

# Quantum Key Manager Rack Installation

These instructions explain how to use the rail kit to install your Quantum 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.

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

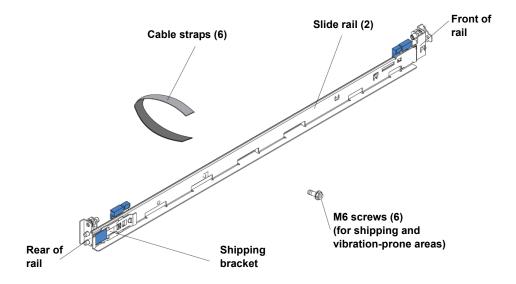
## **Required Tools:**

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 Philips screwdriver.

#### **Rail Kit Contents**

<u>Figure 1</u> 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.

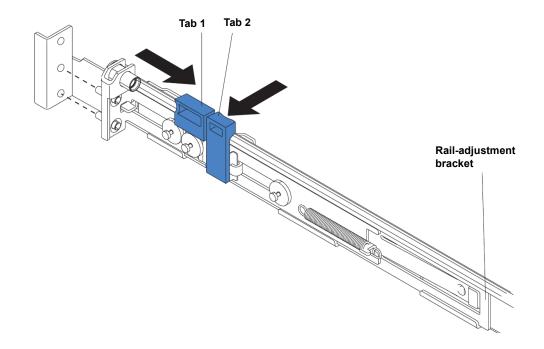
Figure 1 Rail Kit Contents



## **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 <a href="Figure 2">Figure 2</a>.

Figure 2 Rail-Adjustment Bracket

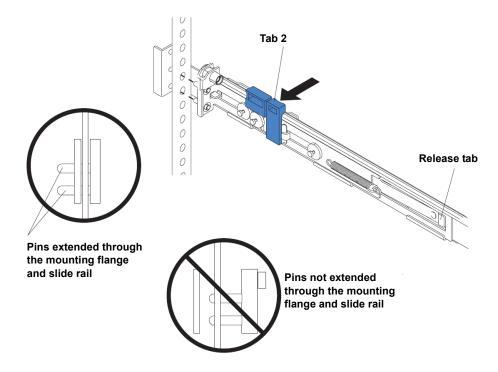


**2** Lift the release tab and fully extend the rail-adjustment bracket from the rear of the slide rail until it snaps into place, if you need to adjust the slide-rail length. See <u>Figure 3</u>.

Align the pins on the rear rail-locking carrier with the holes on the rear mounting flange. Then, press tab 2 to secure the rear of the slide rail to the rear mounting flange. See Figure 3.

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

Figure 3 Securing the Slide Rail to the Rear Mounting Flange

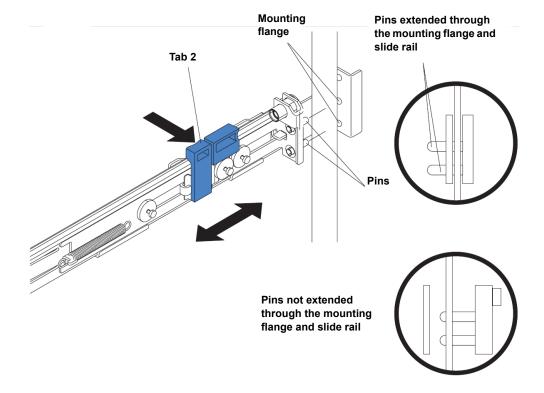


**3** Align the pins on the front rail-locking carrier to the front mounting flange. If you adjusted the rail length, push the rail-locking carrier back toward the rear of the slide rail to align the slide rail with the mounting flange. Then, press tab 2 to secure the front of the slide rail to the front mounting flange. See <u>Figure 4</u>.

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

Repeat step 1 and step 2 for the other slide rail.

Figure 4 Securing the Slide Rail to the Front Mounting Flange

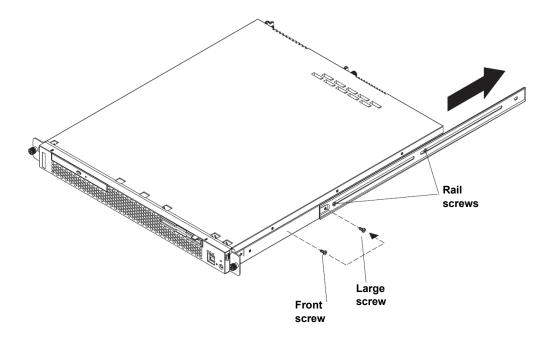


**4 Transporting the rack cabinet with the server installed.** If you do not plan to transport the rack cabinet to another location with the server installed, skip this step.

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 <u>Figure 5</u>.

Repeat this step for the other rail.

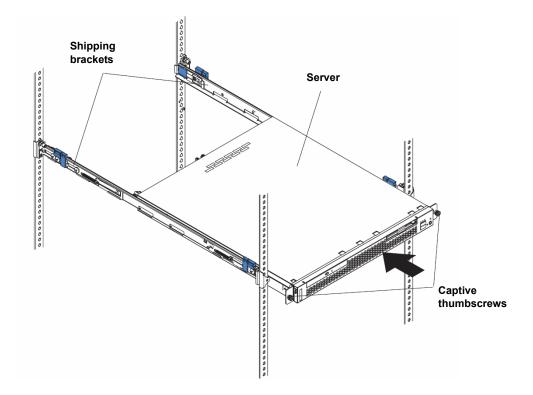
Figure 5 Securing the Rail for Transport



**5** 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 6.

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

Figure 6 Securing the Server to the Front Mounting Flanges

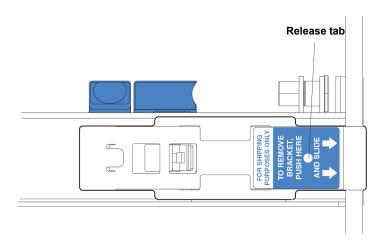


**6 Removing the shipping brackets.** Only remove the shipping brackets if they impede the server from sliding fully in the rack cabinet. Otherwise, skip this step.

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 <u>Figure 7</u>.

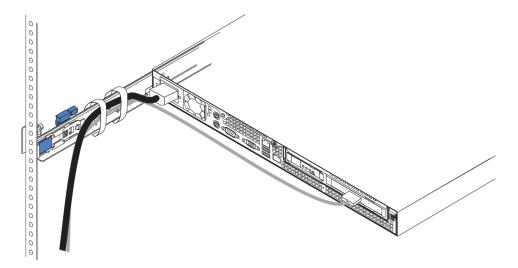
**Note:** You must reinstall the shipping brackets on the slide rails before you transport the rack cabinet with the server installed. To reinstall the shipping brackets, reverse this step.

Figure 7 Shipping Bracket Release Tab



**7** 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 8.

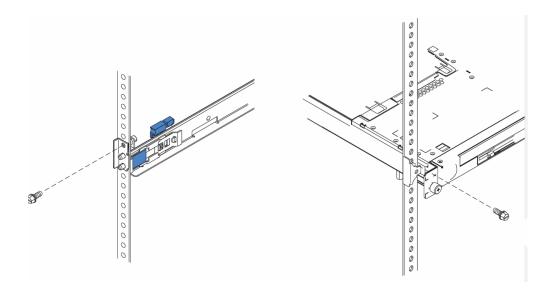
Figure 8 Routing the Server Cables



**8 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 insert the M6 screws in each slide rail. Then, secure the server to the rack cabinet with the M6 screws. See <u>Figure 9</u>.

Ensure the rails are fully extended to the rear of the rack cabinet and that the shipping brackets are installed. Go to steps  $\underline{4}$ ,  $\underline{5}$ , and  $\underline{6}$  for instructions.

Figure 9 Securing the Server to the Rack for Transport



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