

Rack Installation Guide

Friction 2-Post Screw-in Rail Kit v2

Read the guidelines first

Before you install the server in a rack, read the following guidelines:

- Some illustrations might differ from your server. All types of server are removed and installed in a similar manner.
- See the *User Guide* or *Maintenance Manual* for the maximum room air temperature.
- Do not block any air vents, usually 150 mm (6 inches) of air space provides proper airflow.
- Plan the device installation starting from the bottom of the rack.
- Install the heaviest device in the bottom of the rack.
- Do not extend more than one device out of the rack at the same time.
- Do not place any objects on the top of the rack-mounted devices.
- Connect all power cords to properly wired and grounded electrical outlets.
- Do not overload the power outlet when installing multiple devices in the rack.
- The maximum width of the mounting flange is 76.2 to 279.4 mm (3 to 11 inches).

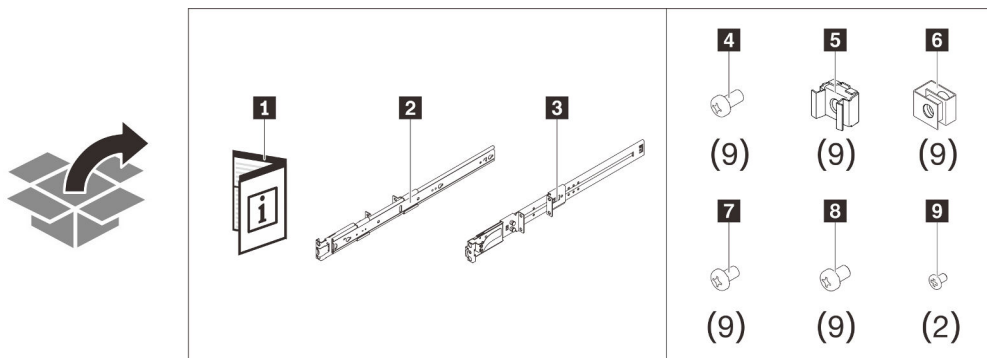
Safety notice



CAUTION:
Make sure the rails support your server model and use safe practices when lifting

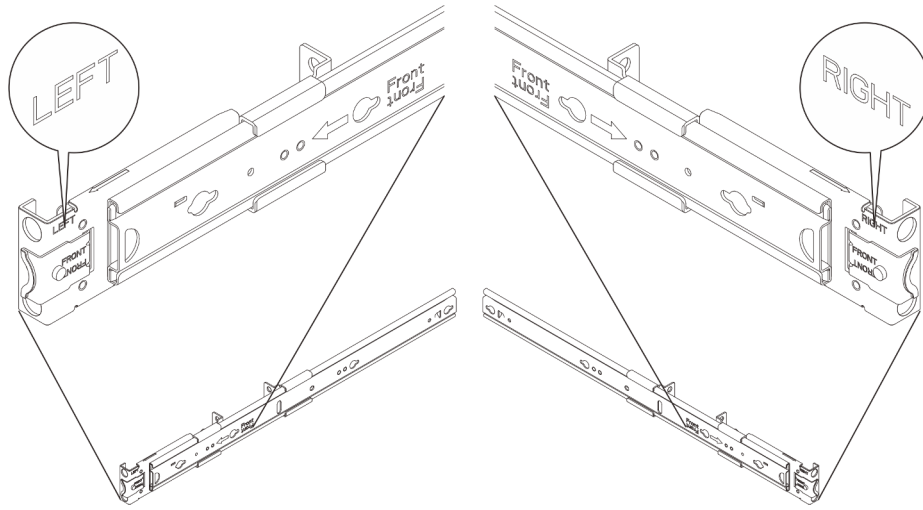


The rail package contains the following items:



1 Document	2 Left rail
3 Right rail	4 Nine M5 screws (for square-hole and round-hole rack)
5 Nine cage nuts (for square-hole rack)	6 Nine clip nuts (for round-hole rack)
7 Nine 10-32 screws (for threaded rack)	8 Nine 12-24 screws (for threaded rack)
9 Two M3.5 screws	

Attention: There are “L” and “R” logos marked on the front of inner rails which represent the left rail and the right rail as the following illustration. Ensure correct rails are installed to the rack accordingly.



Installation

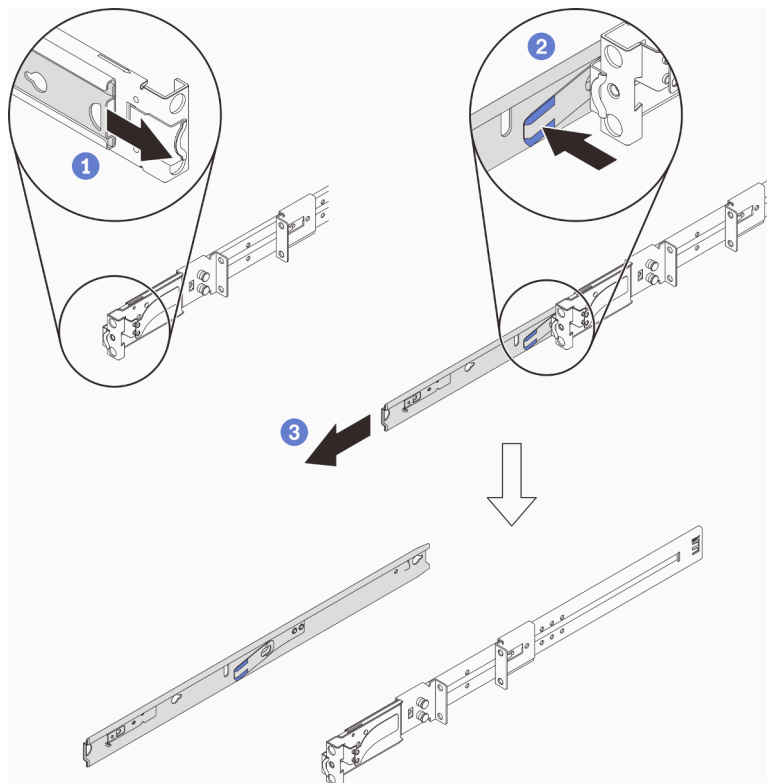
1. Disengage the inner rails

Step 1. Select one of the rails and pull its inner rail outward until you see the release latch.

Step 2. Press the release latch to disengage the inner rail from the outer rail.

Step 3. Pull the inner rail out from the outer rail.

Step 4. Repeat Step 1 to Step 3 to remove the other rail.



2. Install the inner rails on the server

Note: The appearance of the server and the number of the rail mounting pins on the side of the server may be different depending on the server model.

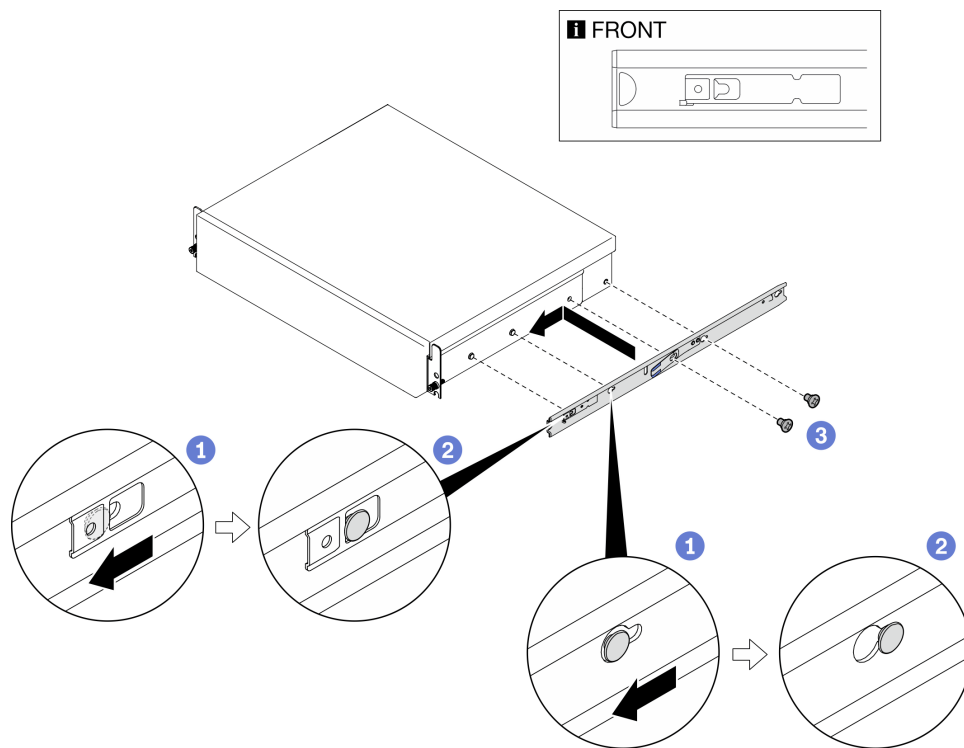
Step 1. Align the mounting holes on the inner rail with the corresponding rail mounting pins on the side of the server.

Step 2. Push the inner rail as shown until the mounting pins on the server are locked in place.

Step 3. Depending on the model, tighten one or two M3.5 screws to secure the inner rail to the server.

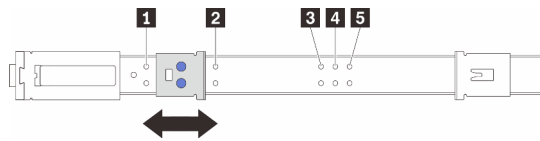
Note: For the model that requires two screws on each side, the extra screws are attached to the server. For the details of the extra screws, see *Server replacement* or *Configuration guide* in the server *User Guide* or *Maintenance Manual*.

Step 4. Repeat Step 1 to Step 3 to install the other rail.



3. Adjust the Position of the Sliding Brackets (optional)

Bracket position for different server depths:



1 300 mm to 360 mm (default position)	2 480 mm to 560 mm
3 675 mm to 752 mm	4 700 mm to 779 mm
5 725 mm to 805 mm	

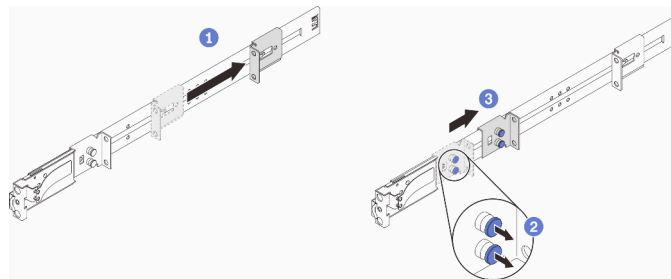
Note: Based on the server dimension, you may need to adjust the bracket to make sure the center of gravity of the server is within the rails.

Step 1. Select one of the rails. Move the rear sliding bracket to the back as shown.

Step 2. Pull the pins of the front sliding bracket.

Step 3. Slide the front bracket and lock the pins into the holes on the rails according to your server depths.

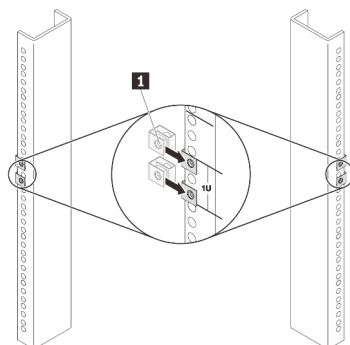
Step 4. Repeat Step 1 to Step 3 to adjust the other rail.



4. Install Nuts to the Rack

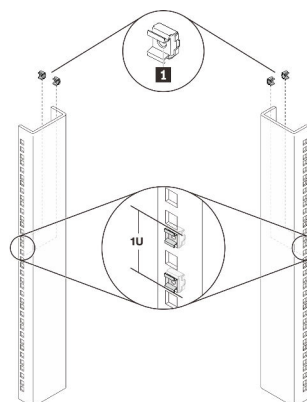
Threaded rack: Skip to [Step 5](#).

Round-hole rack: Install the two clip nuts to the rack as shown:



1 Clip nut

Square-hole rack: Install the two cage nuts to the rack as shown:



1 Cage nut

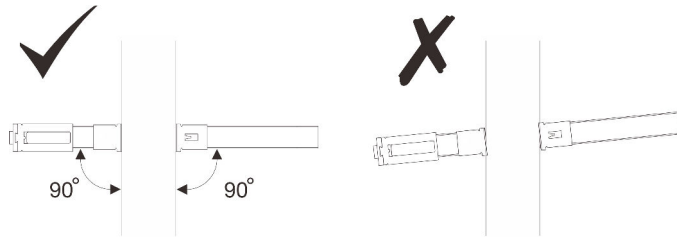
5. Install the outer rails to the rack

Step 1. Align one of the outer rails with the rack. Secure the front side of the outer rail to the rack with two screws.

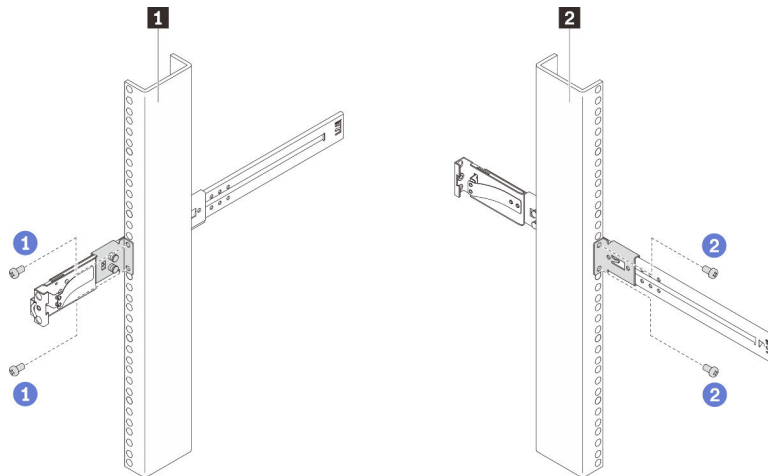
Round-hole rack	Square-hole rack	Threaded rack
M5 screws		10-32 or 12-24 screws (depending on the rack)

Step 2. Adjust the rear sliding brackets against the rack. Secure the rear side of the rail to the rack with two screws.

Important: Make sure that both ends of the rail are seated at the same height.



Step 3. Repeat Step 1 to Step 2 to install the other rail.



1 Screws installation on the front side of the rack

2 Screws installation on the rear side of the rack

Server replacement

To install or remove the server, refer to the “Hardware replacement procedures” chapter in the server *User Guide* or *Maintenance Manual*. Search your server and select its *User Guide* or *Maintenance Manual* at Lenovo server product portfolio page: <https://pubs.lenovo.com/>.



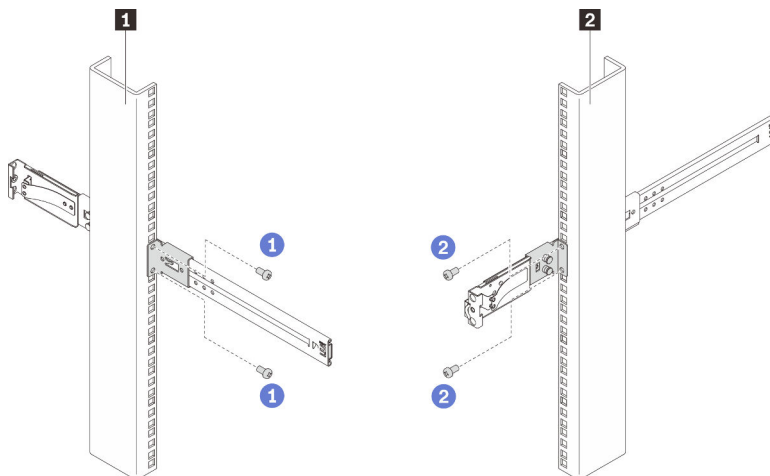
Removal

1. Remove the outer rails from the rack

Step 1. Loosen the two screws which secure the rear side of the rail.

Step 2. Loosen the two screws which secure the front side of the rail. Carefully remove the whole rail from the rack.

Step 3. Repeat Step 1 to Step 2 to remove the other rail.



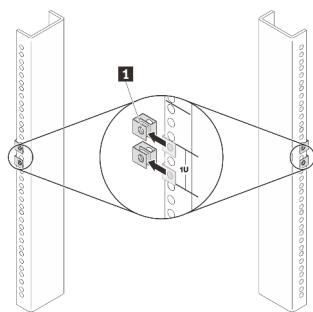
1 Screws removal from the rear side of the rack

2 Screws removal from the front side of the rack

2. Remove Nuts from the Rack

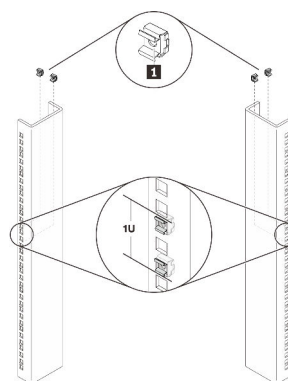
Threaded rack: Skip this step.

Round-hole rack: Remove the two clip nuts from the rack as shown:



1 Clip nut

Square-hole rack: Remove the two cage nuts from the rack as shown:



1 Cage nut

3. Remove the inner rails from the server

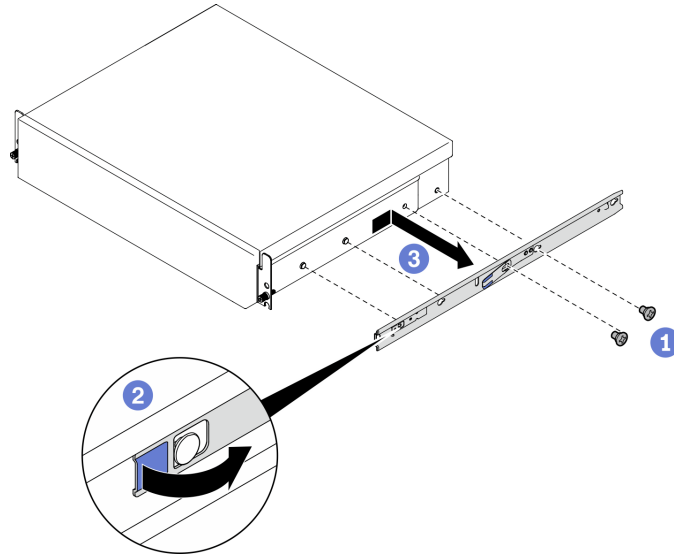
Note: The appearance of the server and the number of the rail mounting pins on the side of the server may be different depending on the server model.

Step 1. Depending on the model, loosen the one or two M3.5 screws that secure the inner rail.

Step 2. Open the front latch on the inner rail.

Step 3. Slightly push the inner rail to the right and release the inner rail from the mounting pins on the server as shown.

Step 4. Repeat Step 1 to Step 3 to remove the other rail.

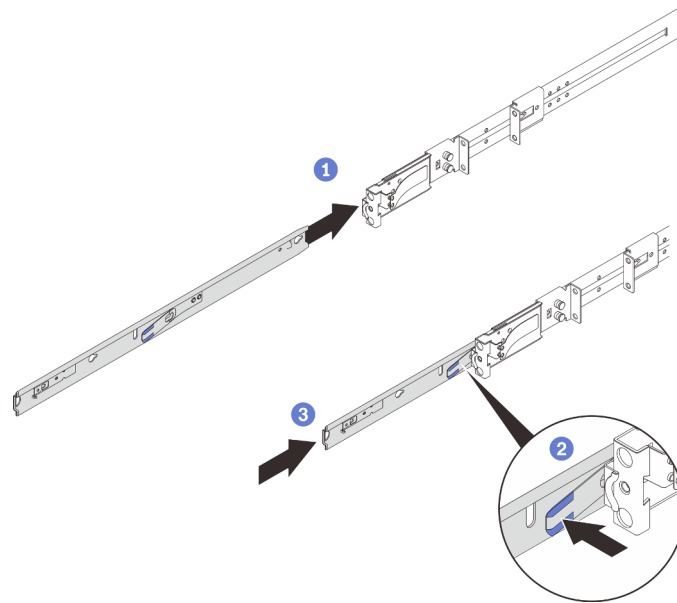


4. Engage the inner rails with the outer rails

Step 1. Align the outer rail to insert and push the inner rail until it stops.

Step 2. Press the release latch to push continuously until the inner rail is completely engaged with the outer one.

Step 3. Repeat Step 1 to Step 2 to engage the other rail.



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