

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.
- Install the 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.







≥32 kg (70.5 lb)



≥55 kg (121.2 lb)



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



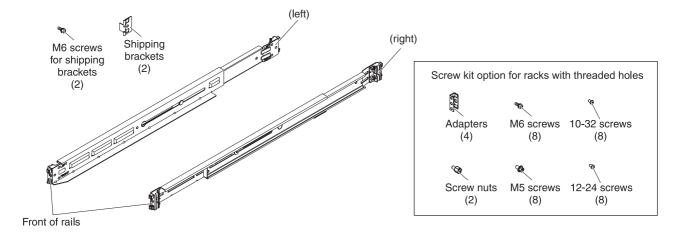
Notes:

- 1. When you install a 2U server, be sure to install the rails in the bottom U of the 2U area in the rack.
- 2. Cage nuts and clip nuts may be required to install the server in a rack cabinet.
- 3. Your server might look different from the servers that are illustrated, and some parts of the rack installation kit might not be used.

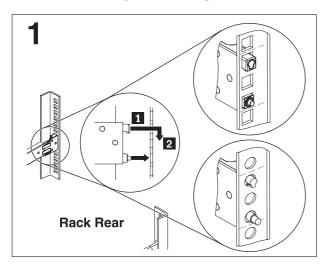
The following illustration shows the items that you need to install the server in the rack cabinet. If any items are missing or damaged, contact your place of purchase.

Notes:

- 1. Some items come with the server, not in the rack installation kit.
- 2. You will need the components in the screw kit option to install the rails in a rack with threaded holes.



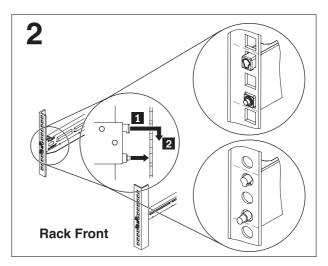
Note: If the rails in your rack installation kit came with shipping screws, remove them before you begin the following installation procedure.



Install the rear end of the rails in a rack with non-threaded holes.

Note: If you are installing the rails in a rack with threaded holes, skip to step 3.

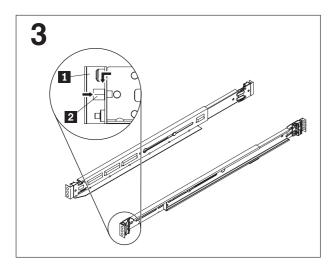
From the front of the rack, line up the pins on the rear of the rail with the holes in the selected U on the rear of the rack. Push the rail so that the pins go into the holes 1, and drop the rail down until it latches into place.

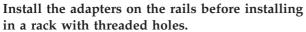


Install the front end of the rails in a rack with non-threaded holes.

Pull the rail forward and insert the pins 1 on the front of the rail into the holes in the U on the front of the rack. Drop the rail down 2 until it latches into place.

Repeat steps 1 and 2 to install the other rail. Make sure that each rail is securely engaged in the rack. Skip to step 5.



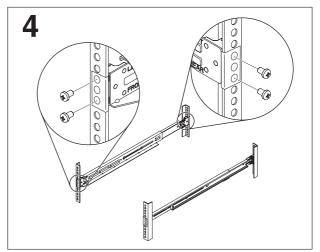


Note: If you are installing the rails in a rack with non-threaded holes, skip to step 5.

Line up the pins on the front of the rail with the holes on the adapter. Push the adapter **1** so that the pins go into the holes until the adapter latches on the rail.

Install the cage nut 2 in the hole on the front of the rail.

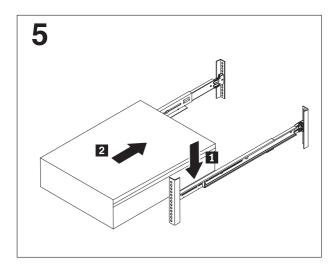
Install the other adapter to the rear of the rail.



Install the rails in a rack with threaded holes.

Align the holes on the adapter tab with holes in the U on the rear of the rack; then, install the screws to secure the rail in the rack. Install the front of the rail in the rack.

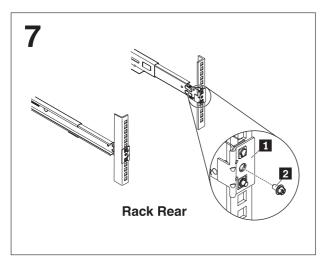
Repeat steps 3 and 4 to install the other rail. Make sure that each rail is securely installed in the rack.



Install the server on the rails.

Carefully lift the server and tilt it into position over the rails, and then slowly lower the rear of the server on the rails 1. Make sure that the server sits on the rails securely and push the server 2 all the way into the rack.

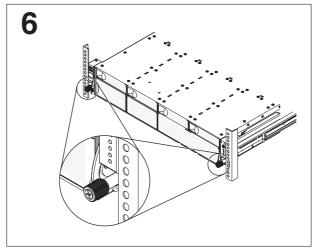
It is possible to install the server horizontally, but it is easier to install when the server is tilted.



Secure the server in the rack for shipping. Note: If you install the server in a rack with threaded holes, you must remove the server from the rack before shipping.

Install the shipping bracket marked "Left" to the rear of the left rail. Align the holes on the shipping bracket 1 to the pins on the rail; then, install the screw 2 to secure the shipping bracket to the rack.

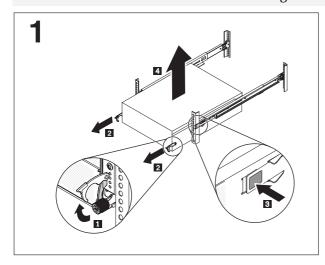
Install the other shipping bracket to the rear of the right rail.



Tighten the front thumbscrews.

When you move the rack cabinet, or if you install the rack cabinet in a vibration-prone area, tighten the two thumbscrews on the front of the server to secure the server in the rack cabinet.

Removing the server from the rack

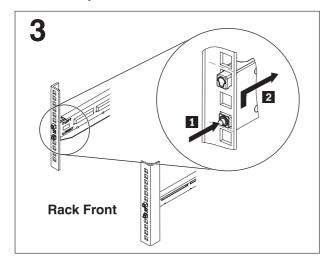


Remove the server from the rack.

To remove the server from the rack, disconnect the cables from the rear of the server. Loosen the thumbscrews on the front of the server and pull out the handles 1; then, pull the server slightly forward 2.

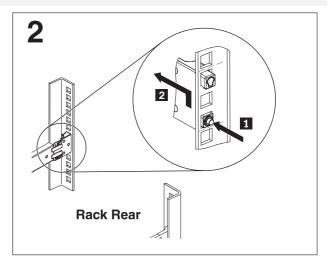
While supporting the rear of the server, press the release latches **3** on both sides of the server to slide the server out of the rack.

Lift the server out of the rack cabinet 4 and place it on a sturdy surface.



Remove the front end of the rails.

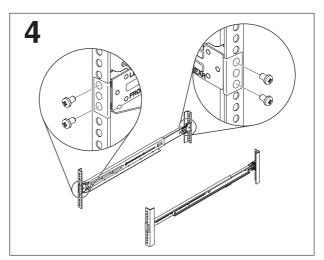
To remove the rails from the front of the rack with non-threaded holes, push in the lower pin 1 and lift up slightly on the front of the rail 2. Remove the rails from the rack.



Remove the rear end of the rails.

Note: If you are removing the rails from a rack with threaded holes, skip to step 4.

To disengage the rails from the rear of the rack, push in the lower pin 1 and then push back on the rail 2.



Remove the rails from a rack with threaded holes.

To remove the rails from a rack with threaded holes, remove the screws from the front and rear of the rails; then, remove the rails from the rack.

Store this information with your server documentation for future use.

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