



Rack installation instructions

Review the documentation that comes with the rack cabinet for safety and cabling information. Before you install the server in a rack cabinet, review the following guidelines:

- Two or more people are required to install devices 2U or larger in a rack cabinet.
- Make sure that the room air temperature is below 35°C (95°F).
- Do not block any air vents; usually 15 cm (6 in.) of space provides proper airflow.
- Do not leave open spaces above or below an installed server in your rack cabinet. To help prevent damage to server components, always install a blank filler panel to cover the open space and to help ensure proper air circulation.
- Install the server only in a rack cabinet with perforated doors.
- Plan the device installation starting from the bottom of the rack cabinet.
- Install the heaviest device in the bottom of the rack cabinet.
- Always install the tip plates on the rack.
- Do not extend more than one device out of the rack cabinet at the same time.
- Remove the rack doors and side panels to provide easier access during installation.
- Connect the server to a properly grounded outlet.
- Do not overload the power outlet when you install multiple devices in the rack cabinet. Pay attention to equipment ratings while planing for power requirements.
- Install the server in a rack that meets the following requirements:
 - Minimum depth of 50 mm (1.97 in.) between the front mounting flange and inside of the front door.
 - Minimum depth of 200 mm (7.9 in.) between the rear mounting flange and inside of the rear door to support the use of the cable-management arm.
 - Minimum depth of 660 mm (26.0 in.) and maximum depth of 734 mm (29.0 in.) between the front and rear mounting flanges to support the use of the system rack slides.



Use safe practices when lifting.



≥18 kg (39.7 lb)



≥32 kg (70.5 lb)



≥55 kg (121.2 lb)



Do not place any objects on top of rack-mounted devices.

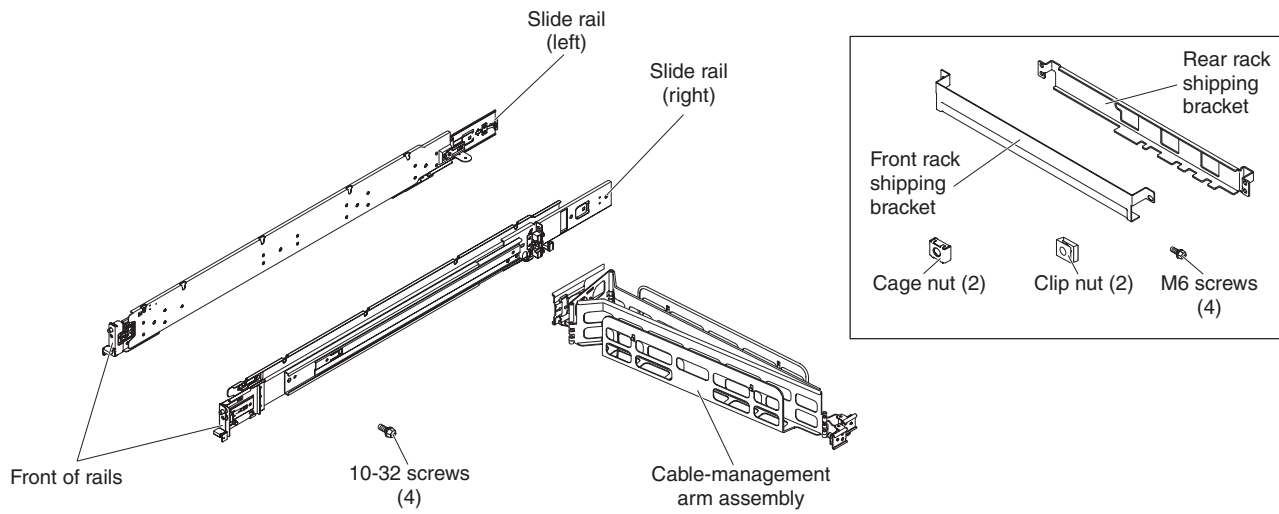


Notes:

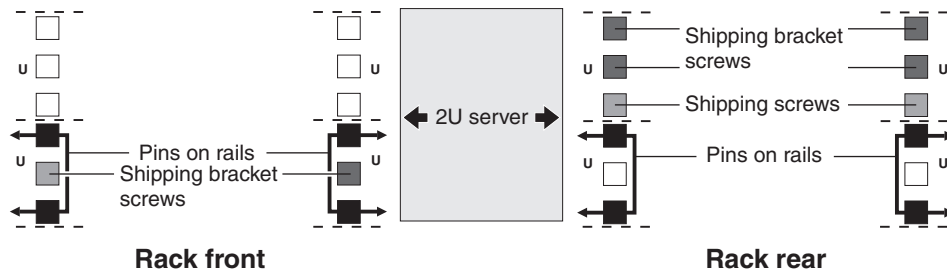
1. You can install the cable-management arm on either side of the server. The installation instructions in this document can be reversed if you are installing the cable-management arm on the side of the server that is not shown.
2. Cage nuts and clip nuts are not required to install the server in a rack cabinet.

The following illustration shows the items that you need to install the server in the rack cabinet. If any items are missing or damaged, contact your place of purchase.

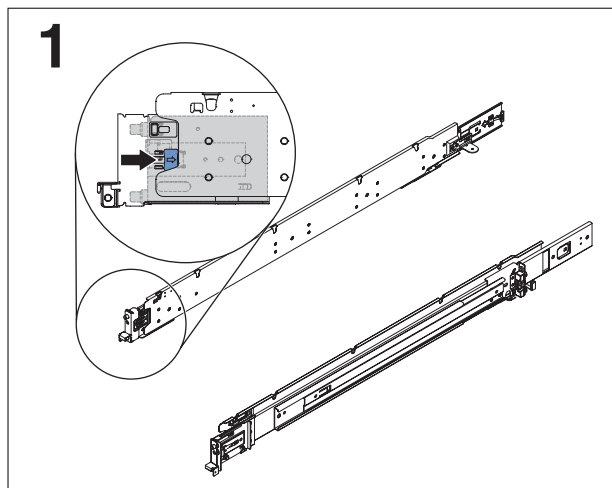
Note: The following items come with either the server or the rack installation kit.



Use the following illustration of the front and rear rack-mounting flanges to determine the appropriate rack-mounting holes for installing the slide rails.

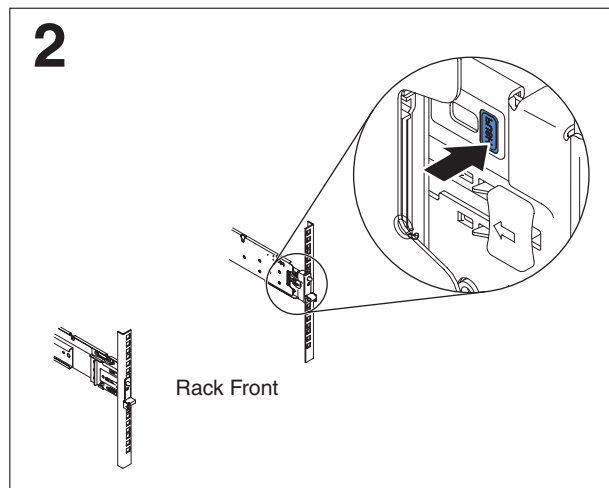


Note: If the slide rails in your rack installation kit came with shipping screws, remove them before you begin the following installation procedure.



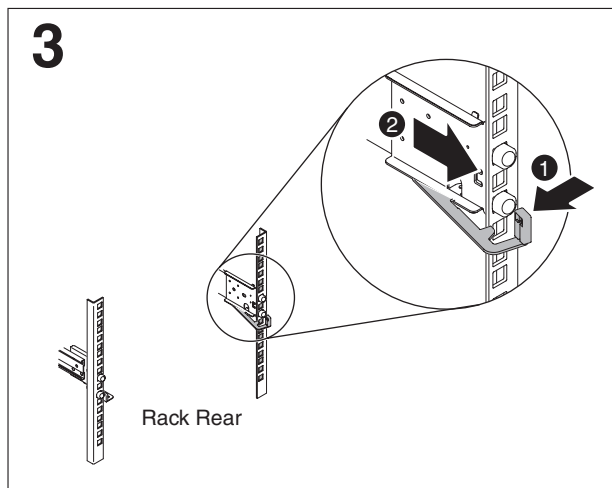
Open the front rack-locking carrier.

Each slide rail is marked with either **RIGHT FRONT** or **LEFT FRONT**. Select one of the slide rails and push the tab until it clicks into place.



Install the front end of the slide rails.

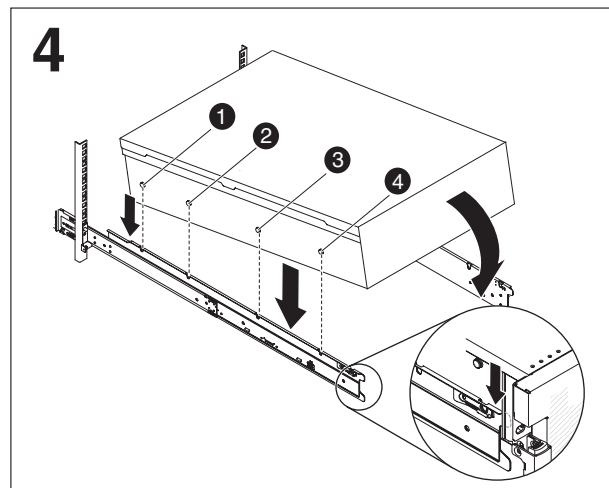
From the front of the rack, line up the two pins on the front of the slide rail with the holes in the selected U on the front of the rack. Press the release button to close the rack-locking carrier. Make sure the pins go through the holes.



Install the rear end of the slide rails.

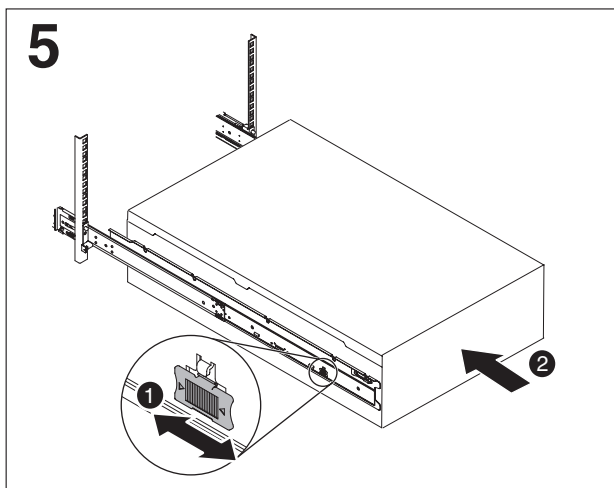
Line up the pins on the rear of the slide rail with the holes in the selected U on the rear of the rack. Push the rack-locking latch **1** while you insert the pins into the holes **2**; then, release the rack-locking latch to securely engage the rear of the slide rail to the rack.

Repeat steps 1 through 3 to install the other slide rail into the rack. Make sure that each slide rail is securely installed in the rack.



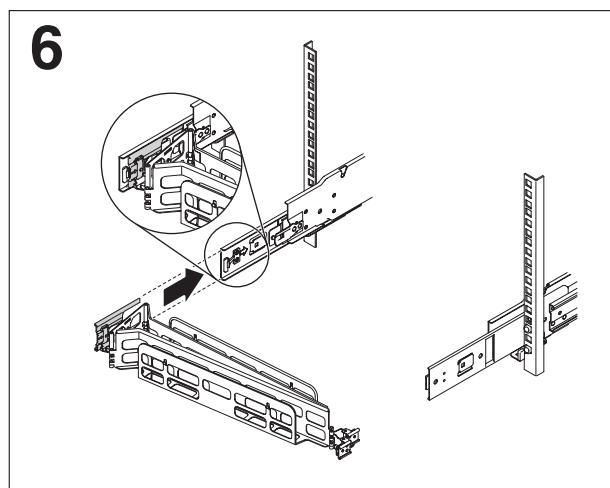
Install the server on the slide rails.

Pull the slide rails forward until they click into place. Carefully lift the server and tilt it into position over the slide rails so that the rear rail heads on the server line up with the rear slots on the slide rails. Slide the server down until the rear rail heads slip into the two rear slots; then, slowly lower the front of the server until the other rail heads slip into the slots and the front of the slide rails slip into the guides on the sides of the server.



Slide the server into the rack.

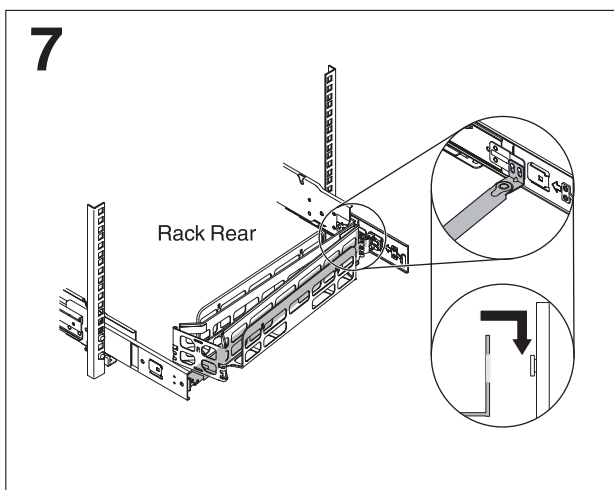
Push the locking levers **1** on the slide rails and push the server **2** all the way into the rack until it clicks into place.



Install the cable-management arm.

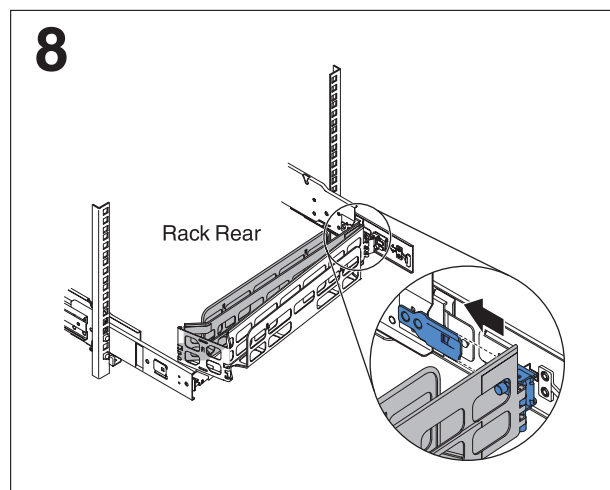
Note: The cable-management arm can be installed on either side of the server. This document shows it being installed on the left side. To install the cable-management arm on the right side, follow the instructions and install the hardware on the opposite side.

Slide the tab on the cable-management arm completely into the right slide rail.



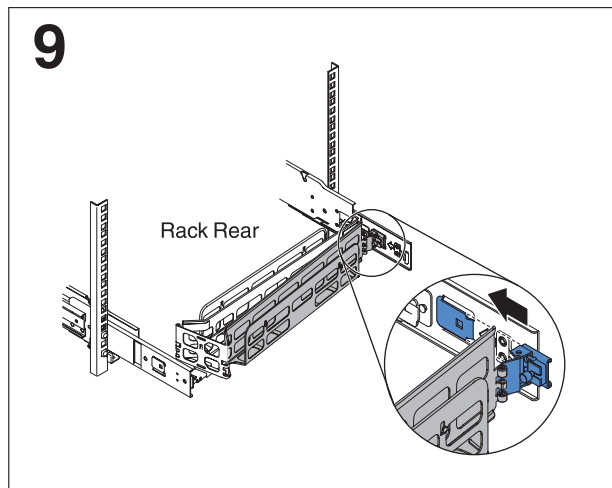
Install the support arm for the cable-management arm.

To attach the support arm to the slide rail, align the holes on the support arm with the nail heads on the mounting bracket on the other slide rail. Push the support arm so that the nail heads slip into the holes; then, drop the support arm down until it latches into place.



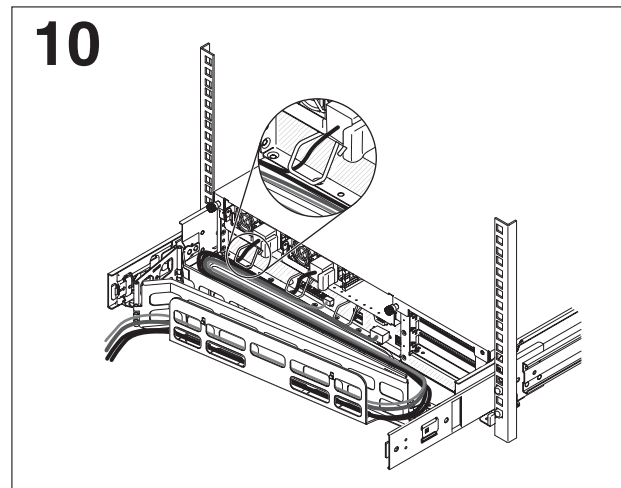
Install the front cable-management arm.

Slide the tab on the front cable-management arm into the slot on the slide rail. Push the tab until it snaps into place.



Install the rear cable-management arm.

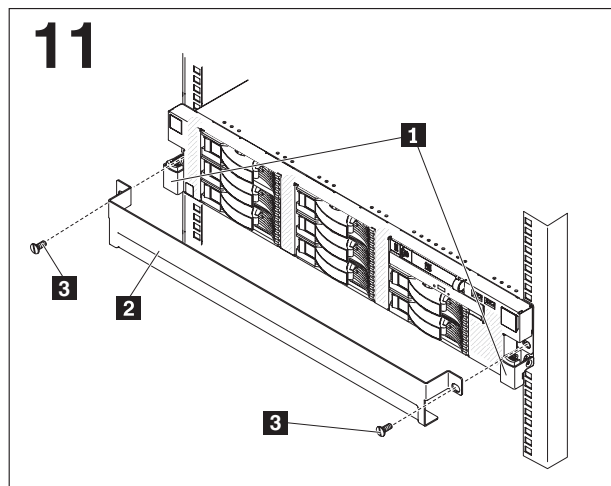
Slide the tab on the rear cable-management arm into the slot on the slide rail. Push the tab until it snaps into place.



Connect and route the cables.

Attach the power cords and other cables to the rear of the server (including keyboard, monitor, and mouse cables, if required). Route the cables and power cords in the cable-management arm.

Note: Allow slack in all cables to avoid tension in the cables as the cable-management arm moves.

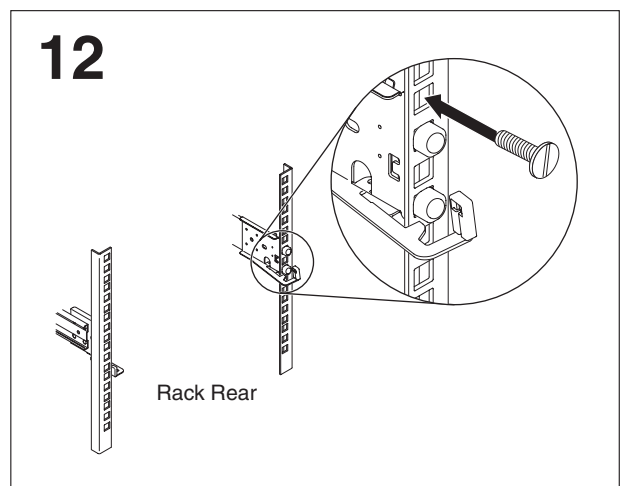


Install the front rack shipping bracket.

Slide the server into the rack until it snaps into place. To slide the server out of the rack, press on the release latches **1**.

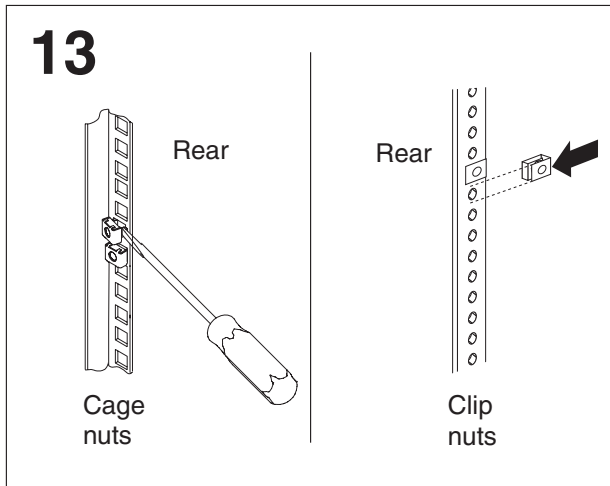
To ship the server in a rack, install the front shipping bracket. Align the screw holes on the rack shipping bracket **2** with the screw holes on the rack; then, install the 10-32 screws **3**.

Note: When you move the rack cabinet, or if you install the rack cabinet in a vibration-prone area, install the 10-32 screws **3** in the front of the server.



Secure the slide rails in the rack for shipping.

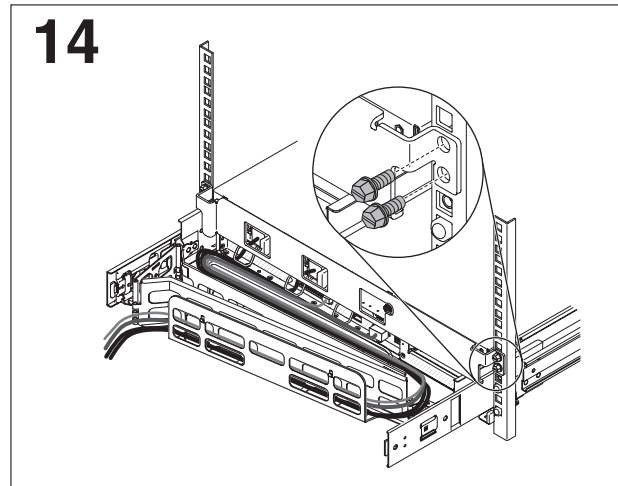
Install a 10-32 screw in the rear of each slide rail.



Install the cage nuts for the rear rack shipping bracket.

Use the cage-nut-insertion tool or a screwdriver to install the cage nuts or the clip nuts on the inside of the mounting rail, as required for your rack, into the selected holes.

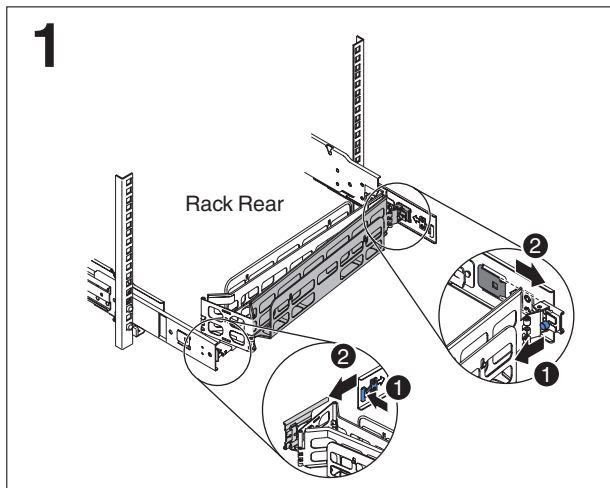
Note: For racks with square holes, use cage nuts. For racks with round holes, use clip nuts.



Install the rear rack shipping bracket.

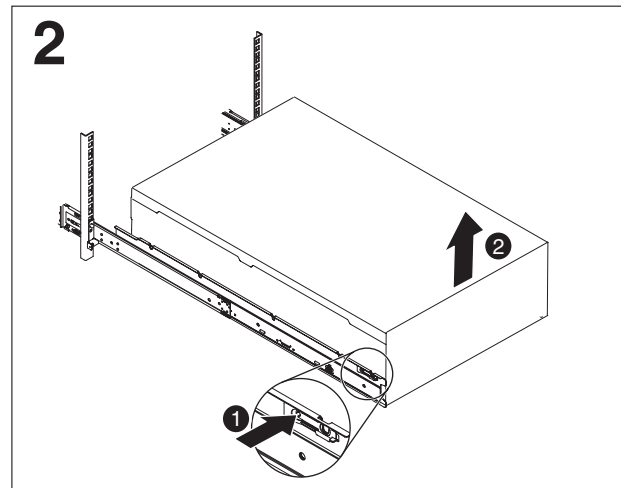
Align the screw holes on the rack shipping bracket with the screw holes on the rack; then, install the M6 screws to secure the rack shipping bracket to the rack.

Removing the server from the rack



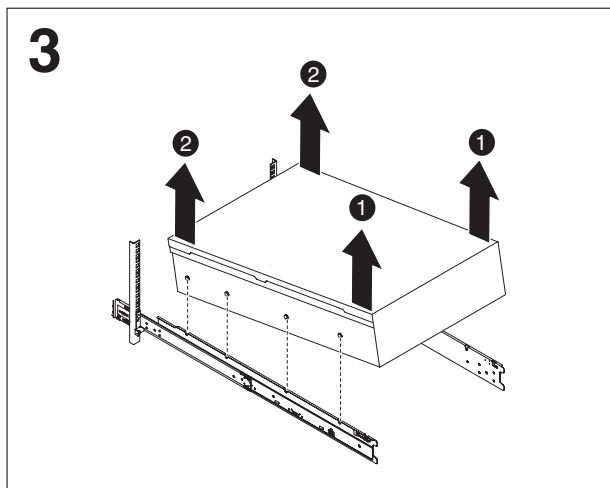
Remove the cable management arm.

To remove the server from the rack, disconnect the cables from the rear of the server. Remove the cable management arm by pulling the pins out while sliding the tabs out of the mounting location. Press the release tab while you slide the other side of the cable-management arm from the slide rail.



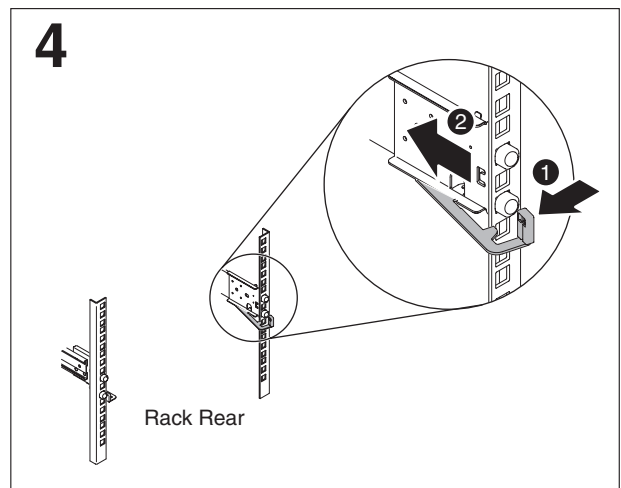
Unlatch and rotate the front of the server.

Press the release latches **1**, while supporting the rear of the server, and lift the front of the server up slightly **2** to disengage the front slide rails from the guides.



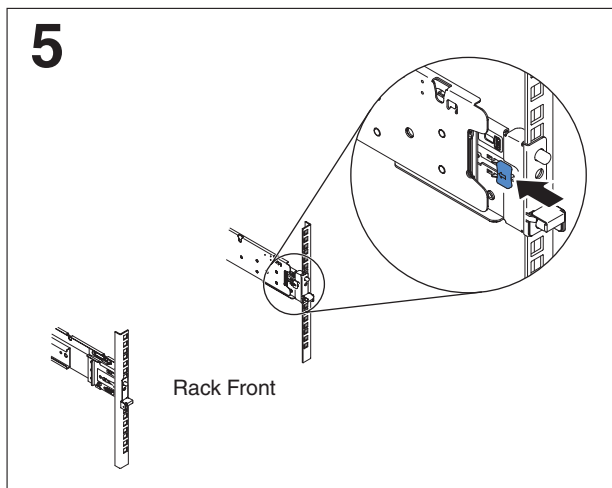
Lift the server off of the slide rails.

After the front slide rails disengage from the front of the server **1**, lift up on the rear of the server **2** to clear the nail heads from the slots. Lift the server out of the rack and place it on a sturdy surface.



Remove the rear end of the slide rails.

To disengage the slide rails from the rear of the rack, press the release latch and push rack-locking carrier toward the front of the rack to disengage the slide rail from the rack.



Remove the front end of the slide rails.

To remove the slide rails from the front of the rack, press the tab toward the rear of the slide rail to open the rack-locking carrier and remove the slide rail from the rack.

Store this information with your server documentation for future use.

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