

Rack Installation Instructions

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

- Two or more people are required to install the device in a rack cabinet.
- Ensure 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 your 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.
- 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 installing multiple devices in the rack cabinet.
- Install your server in a rack that meets the following requirements:
 - Minimum depth of 70 mm (2.76 in.) between the front mounting flange and inside of the front door.
 - Minimum depth of 157 mm (6.18 in.) between the rear mounting flange and inside of the rear door.
 - Minimum depth of 718 mm (28.27 in.) and maximum depth of 762 mm (30 in.) between the front and rear mounting flanges to support the use of the cable-management arm.



Use safe practices when lifting.



≥18 kg (39.7 lb)



≥32 kg (70.5 lb)



≥55 kg (121.2 lb)



Do not place any object weighing more than 50 kg (110 lb) on top of rack-mounted devices.

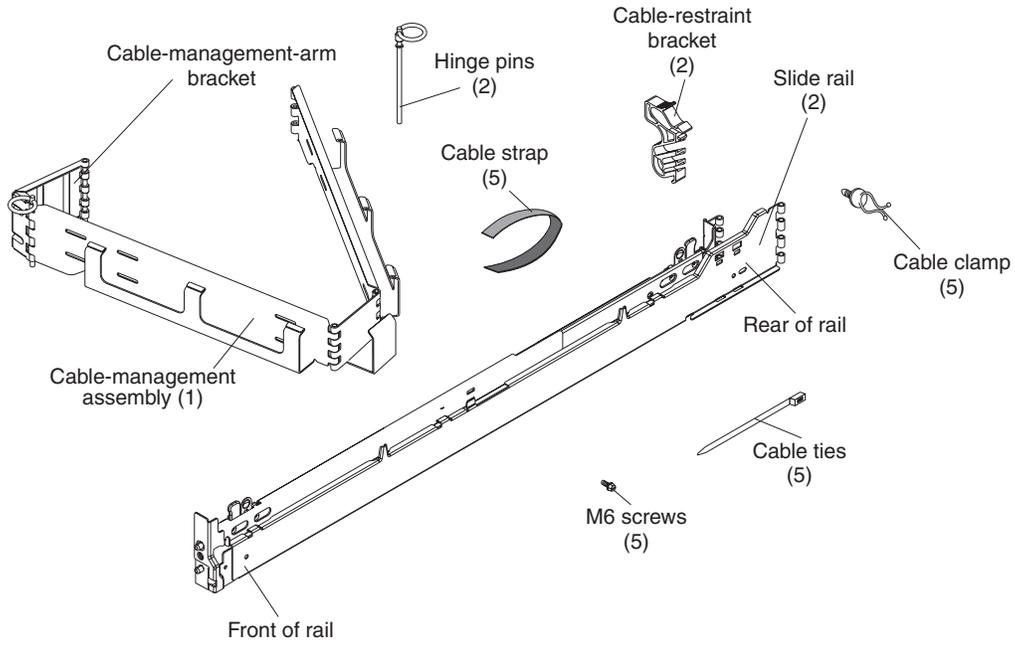


≥50 kg (110 lb)

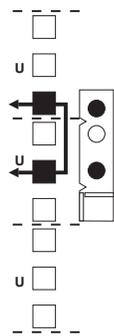
Note: Cage nuts and clip nuts are not required to install your server in a rack cabinet. Use 5.5 mm flat-head screws to install the slide rails in a taped-hole rack, if necessary.

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

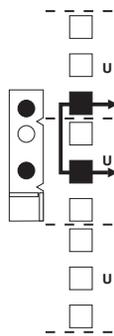
Note: Some items come with the server, not in the rack installation kit.



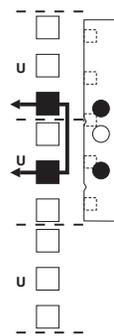
Use the following illustration of front and rear rack-mounting flanges, or the template that comes in the rack installation kit, to determine the appropriate rack-mounting holes for installing the slide rails. Note that the slides go in the top 2 U's of the 3 U's required for the server.

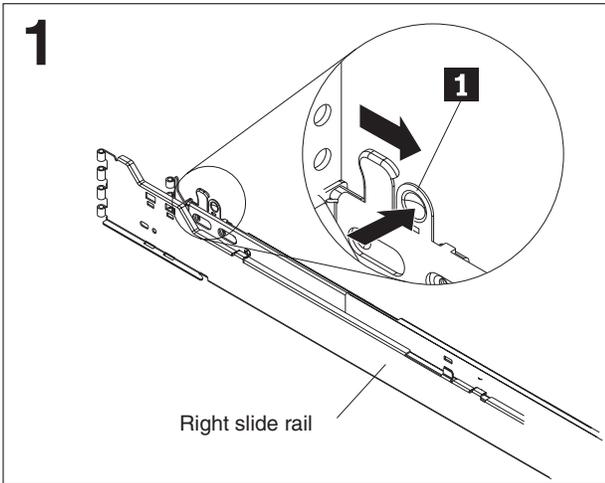


Front



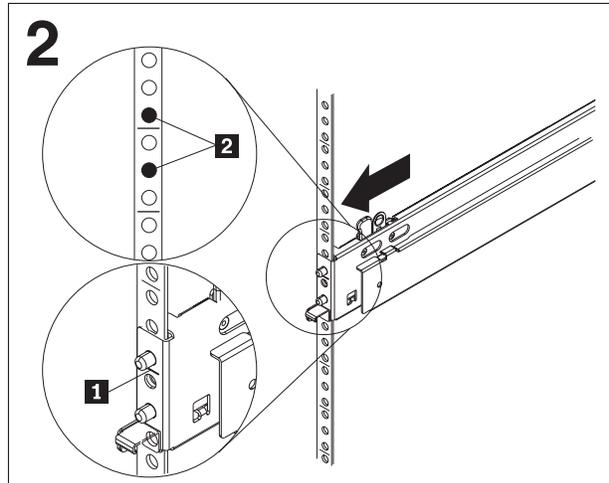
Rear





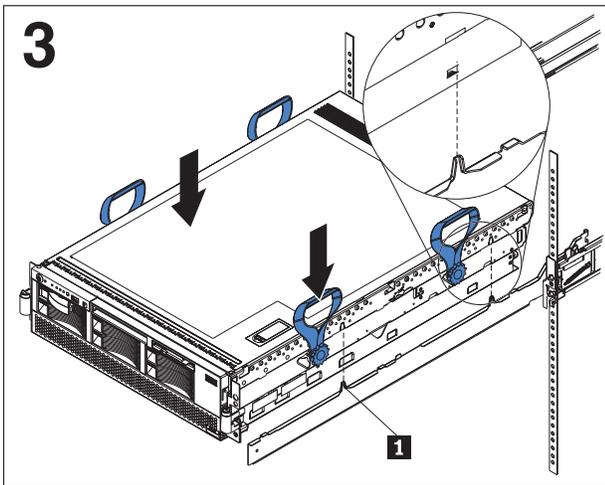
Push outward on the slide-rail latch **1**; then, pull the latch back to open the slide rail. The latch will catch to stay open. Open the other end of the slide rail; then, do the same for the other slide rail.

Note: If you are installing the server in the top of the rack or directly under another server or device, remove the cable-management-arm bracket from the cable-management assembly and install the cable-management-arm bracket on the slide rail. Go to step 6 to install the cable-management-arm bracket; then, continue with step 2.



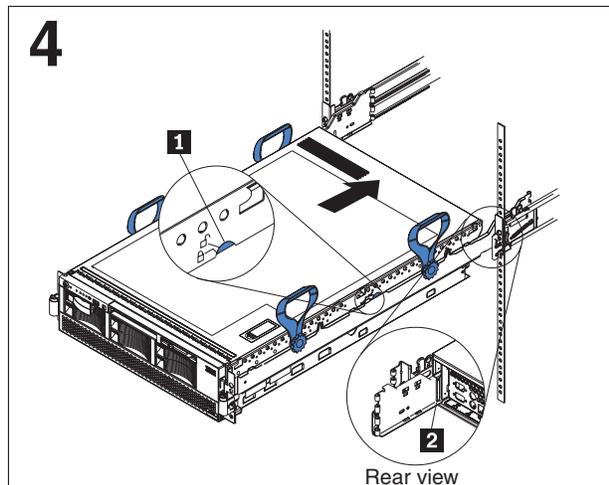
Align the slide rail with the front mounting flange. Use the score mark on the slide rail **1** to align the slide rail. Push outward on the slide-rail latch to close the latch and secure the slide rail. Do the same for the other front slide rail. Align the slide rail with the rear mounting flange. The slide rail occupies the full height of the server. Close the latches to secure the rear of both slide rails.

Note: Make sure that the slide rails are securely seated on the mounting flanges. When secure, the slide rail pins **2** protrude from the slide rails.



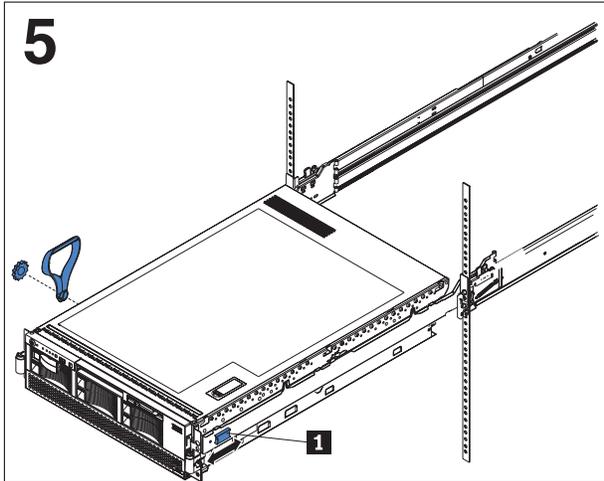
Extend the slide rails fully from the rack until the slide rails lock. Align the tabs on the slide rails **1** with the matching inserts on the server and lower the server on the slide rails.

Note: Make sure that each slide-rail tab is inserted in the matching insert on the server and that the server is resting on the top edge of the slide rail.

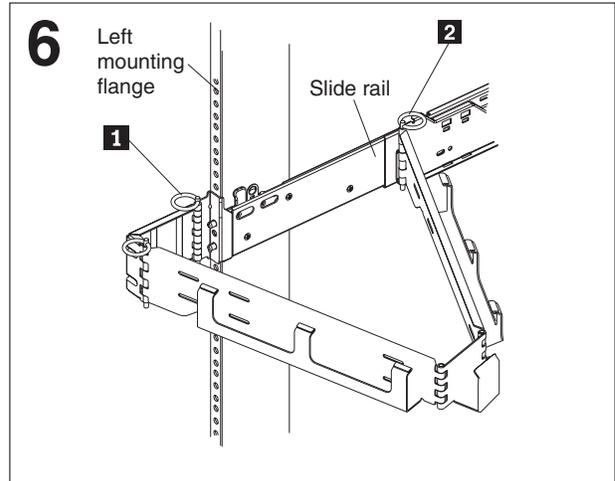


Carefully slide the server along the slide rails approximately one inch toward the rack to lock the server on the slide rails.

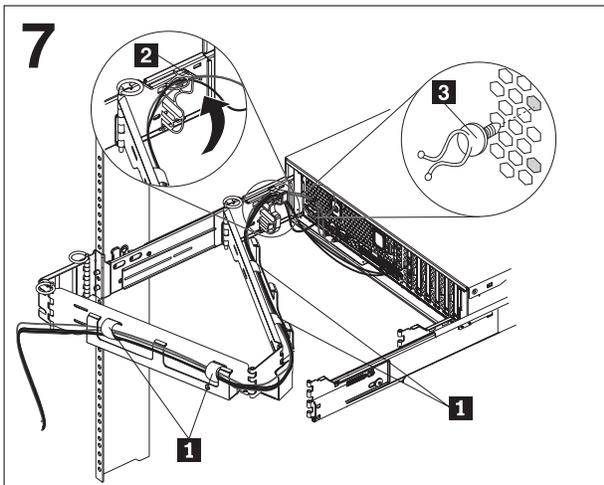
Note: When locked in position, an indicator **1** is visible on each side of the server. Make sure that the server is securely attached to the slide rail hooks **2**. To remove the server from the rack, lift up on the indicator and slide the server forward; then, use the handles to lift the server out of the rack.



Remove the blue handles; then, slide the blue latches **1** on the slide rails in either direction and slide the server into the rack until it extends approximately 4 inches.

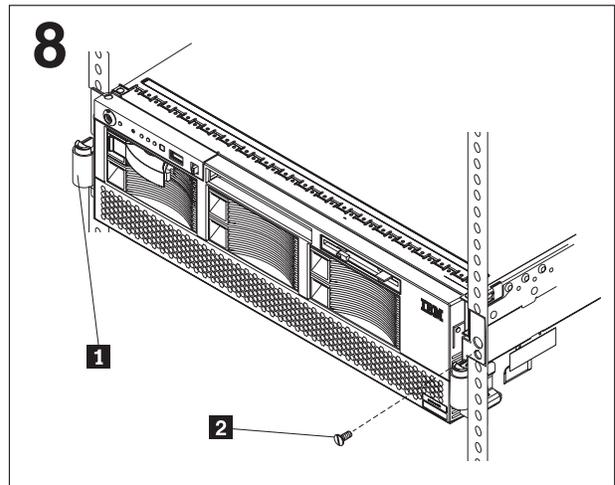


Attach the cable-management assembly to the rear of the slide rail using a hinge pin **1**. Attach the free end of the cable-management assembly to the slide rail using the second hinge pin **2**. **Note:** If you installed the cable-management-arm bracket in step 1, complete the installation of the cable management assembly.



Attach the power cords and other cables to the rear of the server (including keyboard, monitor, and mouse, if required). Secure the cable-restraint bracket **2** to the slide rail. **Note:** See the cable-routing guidelines on page 6. Allow slack in all cables to avoid tension in the cables.

Use cable clamps **3** to secure the cables across the rear of the server. Attach the thinner cables to the cable-restraint bracket **2** on the slide rail. Route the cables along the cable-management arm channel, securing them with cable straps **1**.



Slide the server into the rack cabinet until the release latches **1** lock into place. To slide the server out of the rack, press on the release latches. **Note:** Insert the optional M6 screws **2** in the front and rear of the server when moving the rack cabinet, or if you install the rack cabinet in a vibration-prone area.

To remove the server from the rack, reverse these instructions. After you remove the cables from the rear of the server, you might find it easier to separate the cable-management arm from the server, keeping the cables in the cable-management arm, before you remove the server from the rack. To separate the cable-management arm from the server, remove hinge pin **2** (shown in step 6 on page 5). Store this information with your server documentation for future use.

Cable-routing guidelines: When routing the cables through the cable-management arm, observe the following guidelines:

- First route the power cords in the bottom of the cable-management arm channel, then route any SCSI and RXE-expansion cables in the channel, then route the rest of the cables. The cable-management arm can hold up to two power cables, three SCSI cables, an RXE-expansion cable, a keyboard-video-monitor (KVM) cable, and four to six network cables.
- When installing an RXE-expansion cable, make sure there is at least 35 cm (14 in.) of cable between the RXE expansion connector and the beginning of the channel on the cable-management arm to allow for a large bend radius.

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