Install the switch

Note The images in this chapter are only for representation purposes, unless specified otherwise. The switch' actual appearance and size may vary.

Rack mount the chassis

The switch can be mounted on a 4-post rack.

Warning **Statement 1006**—Chassis Warning for Rack-Mounting and Servicing

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

Warning **Statement 1032**—Lifting the Chassis

To prevent personal injury or damage to the chassis, never attempt to lift or tilt the chassis using the handles on modules, such as power supplies, fans, or cards. These types of handles are not designed to support the weight of the unit.

Warning **Statement 1098—**Lifting Requirement

people are required to lift the heavy parts of the product. To prevent injury, keep your back straight and lift with your legs, not your back.

Note **Statement 4023—**Product Usage Restrictions

This product is designed for indoor usage only. Outdoor usage is not permitted.

Mount Cisco 8101-32FH-O-C01 Switch in a 4-post rack MGX Rack Assembly

Before you begin

Procedure

Step 1 Assemble transfer plate to the Cisco 8101-32FH-O-C01 Switch.

a) Take out the L Side and R Side transfer plates from the slide rail kit box.
b) Position a transfer plate on the side of the Cisco 8101-32FH-O-C01 Switch. Secure it using 10 M4x7 countersunk head screws. Ensure screws are tightened in the specified frequency (e.g., 1-10 per side) to ensure proper alignment and secure fit.
c) Repeat for the other side with the second transfer Plate.

Step 2 Assemble ear mount to the Cisco 8101-32FH-O-C01 Switch.

a) Position an ear mount onto each transfer plate. Secure each ear mount using 2 M4x7 countersunk head screws (e.g., positions 11-12 per side).

Step 3 Assemble inner rail to the transfer plate.

a) Draw out the inner rail from the 3-Pin side of each sliding rail main body.
b) Pull the white-detach-tab forward on the inner rail, then disconnect and draw out the inner rail from the main rail bracket.
c) Place the inner rail and thread it through the T-Pin on the transfer plate, then pull it back to secure it. Ensure the T-Pins are locked by the inner rail spring-plate feature on each side.
d) Secure each inner rail using 2 M4x4 I Head screws into the transfer plate.

Step 4 Assemble the extend tray.

a) Position the extend tray. Ensure the latches are in the release (vertical) status.
b) Align the T-Pins on the inner rails with the slots on the extend tray. Insert the T-Pins into the slots on each side of the extend tray.
c) Rotate the extend tray down into a horizontal position
d) Secure the extend tray by installing 2 M4 Stage screws, one on each side. There is a stopper to indicate the correct position for latch locking.

e) Lock the latches by rotating them from the vertical to the horizontal orientation on each side.

Step 5 Install the slide rail on the rack.

a) Position the rear side of the slide rail main body onto the rack. Utilize the toolless feature to lock it securely onto the rack posts.
b) Pull the front bracket of the slide rail main body and adjust its length to fit the front rack post. Utilize the toolless feature to lock the rail onto the front rack post. Ensure the rack has 9.5x9.5 square holes for proper installation.
c) Repeat for the other side.

Step 6 Insert the Cisco 8101-32FH-O-C01 Switch with extend tray into the rack.

a) Holding the switch with both hands, position the back of the switch between the front posts of the rack.
b) Align the inner rails (attached to the switch) with the main slide rails installed in the rack. Ensure the leading length of the inner rail aligns with the middle rail opening.
c) Gently slide the switch unit all the way into the rack until it is fully seated.
d) Once the unit is installed in the rack, tighten the captive screw from the ear mount assembly into the rack mount on each side to secure the switch.

Example

What to do next

Mount Cisco 8101-32FH-O-C01 switch in a 4-post rack

This section describes how to use the rack-mount kit provided with the Cisco 8101-32FH-O-C01 switch, to install the switch into a cabinet or a 4-post 19-inch rack.

Caution If the rack is on wheels, ensure that the brakes are engaged or that the rack is otherwise stabilized.

For a complete list of items contained in the 4-post rack-mount kit (8101-INSTKIT-C01) provided with the switch, see Accessory Kit.

Note The fan and power modules use the port side intake (PSI) configuration.

Procedure

Step 1 Install the rack-mount brackets on the switch (Refer to item 1 in Figure 7). Ensure that you position the fan modules and power modules on the switch such that the ports are in the cold aisle.

a) Position a rack-mount bracket on the side of the switch with its six holes that are aligned to six of the screw holes on the side of the switch, and then use six M4 flat-head screws with 13.25 in-lbs (1.5 N-m) torque value to attach the bracket to the switch.

Note
You can align six holes in the rack-mount bracket to six screw holes on the front side of switch or four screw holes on the rear side of the switch. The holes that you use depend on which end of your switch is located in the cold aisle.

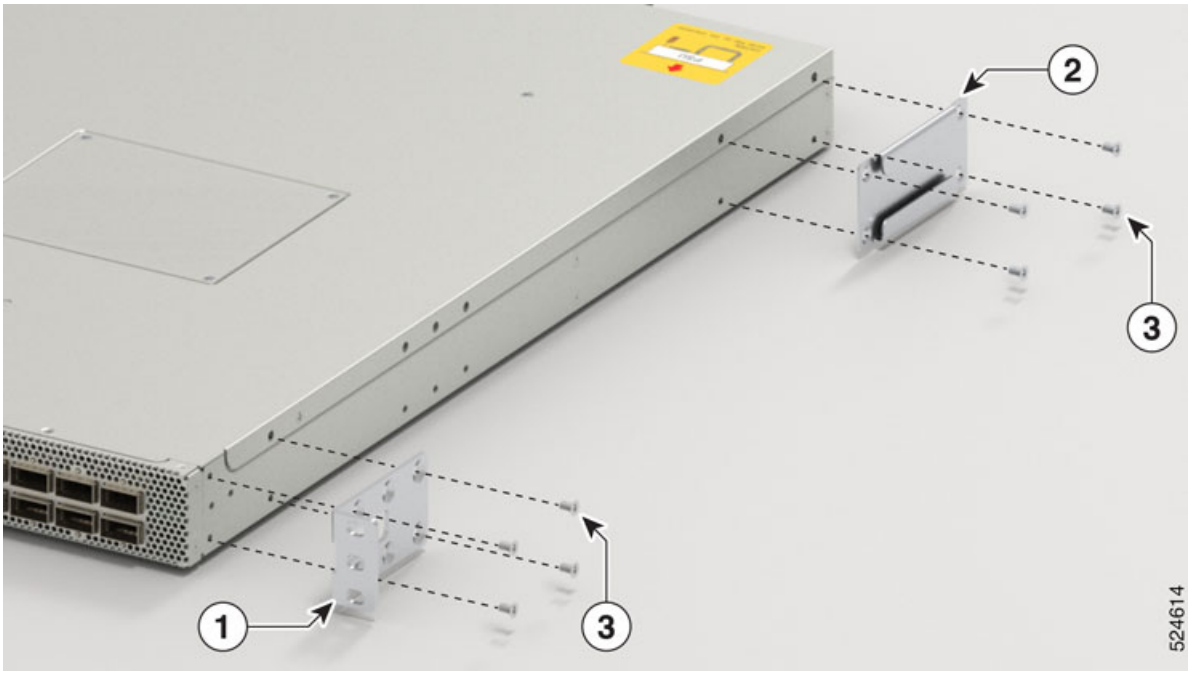
b) Repeat step 1b with the other rack-mount bracket on the other side of the switch.

Step 2 Install the rack-mount guide on the switch. (Refer to item 2 in Figure 7)

a) Position a rack-mount guides on the side of the switch with its six holes aligned to the six screw holes on the side of the switch, and use two M4 flat-head screws to attach the guides to the switch. Tighten the screws to a torque of 13.25 in-lb (1.5 N-m).

b) Repeat Step 2a with the other rack-mount bracket on the other side of the switch.

Figure 1: Attach rack-mount bracket on the front side and attach rack-mount guide on rear



1	Rack mount bracket
2	Rack mount guide
3	2x M4 x 6mm flat-head screws

Step 3 Attach the ground lug bracket to the switch (refer to item 1 in Figure 8).

a) Position the ground lug extension bracket on the switch.

b) Use two M4 x 7mm Phillips flat-head screws with 13.25 in-lbs (1.5 N-m) torque value to attach the ground lug extension bracket to the switch.

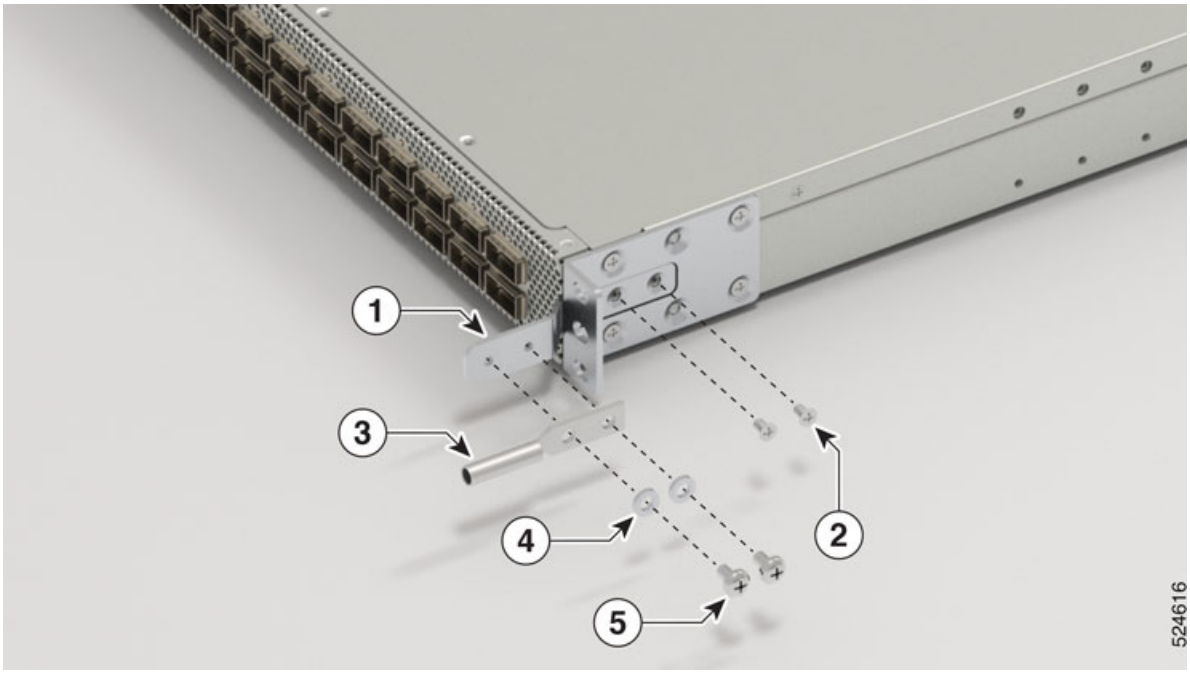
Note

The ground lug bracket installation must be done before the switch is installed onto the rack. The grounding lug itself can be installed after the switch is mounted in the rack.

Step 4 Install the rack-mount guide rails to the rack.

a) Position the rack-mount guide rails at the desired levels on the back side of the rack and use four 12-24 screws or four 10-32 screws, depending on the rack thread type, to attach the rails to the rack.
b) Repeat with the other rack-mount guide rail on the other side of the switch.
c) Use a tape measure and level to verify that the rails are at the same height and horizontal.

Figure 2: Attach ground lug bracket and ground lug



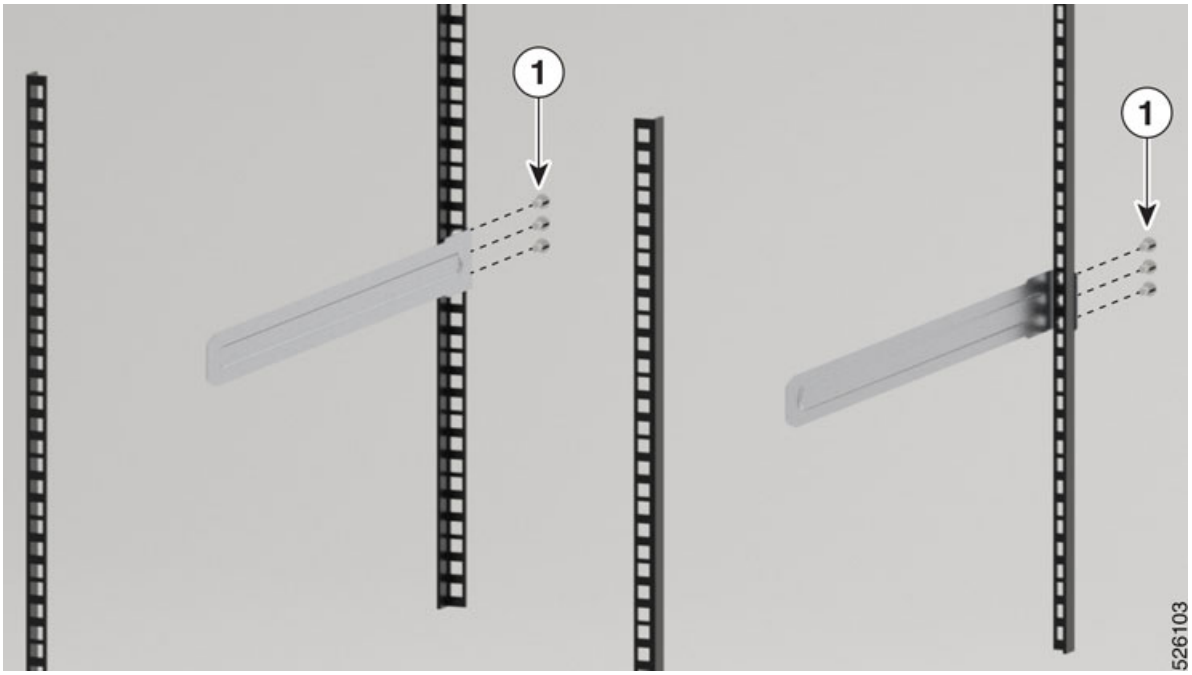
1	Ground lug bracket	2	2x M4 x 7mm Phillips flat-head screws on each side
3	Ground lug	4, 5	2x M4 x 6mm pan-head screws

Step 5 Insert the switch into the rack and attach:

a) Holding the switch with both the hands, position the back of the switch between the front posts of the rack.
b) Align the two rack-mount guides on either side of the switch with the guide rails installed in the rack. Slide the rack-mount guides onto the guide rails, and then gently slide the switch all the way into the rack.

Note
If the switch does not slide easily, try realigning the rack-mount guides on the guide rails.

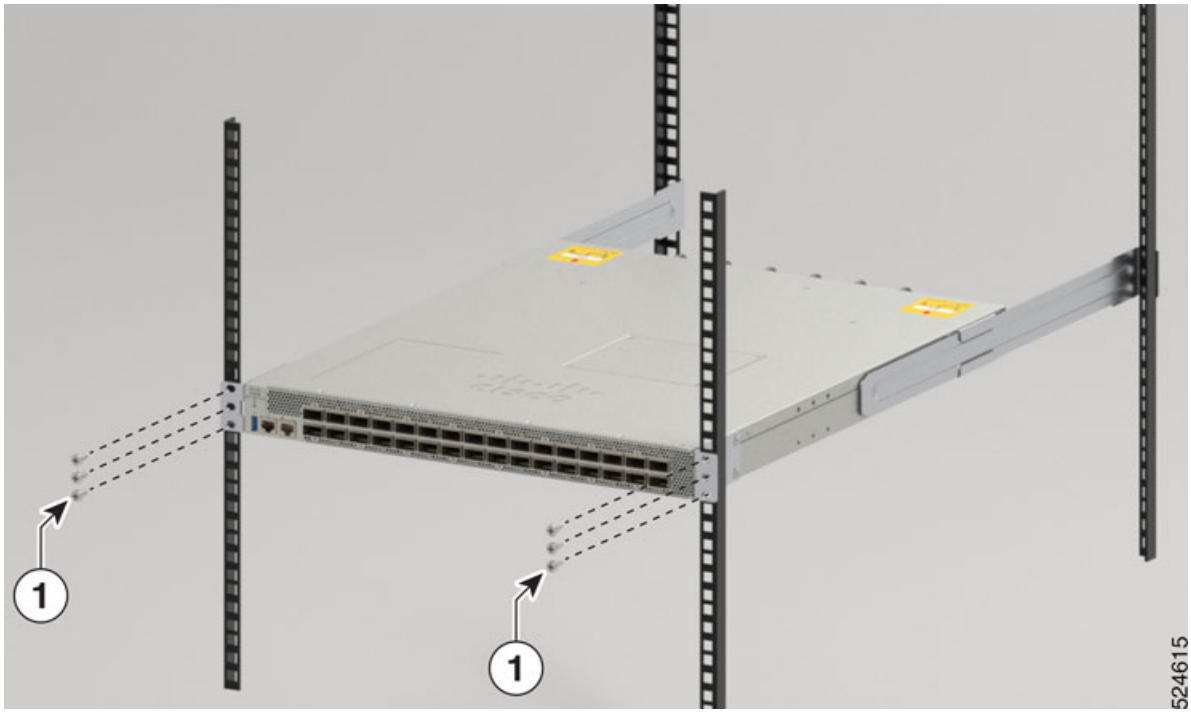
Figure 3: Insert switch into the rack



1	Insert the screws to attach the switch to the rack.

Step 6 Holding the switch level, insert four screws (12-24 or 10-32, depending on the rack type) through the holes in each of the rack-mount brackets and into the cage nuts or threaded holes in the rack-mounting rail.

Figure 4: Attach switch to the rack



1	Insert the screws to attach the switch to the rack.

Step 7 Attach the ground lug to the ground lug bracket (refer to item 3 in Figure 8).

a) Position the ground lug onto the previously installed ground lug bracket.

b) Use two M4 x 6mm pan-head screws to attach the ground lug to the bracket.

Step 8 Tighten the 10-32 screws to 20 in-lb (2.26 N.m) or tighten the 12-24 screws to 30 in-lb (3.39 N.m).

Ground the switch

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 1046—**Installing or Replacing the Unit

To reduce risk of electric shock, when installing or replacing the unit, the ground connection must always be made first and disconnected last.

If your unit has modules, secure them with the provided screws.

Warning **Statement 1101—**Connected To Grounded Outlet

In the Scandinavian countries (Denmark, Finland, Iceland, Norway, and Sweden) the appliance must be connected to a grounded outlet.

Warning **Statement 2004—**Grounded Equipment

This equipment is intended to be grounded to comply with emission and immunity requirements. Ensure that the switch functional ground lug is connected to earth ground during normal use.

Note **Statement 7015—**Equipment Bonding and Grounding

When you use thread-forming screws to bond equipment to its mounting metalwork, remove any paint and nonconductive coatings and clean the joining surfaces. Apply an antioxidant compound before joining the surfaces between the equipment and mounting metalwork.

Caution Grounding the switch is required, even if the rack is already grounded. A grounding pad with two threaded holes is provided on the switch for attaching either a grounding lug or grounding plate. The ground lug must be NRTL-listed. In addition, a copper conductor (wires) must be used and the copper conductor must comply with NEC code for ampacity.

Caution When terminating the frame ground, do not use soldering lug connectors, screwless (push-in) connectors, quick connect connectors, or other friction-fit connectors.

Procedure

Step 1 Use a wire-stripping tool to remove approximately 0.75 inches (19 mm) of the covering from the end of the #6 AWG grounding cable.

Step 2 Insert the stripped end of the grounding cable into the open end of the grounding lug.

Step 3 Use the crimping tool to secure the grounding cable in the grounding lug.