Installing and Upgrading FRUs
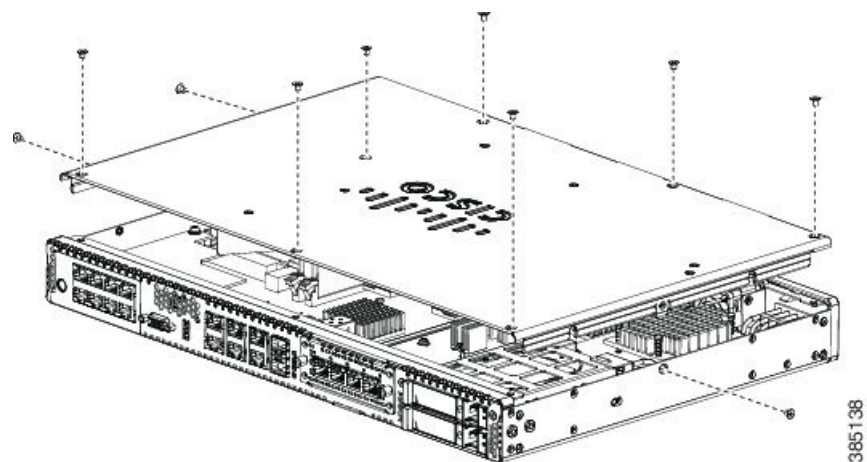
Removing and Replacing the Chassis Cover

These are the steps to remove the chassis cover:

1. Confirm the router is turned off and disconnected from the power supply or power supplies.

2. Place the chassis on a flat surface.

3. Remove the screws at top of the chassis cover.

4. Remove the screws at the sides of the device (See Figure 11).

5. Lift the chassis cover once you have removed all the screws.

Figure 1: Removing the Chassis Cover

Note To replace the chassis cover, place the cover evenly on the top of the device and use the screws to secure it to the device.

Replacing the Power Supply

These are the steps to replace the power supply:

1. Disconnect the power cord from the power supply.

2. Remove the bezel. The bezel is secured with snap latches. To remove the bezel, hold the top and bottom, and pull the bezel.

3. The latch that secures the power supply to the device is on the right. Press the latch to the left and pull out the power supply using the handle.

Figure 2: Power Supply Latch and Handle

4. Insert the replacement power supply.

5. Replace the bezel.

Installing Drive Bays

There are two drive bays. You can use one of them, both of them, or none. Refer to Hardware Features - Replaceable and Upgradable Units to know the types of storage module that each of this bay can hold. If you had not ordered drives, the slots are closed with a blank cover as shown in the image.

These are the steps to install a drive in a drive bay:

1. The drive bays are in the front panel of the device. The bays are closed with a cover if there are no drives in the slots.

2. Press the push button on the center of the cover and pull the cover out of the system to expose the slot.

3. Slide the drive into the slot.

Note   Keep the drive bays covered when there are no drives installed in the slot.

Figure 3: Covers of Hard Disk Drive Slots

Upgrading the M.2 Storage Module

The M.2 storage module is a hardware that is 22mm wide and 80mm long. This hardware comes with different storage capacities.

These are the steps to upgrade the M.2 memory module:

1. Remove the chassis cover.

2. Locate the M.2 storage module. Refer to the Chassis - Internal View section to identify and locate the module.

3. Remove the old storage module by unscrewing the screw that secures the hardware and removing out the storage module.

4. Plug in the new storage module in the same location and secure it with the screw.
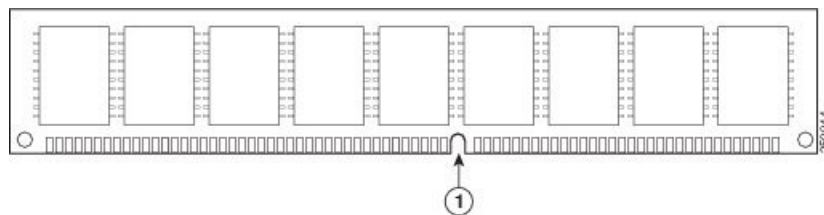
Figure 4: Upgrading the M.2 Storage Module
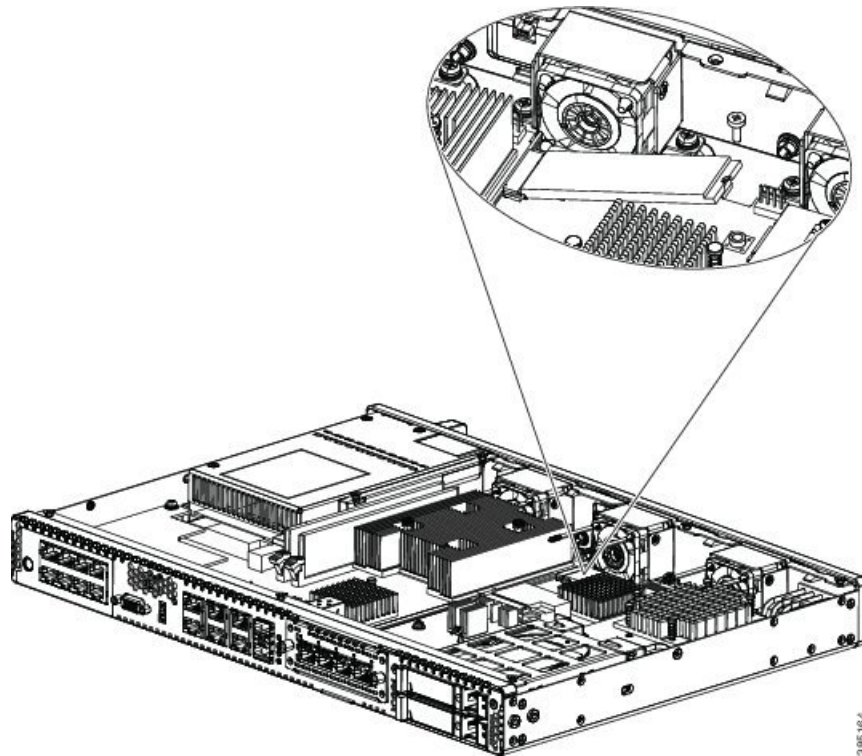
5. Replace the chassis cover.

Installing and Removing a DIMM

There are two DDR4 DIMM slots. DIMMs have a polarization notch on the connecting edge to prevent incorrect insertion.
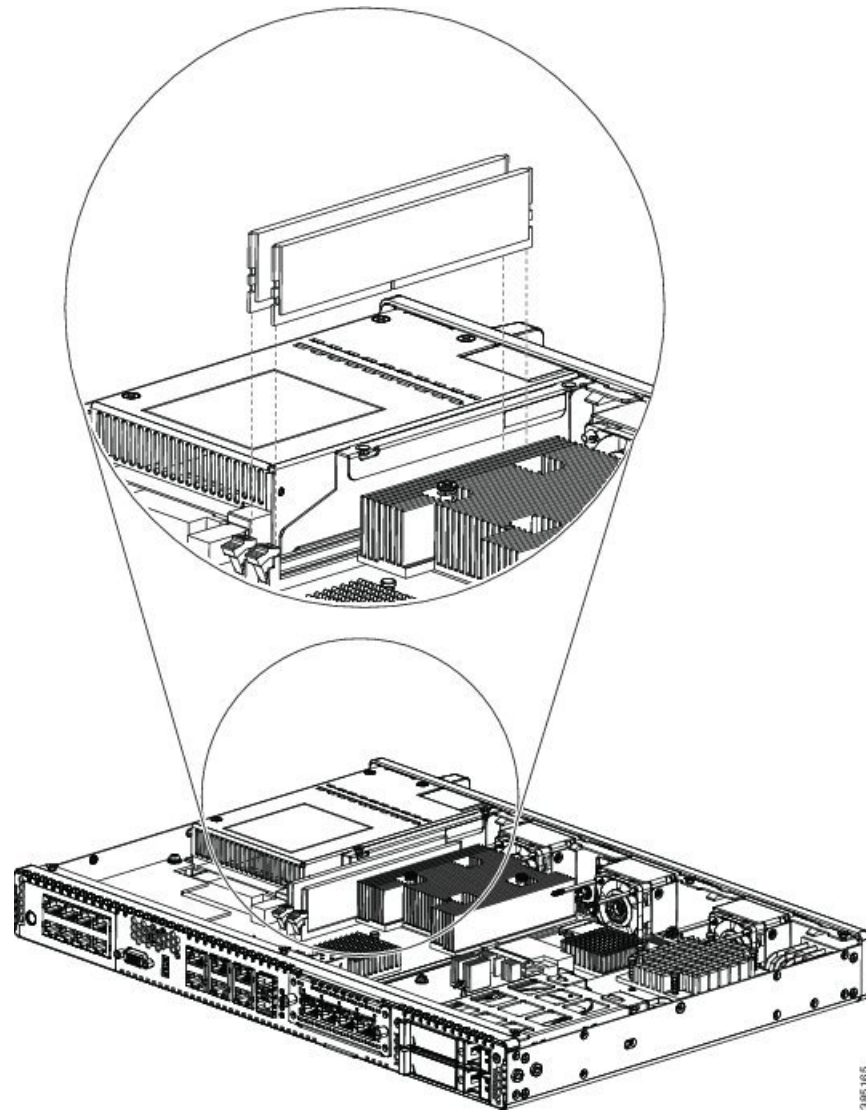
Figure 5: DIMM Showing Polarization Notch
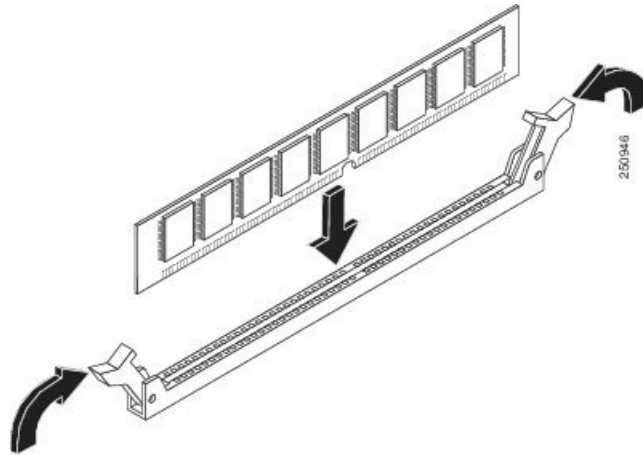

These are the steps to install a DIMM:

1. Remove the chassis cover.

2. Locate the DIMM module on the device.

Figure 6: DIMM Module

3. Make sure that both latches on the DIMM connector are in the open position.

4. Orient the DIMM so that the polarization notch lines up with the polarization key on the connector.

5. Insert the DIMM into the connector.
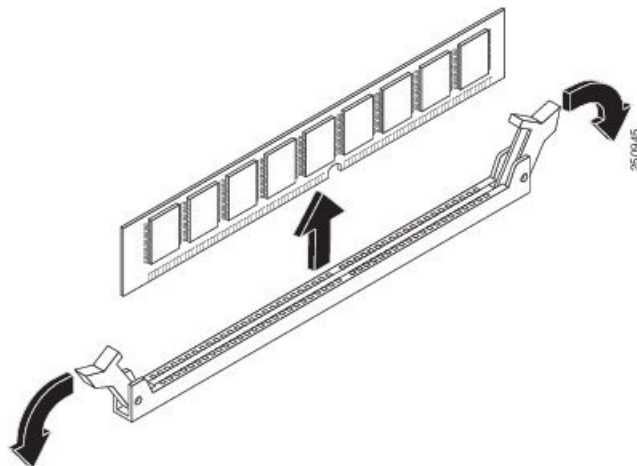
Figure 7: Inserting a DIMM

6. Replace the chassis cover.

These are the steps to remove a DIMM:

1. Remove the chassis cover.

2. Locate the DIMM module on the device. Refer to the Chassis - Internal View section to identify and locate the DIMM module.

3. Pull the latches away from the DIMM at both ends to lift the DIMM slightly. Pull the DIMM out of the socket.

Figure 8: Removing a DIMM

4. Place the DIMM in an antistatic bag to protect it from ESD damage.

5. Replace the chassis cover.

Installing and Removing a NIM

These are the steps to install a NIM:

- Locate the NIM slot on the front panel.

- Loosen the screws to open the slot cover.

- Insert the NIM into the slot.

- Tighten the screws to secure the NIM in the slot.

These are the steps to remove a NIM:

- If the NIM is up and running, issue the following command to shut down the NIM gracefully before removing it:

   hw-module subslot slot 0/2 stop

> ⚠
>
> **Caution**   If you do not shut down the NIM gracefully before removing it, the NIM card could get damaged.

- Locate the NIM slot on the front panel.

- Loosen the screws that secure the NIM.

- Gently pull out the NIM from the slot.

ENCS supports hot swap or OIR (Online Insertion and Removal) for NIM. So, you can insert and remove the NIM when ENCS is running; however, before removing the NIM, ensure that the NIM is shut down gracefully.

Code extract that shows the graceful shutdown of a NIM:

```
CSR-8#hw-module subslot 0/2 stop
Proceed with stop of module? [confirm]
CSR-8#
CSR-8#
CSR-8#sh platform
Chassis type: ISRV

Slot       Type                State                Insert time (ago)
---------  ------------------  -------------------- -----------------
0          ISRV                ok                   16:41:27
0/2        NIM-4G-LTE-NA       stopped              00:00:05
R0         ISRV                ok, active           16:42:19
F0         ISRV                ok, active           16:42:19
```