 2.5-inch drive) or Torx 8 (for 3.5-inch drive)

screwdriver to remove the drive. $oldsymbol{O}$

2. Lift the 3.5 inch drive adapter out of the 3.5 inch drive carrier.

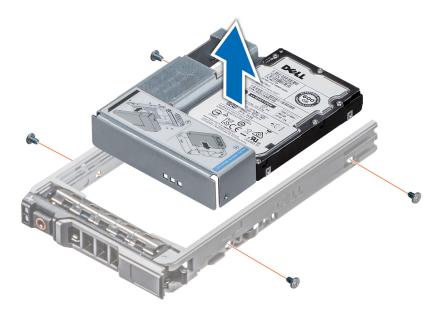


Figure 32. Removing a 3.5 inch drive adapter from a 3.5 inch drive carrier

Next steps

1. Install the 3.5 inch drive adapter into the 3.5 inch drive carrier

Installing a 3.5 inch drive adapter into the 3.5 inch drive carrier

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. Install the 2.5 inch drive into the 3.5 inch drive adapter.

Steps

- 1. Insert the 3.5 inch drive adapter into the 3.5 inch drive carrier with the connector end of the drive toward the back of the 3.5 inch drive carrier.
- 2. Align the screw holes on the 3.5 inch drive adapter with the holes on the 3.5 inch drive carrier.
- **3.** Using a Phillips #1 screwdriver, secure the 3.5 inch drive adapter to the 3.5 inch carrier.

(i) NOTE: If the hard drive or SSD carrier has Torx screw, use Torx 6 (for 2.5-inch drive) or Torx 8 (for 3.5-inch drive)

screwdriver to install the drive. $oldsymbol{O}$

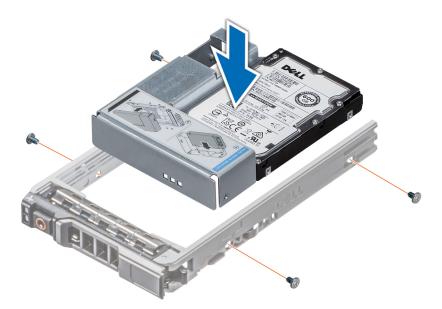


Figure 33. Installing a 3.5 inch drive adapter into the 3.5 inch drive carrier

Next steps

- **1.** Install the drive carrier.
- 2. If removed, install the front bezel.

Removing a 2.5 inch drive from a 3.5 inch drive adapter

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. Remove the 3.5 inch drive adapter from the 3.5 inch drive carrier.

(i) NOTE: A 2.5 inch drive is installed in a 3.5 inch drive adapter, which is then installed in the 3.5 inch drive carrier.

Steps

1. Using a Phillips #2 screwdriver, remove the screws from the side of the 3.5 inch drive adapter.

INOTE: If the hard drive or SSD carrier has Torx screw, use Torx 6 screwdriver to remove the drive.

2. Remove the 2.5 inch drive from the 3.5 inch drive adapter.

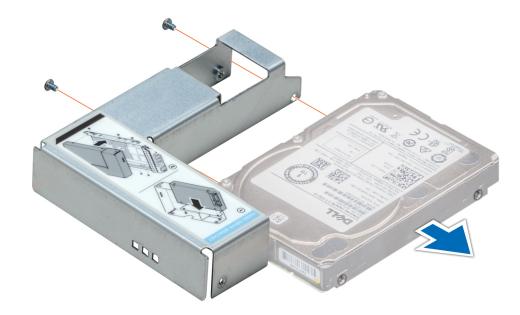


Figure 34. Removing a 2.5 inch drive from a 3.5 inch drive adapter

Next steps

Install a 2.5 inch drive into a 3.5 inch drive adapter.

Installing a 2.5 inch drive into a 3.5 inch drive adapter

Prerequisites

- 1. Follow the safety guidelines listed in Safety instructions.
- 2. Remove the 3.5 inch drive adapter from the 3.5 inch hot swappable drive carrier.

Steps

- 1. Align the screw holes on the 2.5 inch drive with the screw holes on the 3.5 inch drive adapter.
- 2. Using a Phillips #2 screwdriver, secure the 2.5 inch drive to the 3.5 inch drive adapter.

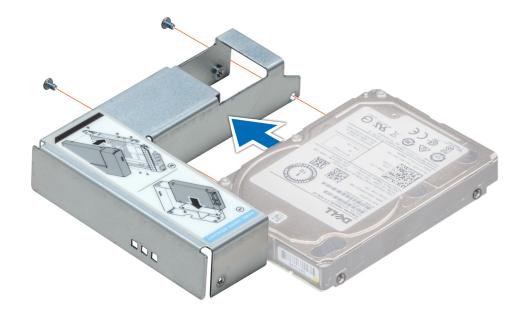


Figure 35. Installing a 2.5 inch drive into a 3.5 inch drive adapter

Next steps

1. Install the 3.5 inch drive adapter into the 3.5 inch hot swappable drive carrier.

Power supply units

PSU specifications

The power supply unit (PSU) is an internal hardware component which supplies power to the components in the system.

Your system supports one of the following:

- Two 2400 W, 2000 W, 1600 W, 1100 W, 750 W, or 495 W AC PSUs
- Two 750 W Mixed Mode HVDC PSUs

(i) NOTE: For more information, see the Technical specifications section.

CAUTION: If two PSUs are installed, both the PSUs must have the same type of label. For example, Extended Power Performance (EPP) label. Mixing PSUs from previous generations of PowerEdge servers is not supported, even if the PSUs have the same power rating. Mixing PSUs will result in mismatch condition or failure to turn the system on.

(i) NOTE: Titanium PSU is nominally rated for 200 V AC to 240 V AC input only.

NOTE: When two identical PSUs are installed, power supply redundancy (1+1 – with redundancy or 2+0 – without redundancy) is configured in system BIOS. In redundant mode, power is supplied to the system equally from both PSUs when Hot Spare is disabled. When Hot Spare is enabled, one of the PSUs is put into the sleep mode when system utilization is low in order to maximize efficiency.

(i) NOTE: If two PSUs are used, they must be of the same maximum output power.