

ThinkSystem SR950 Rack Installation Instructions



Review the documentation that comes with the rack cabinet for safety information, cabling information, and the following guidelines:

- See the server *Setup Guide* for the maximum room air temperature.
- Do not block any air vents; usually, 15 cm (6 in.) of air space in the rear and 5 cm (2 in.) in the front provides proper airflow.
- Do not leave any unused space within a rack open. Fillers must be used to prevent recirculation of warm air.
- Install your server only in a rack that has perforated front and rear doors or in a rack that is equipped with a rear door heat exchanger.
- 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.
- Make sure that there is sufficient room in front of the front EIA flange to provide minimum bezel clearance of 50 mm (1.97 inches).
- Make sure that there is sufficient room behind the rear of the rear EIA flanges to provide for cable management and routing.
- 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 150 mm (5.9 in.) between the rear mounting flange and inside of the rear door.
 - Minimum depth of 609.6 mm (24 in.) and maximum depth of 772.16 mm (30.4 in.) between the front and rear mounting flanges.

RACK SAFETY



Safety Statement 2

DANGER

- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- Always install servers and optional devices starting from the bottom of the rack cabinet.
- Always install the heaviest devices in the bottom of the rack cabinet.



Safety Statement 4

CAUTION:

Use safe practices when lifting.



18-32 kg
39-70 lb



32-55 kg
70-121 lb



55-100 kg
121-200 lb



Safety Statement 26

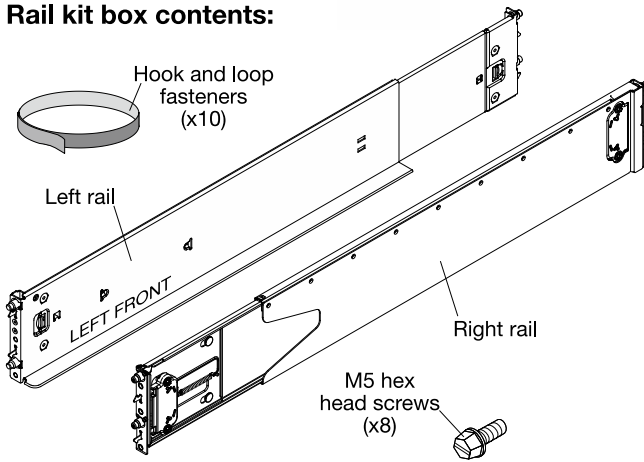
CAUTION:

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

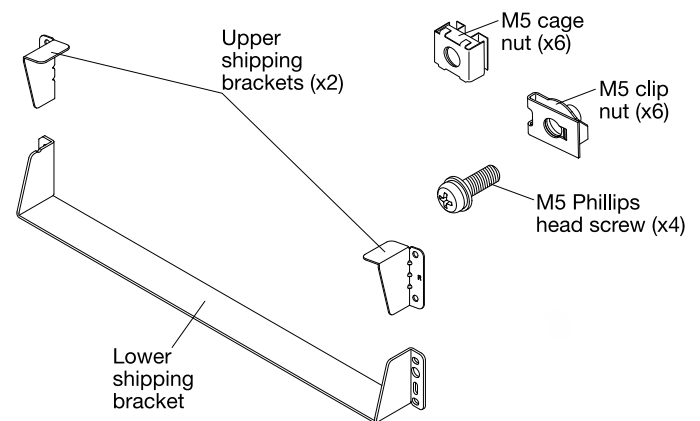


KIT PARTS: The following illustrations show the items that you need to install the server in a rack cabinet.

Rail kit box contents:



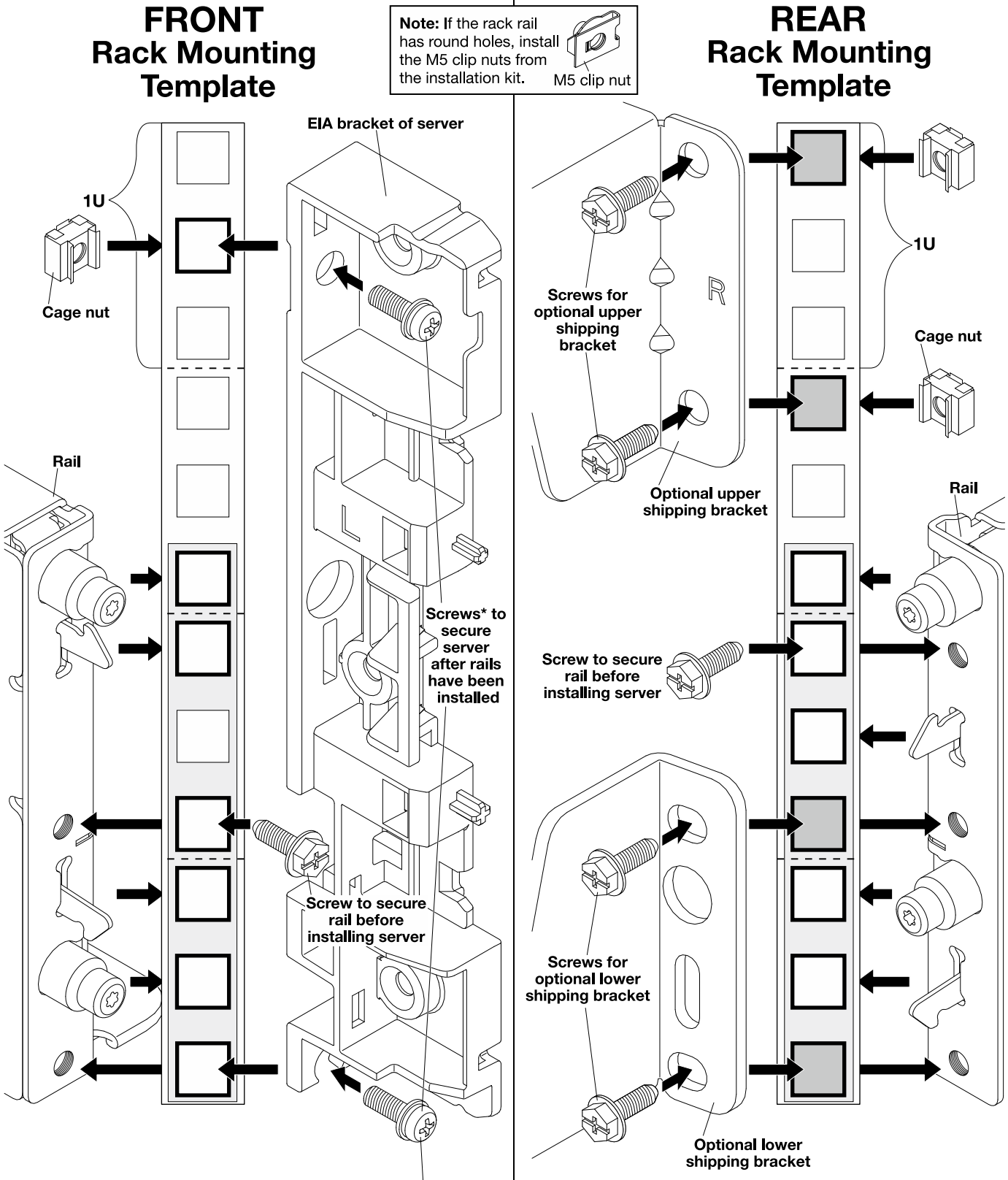
Shipping bracket kit box contents: (optional, purchased separately)



If any item is missing or damaged, contact your place of purchase.

INSTALLING THE SERVER IN A RACK

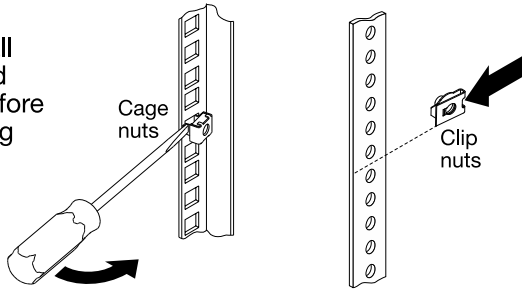
Identify rack space for the server. Align the template with the holes in the rack, making sure the template does not overlap any installed devices.



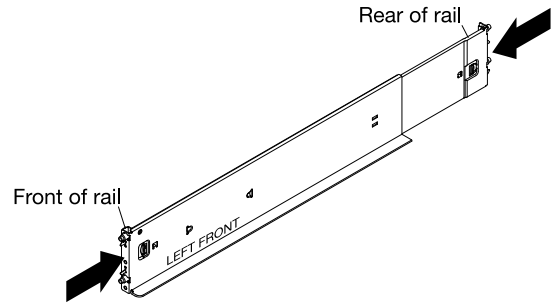
*Note: If you did not order the optional shipping bracket kit, use the M5 hex head screws that came with the rail kit.

1 Install the M5 nuts

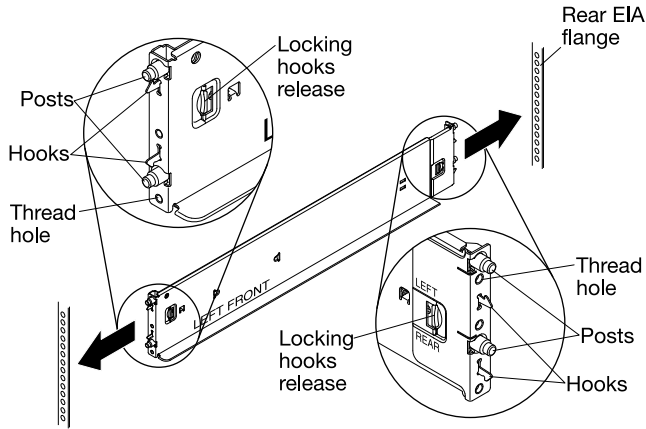
Note:
Install all required nuts before installing server.



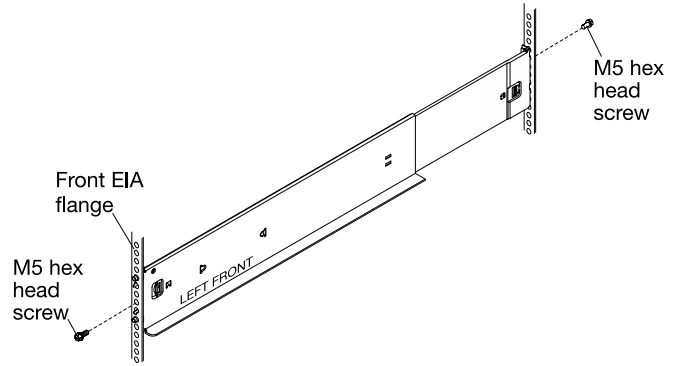
2 Collapse both rails



3 Install the rails in the rack



4 Secure the rails to the rack



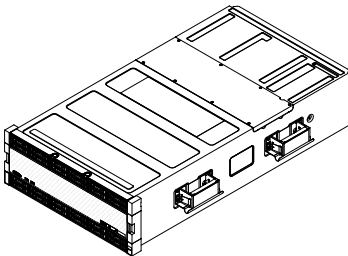
Note: Install all M5 hex head rail screws loosely, then tighten each screw to 30 in-lbs.

1. Align bottom edge of the rail with the bottom U where you want the server to rest and align rail posts with holes in the EIA flange.
2. Insert the rear rail posts through the holes in the rear EIA flange and engage the locking hooks.
3. Insert the front rail posts through the holes in the front EIA flange and engage the locking hooks.

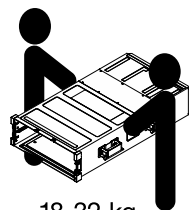
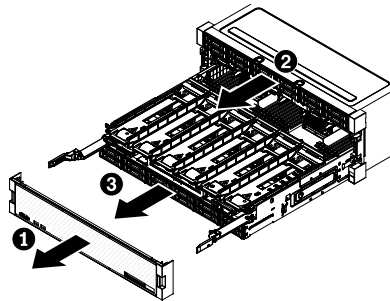
Note:

If a rail is incorrectly aligned, press the locking hooks release on the rail to disengage the hooks; then, remove and reposition the rail.

5 Remove the server components



55-100 kg
121-200 lb

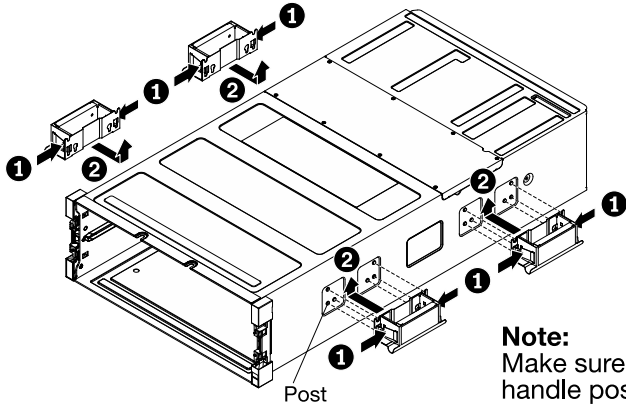


18-32 kg
39-70 lb

Note:

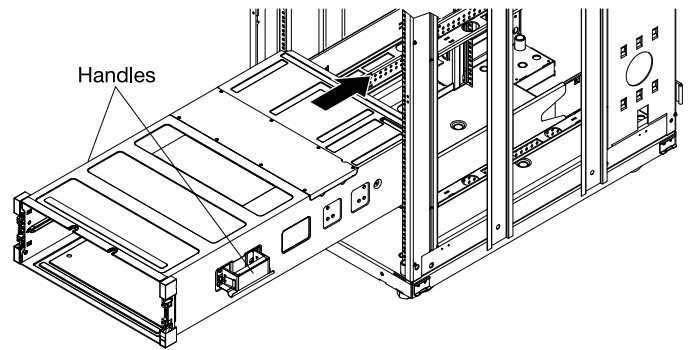
Remove the server components to reduce the server weight for easier installation (see the server documentation for instructions).

6 Attach the server handles



Note:
Make sure all handle posts are secured before lifting.

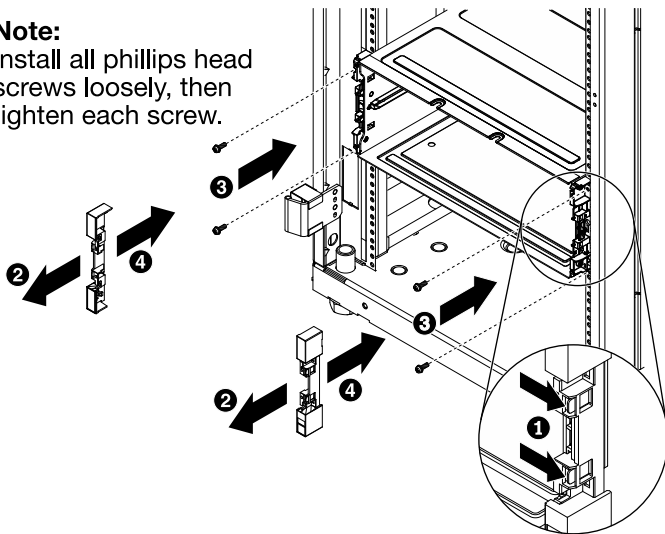
7 Install the server in the rack



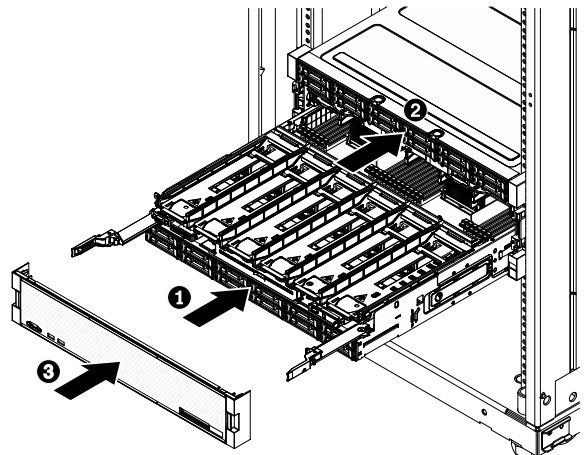
1. Place the rear edge of the server on the rails, slide it in slightly, and remove the rear handles.
2. Slide the server in until the front handles are near the EIA flange.
3. Remove the front handles and slide the server into the rack until it is fully seated against the EIA flange.

8 Secure the server in the rack

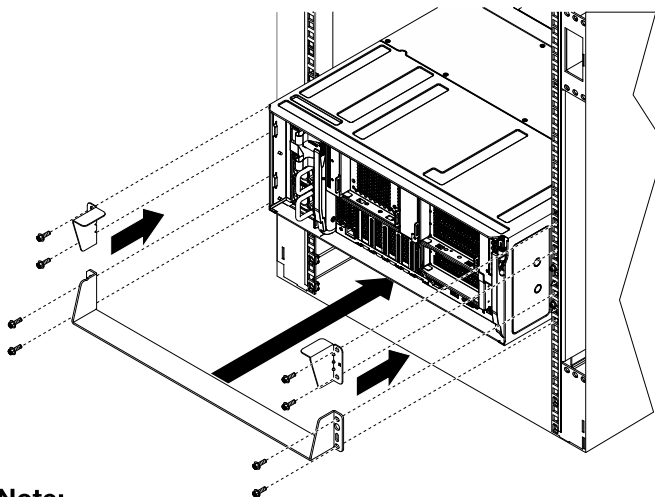
Note:
Install all phillips head screws loosely, then tighten each screw.



9 Reinstall the server components

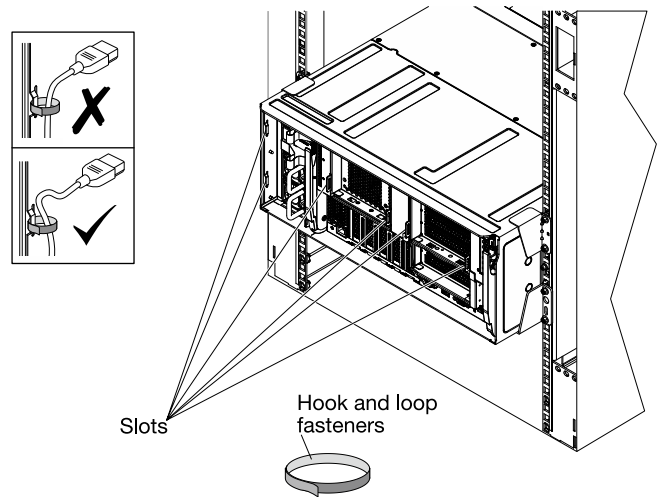


10 Install the shipping brackets (optional)



- Note:**
- Install the brackets tight against the system.
 - Install all M5 hex head screws loosely, then tighten each screw.
 - Shipping brackets must be installed to transport the rack with the server installed.

11 Attach the fasteners for cable-management



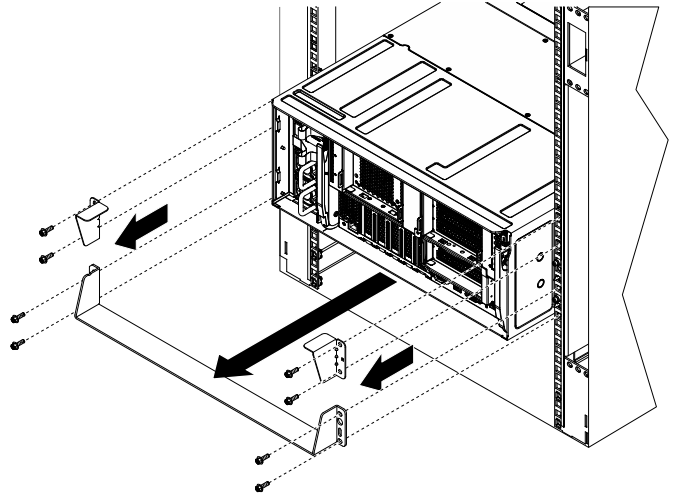
- Note:**
- When routing cables, remember to allow some slack in the cables to avoid strain.
 - Pull cables tight so they do not hang below the U space.

REMOVING THE SERVER FROM THE RACK

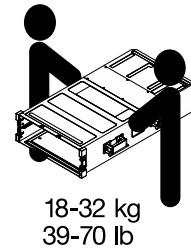
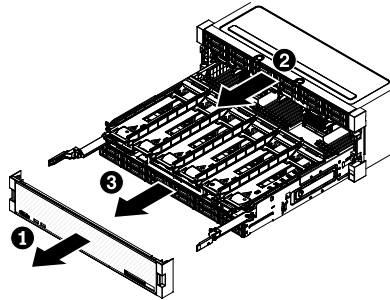
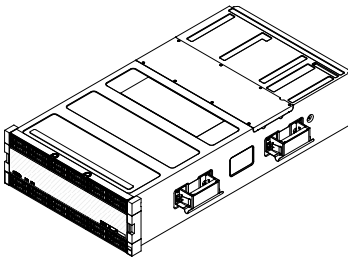
1 Prepare the server for removal

1. Turn the server off.
2. Disconnect the external cables.
3. Release the cables from the cable tie points on the server.

2 Remove the optional shipping brackets



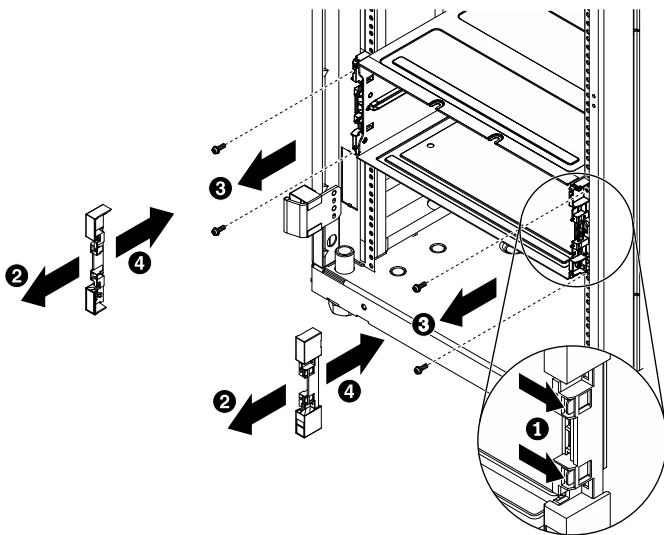
3 Remove the server components



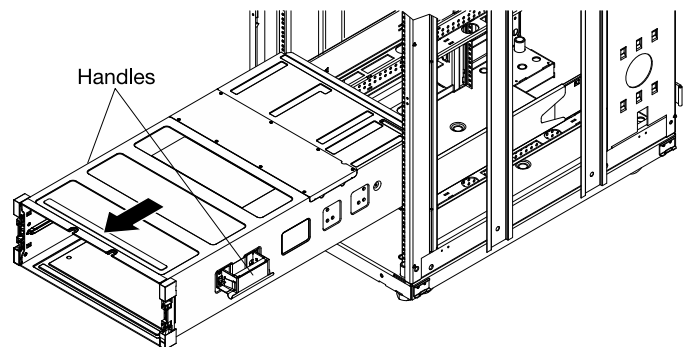
Note:

Remove the server components to reduce the server weight for easier installation (see the server documentation for instructions).

4 Unfasten the server from the rack

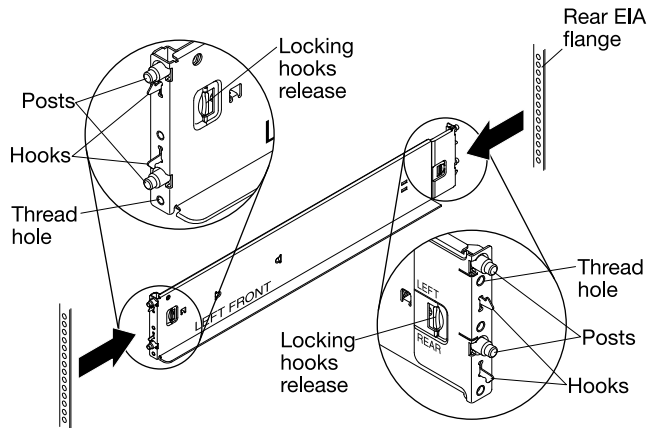


5 Remove the server from the rack



1. Slide the server forward and attach the front handles, once their location is exposed.
2. Carefully slide the server forward until the rear handle locations are exposed.
3. Attach the rear handles and lift the server from the rack.

6 Remove the rails and M5 nuts from the rack



1. Remove the screws from the rails (two screws per rail, one in the front and one in the rear).
2. Remove the rails from the rack by pressing the *locking hooks release* on the rail to disengage the hooks and sliding the posts out of the holes on the EIA flange.
3. Remove the M5 cage nuts or clip nuts from the rack.

Where to go for support

| Links | |
|---|--|
| <p>Lenovo ThinkSystem SR950 Information Center (Detailed information about installing hardware options and configuring the system) http://thinksystem.lenovofiles.com/help/topic/7X12/introduction.html</p>  | <p>Lenovo Support – SR950 (Includes drivers and software) http://datacentersupport.lenovo.com/products/servers/thinksystem/sr950/</p>  |
| <p>Lenovo Press (Product guides and white papers) https://lenovopress.com/</p>  | <p>Lenovo Server Proven (Compatibility information) http://support.lenovo.com/us/en/serverproven</p>  |
| <p>Lenovo System x Server forums https://forums.lenovo.com/t5/Datacenter-Systems/ct-p/sv_eg</p>  | <p>Lenovo Product Security Advisories https://support.lenovo.com/us/en/product_security/home</p>  |

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