

Prepare to Install Cisco NCS 5000

This chapter describes how to prepare the Cisco NCS 5000 series router for installation. This chapter includes the following topics:

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Installation Options with Racks and Cabinets

The Cisco NCS 5000 series routers can be installed in the following types of racks using a rack-mount kit shipped with the router:

- Open EIA rack
- · Perforated EIA cabinet

To enable you to easily mount your router in any qualifying rack, you can attach the rack-mount brackets accommodate racks of different depths.

Airflow Direction

The airflow direction of the Cisco NCS 5000 series routers can be configured as front-to-back (port side intake), or back-to-front (port side exhaust). This is dependent on the type of fan modules and power supplies configured with the chassis. It is not possible to mix airflow directions. In other words, all fan modules and power supplies must either be configured to the same front-to-back, or back-to-front airflow directions.

Chassis Weight

When lifting the router chassis, follow these guidelines.:

• Disconnect all power and external cables before lifting the router.

- Ensure that two people lift the router. The Cisco NCS 5001 router with two power supplies, weighs 22 lb, and the Cisco NCS 5002 with two power supplies, weighs 46 lbs. The Cisco NCS 5011 with two power supplies, weighs 22.2 lbs. Ensure that your footing is solid and the weight of the router is evenly distributed between your feet.
- Lift the router slowly, keeping your back straight. Lift with your legs, not with your back. Bend at the knees, not at the waist.

Required Equipment

Before beginning the installation, ensure that you have the following items available:

- Four 12-24 or 10-32 screws for attaching slider rails to the rack
- Number 1 and number 2 Phillips screwdrivers with torque capability
- 3/16-inch flat-blade screwdriver
- Tape measure and level
- ESD wrist strap or other grounding device
- · Antistatic mat or antistatic foam

Also, the following additional items (not found in the accessory kit) are required to ground the chassis:

- Grounding cable (6 AWG recommended), sized according to local and national installation requirements; the required length depends on the proximity of the router to proper grounding facilities
- Crimping tool, large enough to accommodate the girth of the lug
- Wire-stripping tool

Unpack and Inspect the New Router

Before you install a new chassis, you need to unpack and inspect it to be sure that you have all the items that you ordered and verify that the router was not damaged during shipment.



Caution

When handling router components, wear an ESD strap and handle modules by their handles and carrier edges only. An ESD socket is provided on the chassis. For the ESD socket to be effective, the chassis must be grounded through the power cable, the chassis ground, or the metal-to-metal contact with a grounded rack.



Tip

Do not discard the shipping container when you unpack the router. Flatten the shipping cartons and store them with the pallet used for the system. If you need to move or ship the system in the future, you will need these containers.



Note

The router is thoroughly inspected before shipment. If any damage occurred during transportation or any items are missing, contact your customer service representative immediately.

To inspect the shipment, follow these steps:

Procedure

- Step 1 Compare the shipment to the equipment list provided by your customer service representative and verify that you have received all items ordered (optional items as well), including the following:
 - Grounding lug kit
 - · Rack mount kit
 - ESD wrist strap
 - · Cables with connectors
 - Filters (According to air flow direction)
 - · Any optional items ordered
- **Step 2** Check the contents of each box for damage.
- **Step 3** If you notice any discrepancies or damage, send the following information to your customer service representative by email:
 - Invoice number of the shipper (see the packing slip)
 - Model and serial number of the missing or damaged unit
 - Description of the problem and how it affects the installation
 - Photos of the damage to external packaging, internal packaging, and product
 - Effect of damage on the installation

Unpack and Inspect the New Router