



# Scalar Key Manager Rack Installation

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These instructions explain how to use the rail kit to install your Scalar Key Manager server in a rack. To remove the server from the rack, reverse these instructions. Store this information with your server documentation for future use.

Review the documentation that comes with your rack cabinet for safety and cabling information.

When installing your server in a rack cabinet, consider the following:

- Ensure the room air temperature is below 95°F (35°C).
- Install the server only in a rack cabinet that has perforated doors.
- Do not block any air vents. Usually 6 in. (15 cm) of air space provides proper airflow.
- 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 leave open space above or below an installed server in your rack cabinet. To help prevent damage to server components, always install a filler panel to cover the open space and to help ensure proper air circulation.
- Do not extend more than one device out of the rack cabinet at the same time.
- Connect all power cords to properly wired and grounded electrical outlets.
- Do not overload the power outlet when installing multiple devices in the rack.
- Remove the rack doors and side panels to provide easier access during installation.
- The slide rails in this kit come preset to the correct length for installation in an IBM-type rack cabinet and they are adjustable for other rack cabinets.
- The slide rails are marked (RIGHT/FRONT and LEFT/FRONT) for proper placement on the rack-cabinet flanges.

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

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**Note:** If you are installing the server on a rack with threaded holes, you must use the appropriate screws (not supplied) for the rack.

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**Note:** The illustrations in this document might differ slightly from your hardware.

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### Required Tools:

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This server does not require any tools for installation, unless you are shipping the server in a rack. When you are shipping the server in a rack, you will need a Phillips screwdriver.

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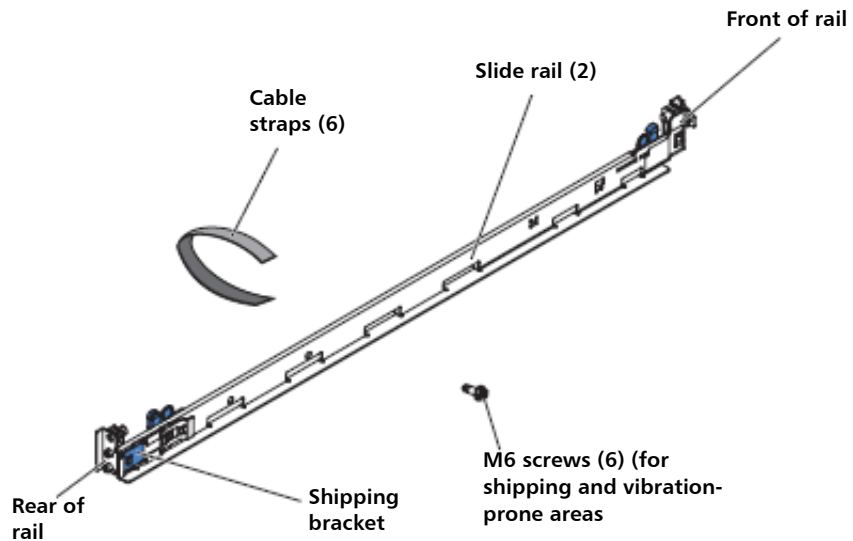
### Rail Kit Contents

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[Figure 1](#) shows the items that you need to install the server in a rack cabinet. If any items are missing from the rail kit or damaged, contact your place of purchase.

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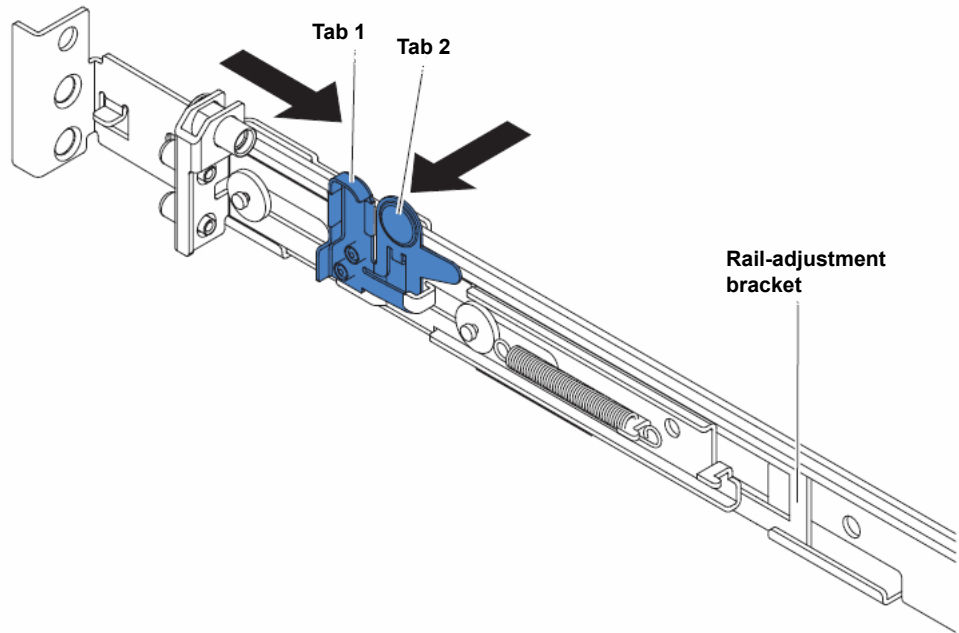
Figure 1 Rail Kit Contents



## Installation Instructions

- 1 Press on the rail-adjustment bracket on the rear of the slide rail to prevent the bracket from moving. Then, press on tab 1 and tab 2 and slide the rail-locking carrier toward the front of the slide rail until it snaps into place. Press on tab 1 and tab 2 on the front rail-locking carrier and slide the rail-locking carrier toward the rear of the slide until it snaps into place. See [Figure 2](#).

Figure 2 Rail-Adjustment Bracket

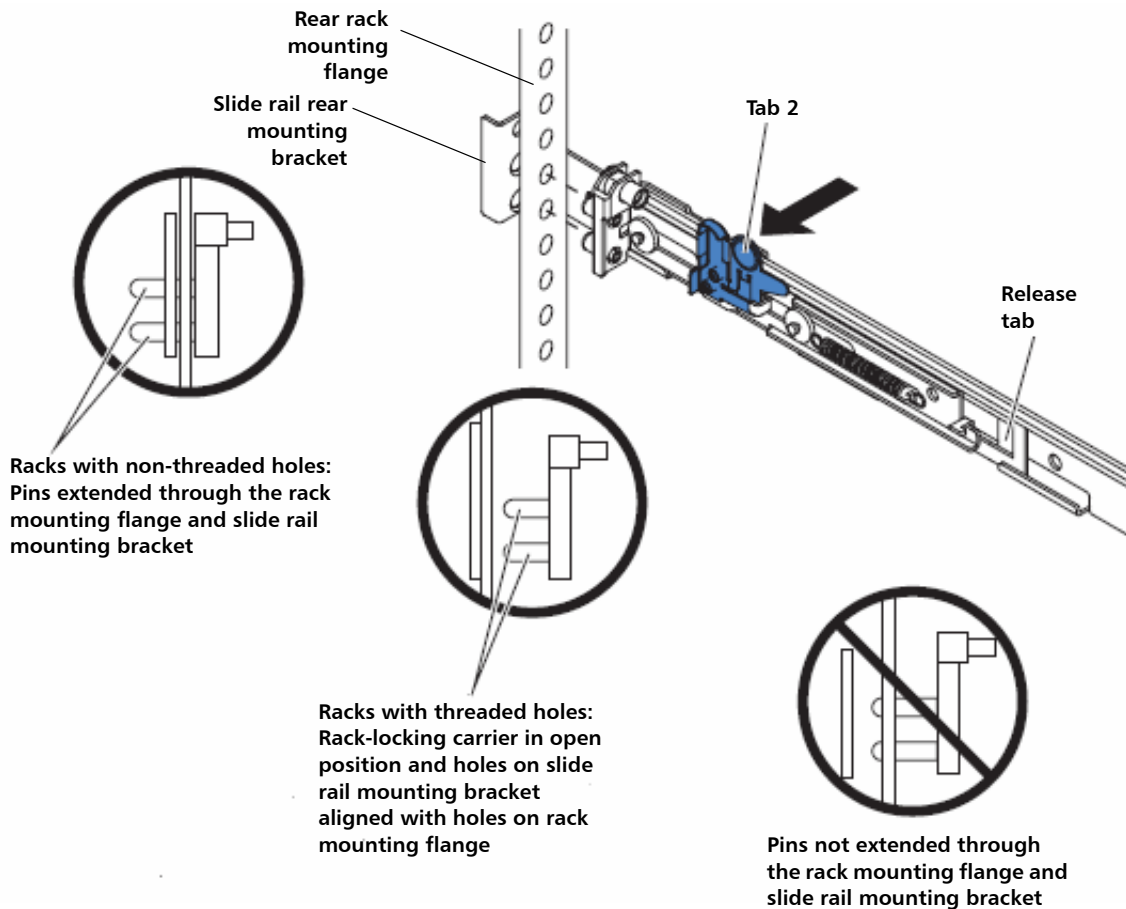


2 **Securing the slide rail to the rear rack mounting flange.** If you need to adjust the slide-rail length, lift the release tab and fully extend the rail-adjustment bracket from the rear of the slide rail until it snaps into place. See [Figure 3](#).

- **Threaded holes:** If you are installing the slide rails on a rack with threaded holes, ensure that the rail-locking carrier is open (the pins do not touch the rack mounting flange).
- **Non-threaded holes:** If you are installing the slide rails on a rack with non-threaded holes, align the pins on the rear rail-locking carrier with the holes on the rear rack mounting flange. Then, press tab 2 to secure the slide rail rear mounting bracket to the rear rack mounting flange. See [Figure 3](#).

**Important:** Ensure that the pins are fully extended through the rack mounting flange and slide rail mounting bracket.

Figure 3 Securing the Slide Rail to the Rear Rack Mounting Flange

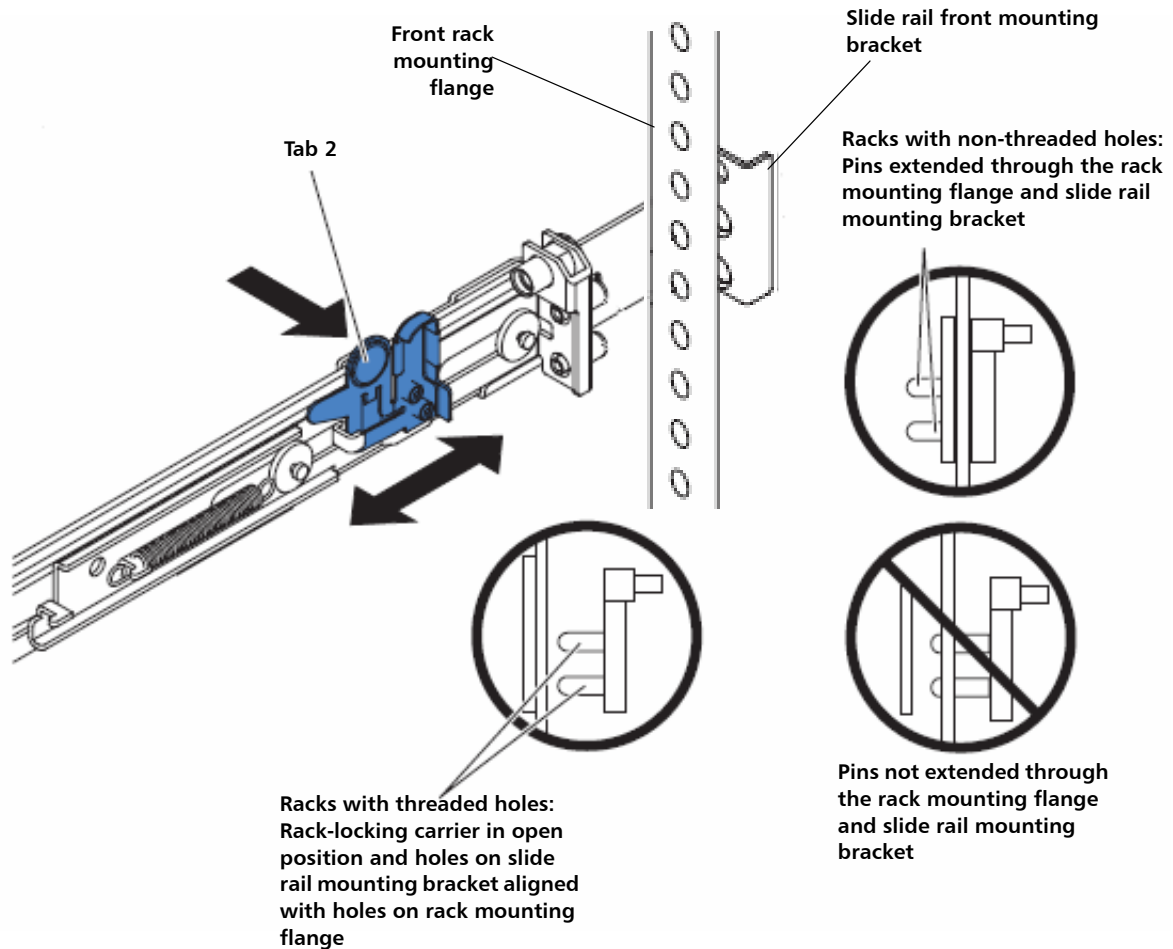


### 3 Securing the slide rail to the front rack mounting flange.

- **Threaded holes:** If you are installing the slide rails on a rack with threaded holes, ensure that the rail-locking carrier is open (the pins do not touch the rack mounting flange).
- **Non-threaded holes:** If you are installing the slide rails on a rack with non-threaded holes, align the pins on the front rail-locking carrier to the front rack mounting flange. If you adjusted the rail length, push the rail-locking carrier back toward the rear of the slide rail to align the slide rail with the rack mounting flange. Then, press tab 2 to secure the slide rail front mounting bracket to the front rack mounting flange. See [Figure 4](#). **Important:** Ensure that the pins are fully extended through the rack mounting flange and the slide rail mounting bracket.

Repeat [Step 1](#), [Step 2](#), and [Step 3](#) for the other slide rail.

Figure 4 Securing the Slide Rail to the Front Rack Mounting Flange

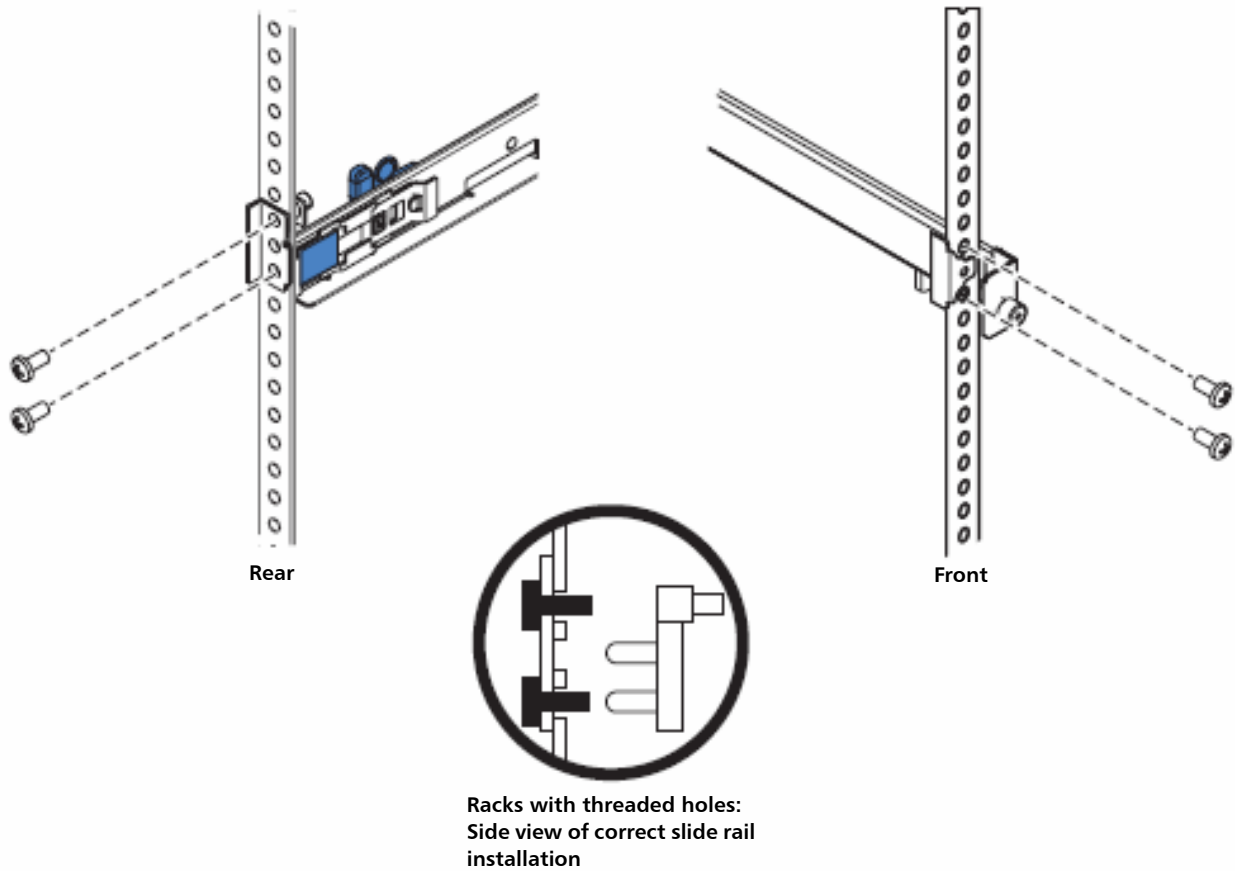


**4 Installing slide rails on a rack with threaded holes.** If your rack does not have threaded-holes, skip this step and go to [Step 5](#).

Install the appropriate screw for your rack (not a hex M6 screw) in both the top hole and the lower hole of the front slide rail mounting bracket to attach it to the front of the rack cabinet. See [Figure 5](#).

Repeat this step to attach the rear slide rail mounting bracket to the rear of the rack cabinet; then install the other slide rail.

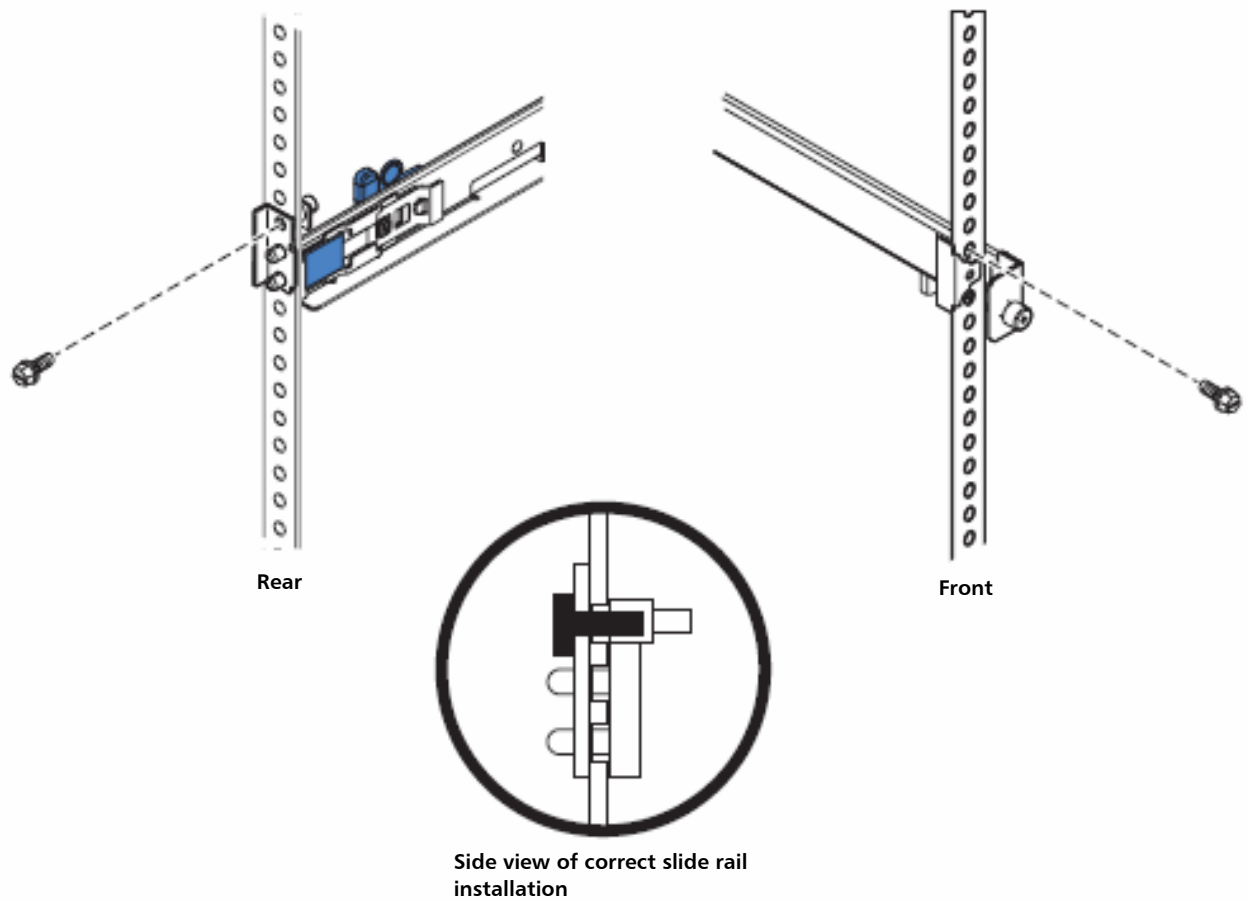
Figure 5 Installing Slide Rails on Rack with Threaded Holes



**5 Installing slide rails on a rack with non-threaded holes.** If your rack does not have non-threaded holes, skip this step and go to [Step 6](#).

Secure the slide rails to the rack by installing the M6 screws on the front and rear of each slide rail mounting bracket. See [Figure 6](#).

Figure 6 Installing Slide Rails on Rack with Non-threaded Holes

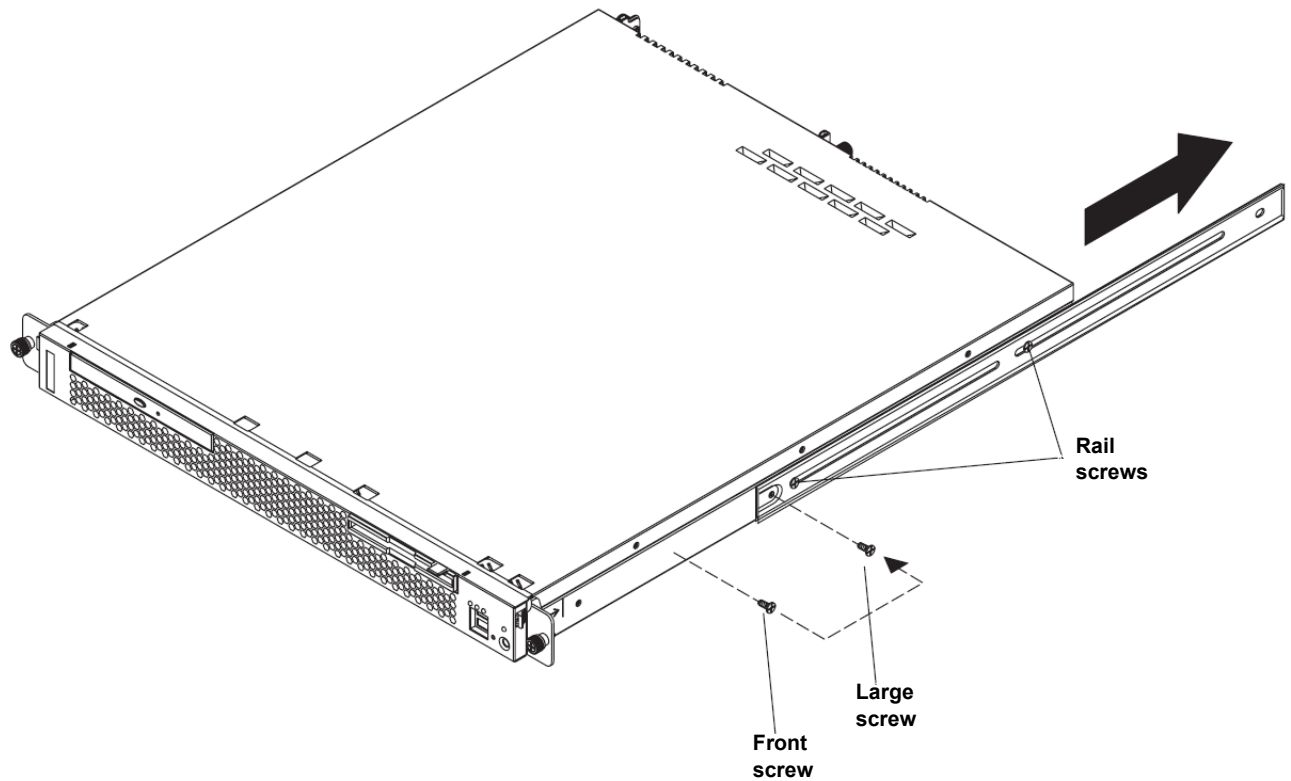


**6 Transporting the rack cabinet with the server installed.** If you do not plan to transport the rack cabinet to another location with the server installed, skip this step.

If you plan to transport the rack cabinet to another location with the server installed, remove the large screw and discard it. Remove and save the front screw and loosen the two rail screws. Then, fully extend the rail and insert the screw you saved into the position where the large screw had been located. Tighten all screws to secure the rail. See [Figure 7](#).

Repeat this step for the other rail.

Figure 7 Securing the Rail for Transport





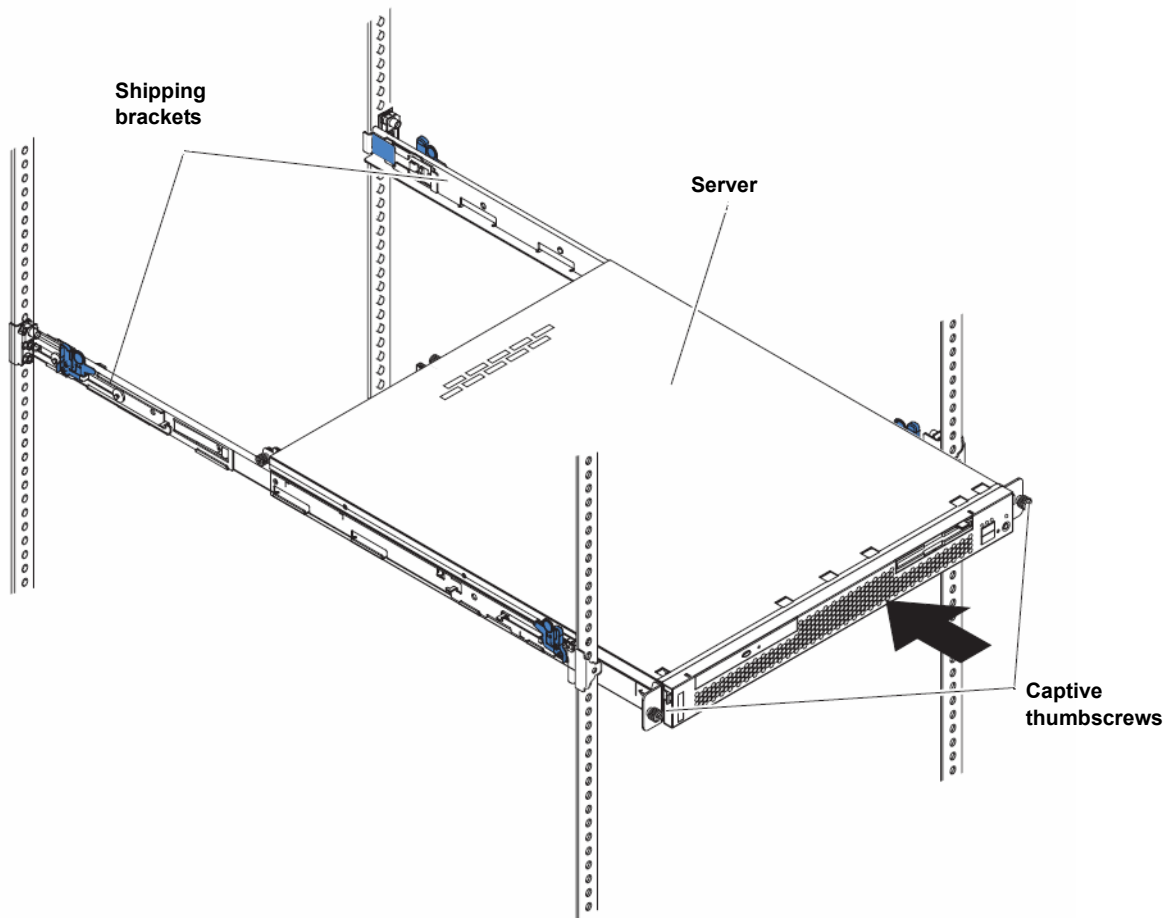
- 7 Align the server on the slide rails and push the server fully into the rack cabinet. Secure the server to the front mounting flanges with the captive thumbscrews. See [Figure 8](#).

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**Note:** You must leave the shipping brackets attached to the slide rails unless the shipping brackets impede the server from sliding fully into the rack cabinet. If you need to remove the shipping brackets, continue with the next step.

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Figure 8 Securing the Server to the Front Mounting Flanges



- 8 Removing the shipping brackets.** Only remove the shipping brackets if they impede the server from sliding fully into the rack cabinet. Otherwise, skip this step.

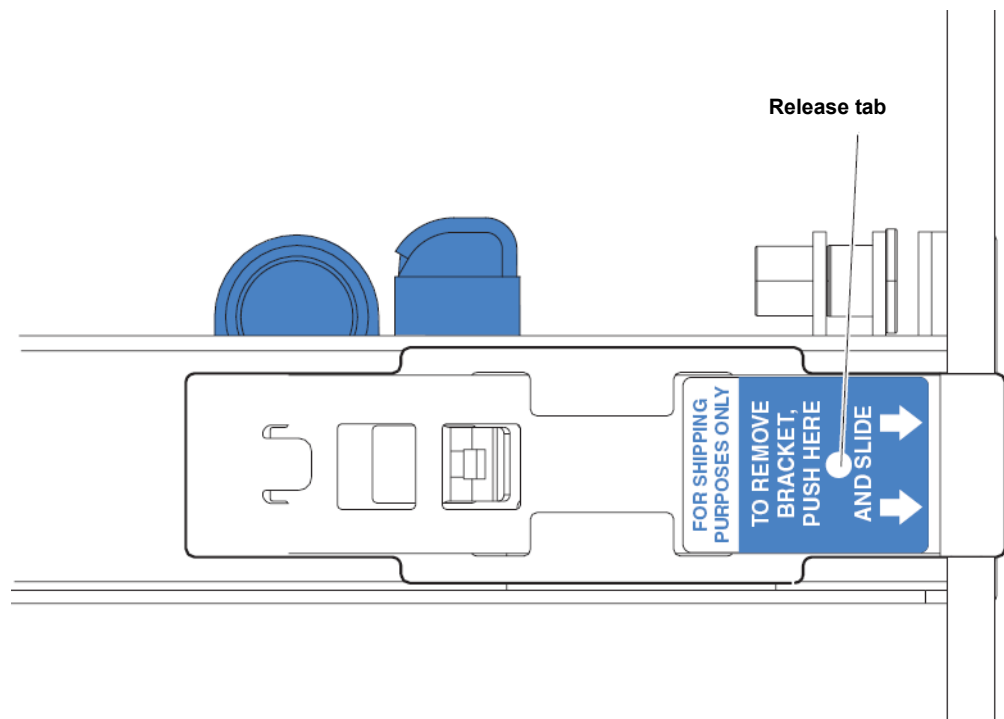
Press on the release tab as indicated on the shipping bracket, and remove the shipping bracket from the slide rail. Repeat this step for the other shipping bracket. Store the shipping brackets for future use. See [Figure 9](#).

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**Note:** You must reinstall the shipping brackets on the slide rails before you transport the rack cabinet with the server installed. To reinstall the shipping brackets, reverse this step.

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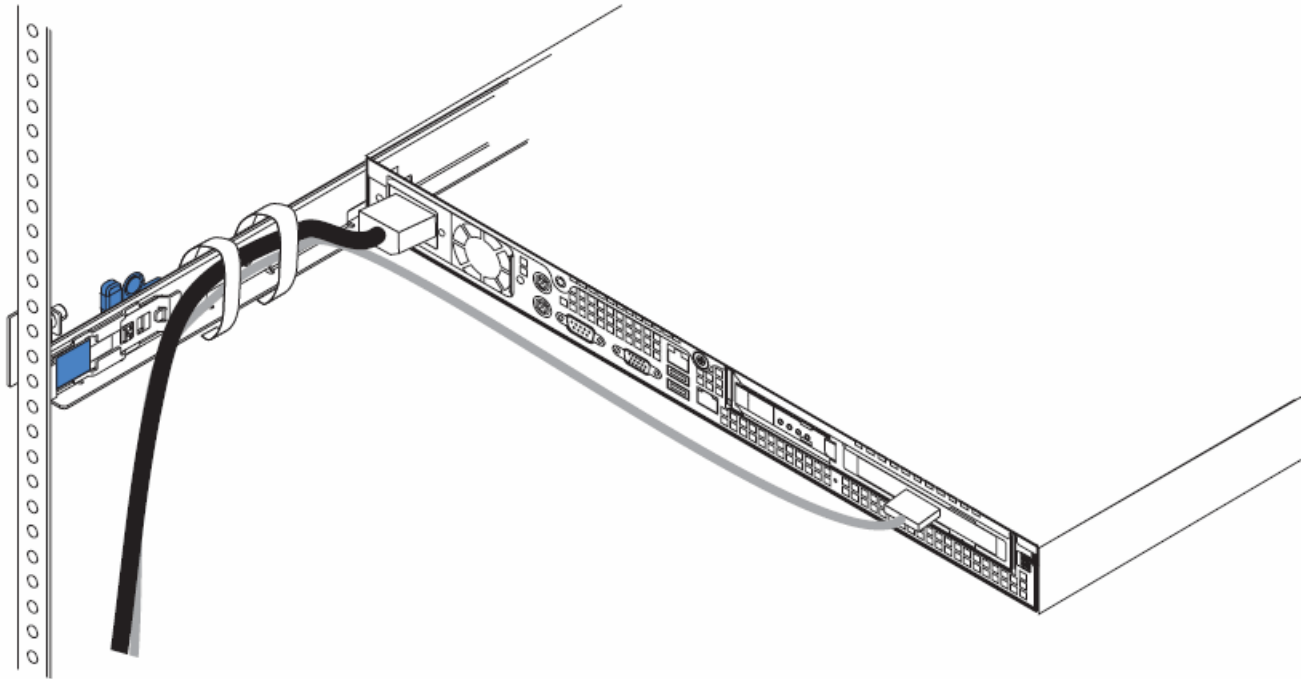
Figure 9 Shipping Bracket  
Release Tab



- 9 Attach cables to the rear of the server. Route the cables to the left corner of the server (as viewed from the rear) and use the cable straps to secure the cables to the slide rails. See [Figure 10](#).

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Figure 10 Routing the Server Cables

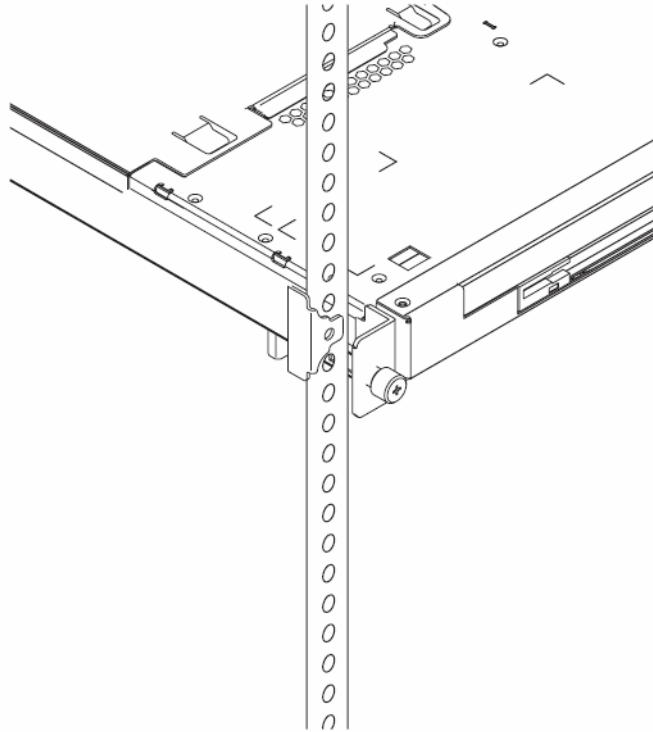


- 10 Transporting the rack cabinet with the server installed.** Before you transport the rack cabinet to another location with the server installed, you must secure the server to the rack. If necessary, disconnect the cables from the rear of the server; then, slide the server out of the rack 6 inches (150 mm) and secure the server to the rack cabinet. See [Figure 11](#).

Ensure the rails are fully extended to the rear of the rack cabinet and that the shipping brackets are installed. Go to steps [6](#), [7](#), and [8](#) for instructions.

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Figure 11 Securing the Server to the Rack for Transport



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