

# Quantum Scalar LTF5 Appliance: Rail Replacement

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To replace the rails in your Scalar Linear Tape File System (LTF5) Appliance, refer to the following sections:

- [Turning Off the Scalar LTF5 Appliance](#) on page 1
- [Preparing To Remove the Scalar LTF5 Appliance](#) on page 2
- [Removing the Chassis and Rails From the Rack](#) on page 2
- [Replacing the Rails in the Rack](#) on page 3
- [Reinstalling the Chassis in the Rack](#) on page 5
- [Turning On the Scalar LTF5 Appliance](#) on page 7

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## Turning Off the Scalar LTF5 Appliance

Follow these steps to cleanly shut down and power off the Scalar LTF5 Scalar LTF5 Appliance:

- 1 Open an ssh connection to the Scalar LTF5 Appliance, and log in as the service user:
  - User: **service**
  - Password: The customer-supplied password.
- 2 Enter **sudo rootsh**.
- 3 Enter the password for the service user account a second time.
- 4 Enter **/sbin/poweroff**.

Both the operating system and the system software are gracefully shut down, and then the system powers off.



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## Preparing To Remove the Scalar LTFS Appliance

Before removing any part, do the following:

- Obtain the required tools:
  - #2 PHILLIPS® screw driver
  - Materials for labeling cables
- Request the assistance of another person to help you.

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**WARNING:** Whenever you need to lift the Scalar LTFS Appliance, get others to assist you. To avoid injury, do not attempt to lift the Scalar LTFS Appliance by yourself. The Scalar LTFS Appliance weighs 57.54 pounds (26.1 kg). Two people are required to lift the unit

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**Note:** You will be replacing only the damaged rails (chassis rails or rack rails) and not the entire rackmount.

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## Removing the Chassis and Rails From the Rack

To remove the Scalar LTFS Appliance chassis from the rack, complete the following steps:

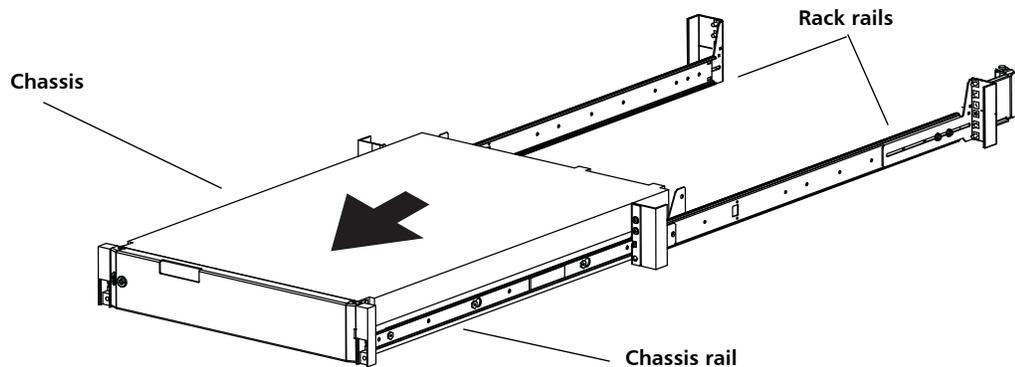
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**Note:** Before you begin this procedure, be sure you powered down the Scalar LTFS Appliance (see [Turning Off the Scalar LTFS Appliance](#) on page 1).

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- 1 Label the cables so that you can reconnect them to the correct ports.
- 2 Remove all power, SAS, Ethernet, and Fibre Channel cables from the back of the Scalar LTFS Appliance.
- 3 Hold the power button in at least 20 seconds to discharge all of the condensers before opening the Scalar LTFS Appliance.
- 4 Remove the PHILLIPS screws that are securing the Scalar LTFS Appliance to the front of the rack.
- 5 Press the slide-release lock button on both rails and slide the system from the rack (see [Figure 1](#)).
- 6 Lift up slightly to remove the Scalar LTFS Appliance out of the rail J-slots and place it on a flat surface.

Figure 1 Pulling the Scalar LTFS Appliance From the Rack



- 7 To remove the rails, pull the latch release button on the end piece midpoint and unseat each rail.

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## Replacing the Rails in the Rack

To replace the rails in the rack, complete the following steps:

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**Note:** When replacing the rails refer to [Figure 2](#) on page 4 for square holes and [Figure 3](#) on page 5 for round holes.

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- 1 Position the left and right rail end pieces labeled **FRONT** facing inward and orient each end piece to seat in the holes on the front side of the vertical rack flanges.
- 2 Align each end piece in the bottom and top holes of the desired U spaces.
- 3 Engage the back end of the rail until it fully sets on the vertical rack flange and the latch locks into place.
- 4 Repeat [Step 1](#) through [Step 3](#) to position and seat the front end piece on the vertical rack flange.

Figure 2 Installing the Tool-less Rails (Square Holes)

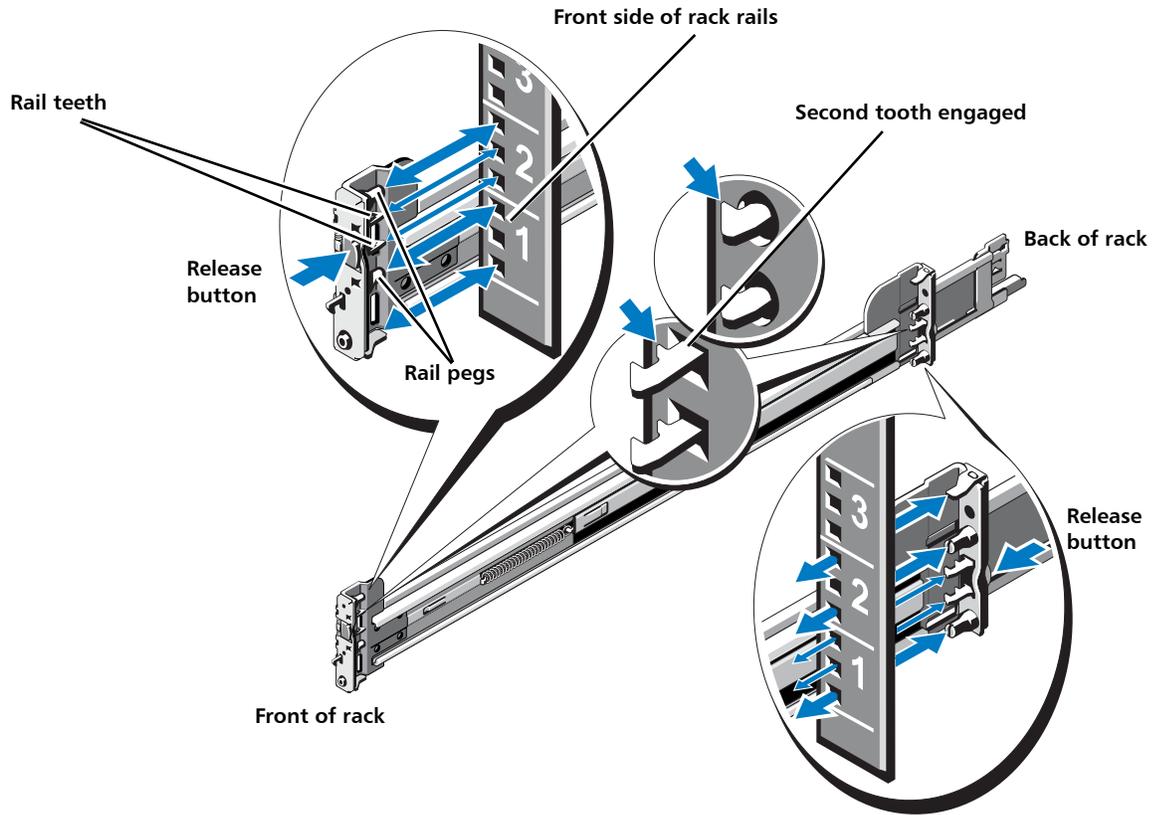
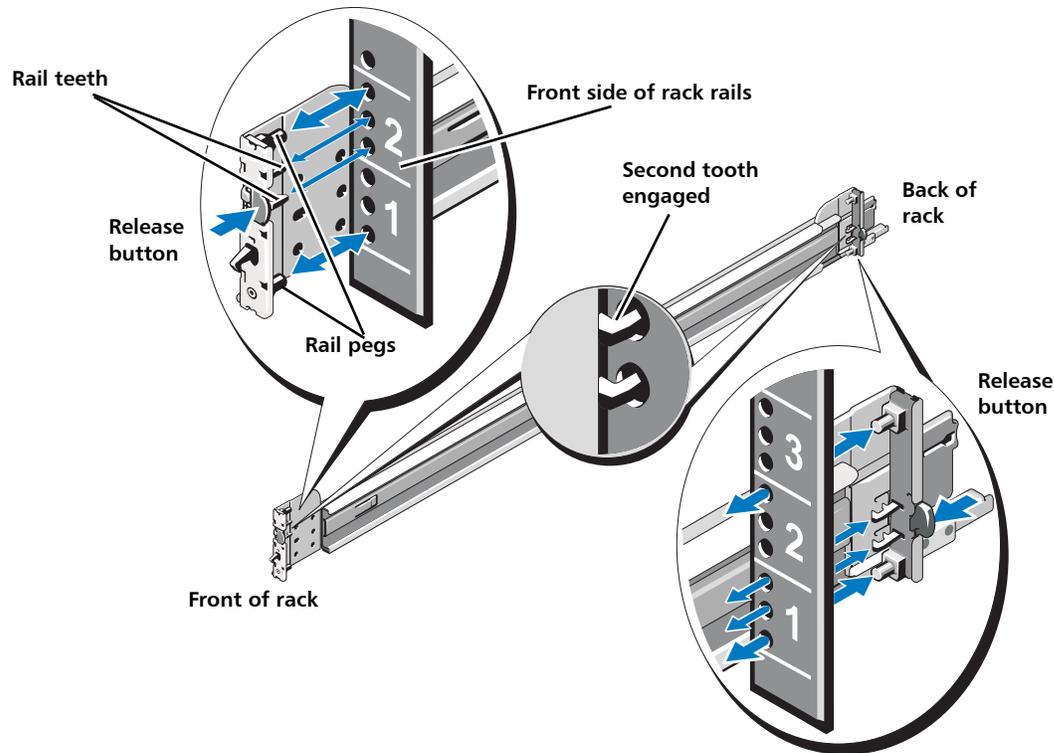


Figure 3 Installing the Tool-less Rails (Round Holes)



**Note:** When using round hole rails, the Scalar LTFs Appliance may protrude from the rack by approximately 1/8 inch (0.3175 cm).

- 5 Place the Scalar LTFs Appliance on a level surface and align the four J-slots on the chassis rails with the corresponding pins on the system. Slide the chassis rails towards the back of the system until each one locks into place (see [Figure 4](#) on page 6)

## Reinstalling the Chassis in the Rack

To reinstall the Scalar LTFs Appliance chassis back into the rack, complete the following steps:

**WARNING:** Ensure that the system is properly supported until the chassis rails are locked into the slide rails on both sides.

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**WARNING:** The Scalar LTFS Appliance weighs 37.3 lbs (16.9 KG). Two people are required to lift the chassis.

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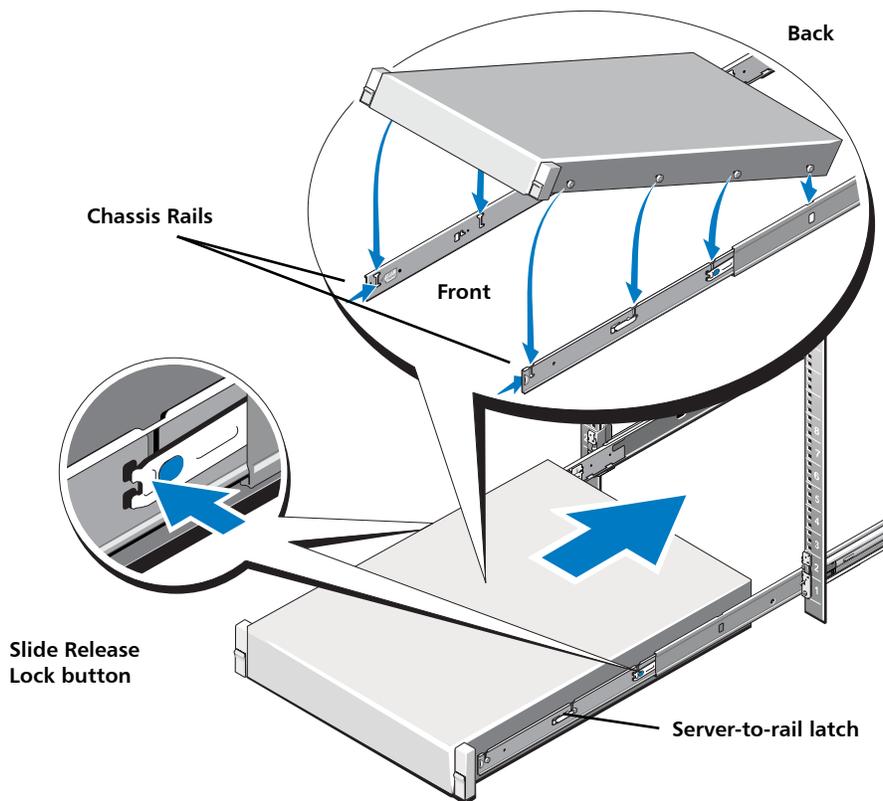
- 1 Pull the inner slide rails out of the rack until they lock into place.
- 2 Locate the rear rail standoff on each side of the Scalar LTFS Appliance and lower them into the rear J-slots on the slide assemblies.
- 3 Rotate the Scalar LTFS Appliance downward until all the rail standoffs are seated in the J-slots.
- 4 Push the Scalar LTFS Appliance inward until the lock levers click into place.
- 5 Press the slide-release lock button on both rails and slide the system into the rack.

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**Note:** [Figure 4](#) shows nodes with the bezel; however, the bezel is actually added after the components are installed in the rack.

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Figure 4 Installing the Chassis in a Rack



- 6 Insert and tighten the PHILLIPS screws that secure the Scalar LTFS Appliance to the front of the rack.

- 7 Re-attach all power, SAS, Ethernet, and Fibre Channel cables to the back of the Scalar LTFS Appliance.

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## Turning On the Scalar LTFS Appliance

To turn the Scalar LTFS appliance back on: Push once on the power button located on the front of the Scalar LTFS Appliance (see [Figure 5](#)).

[Reviewers: Are there any other steps to powering on the LTFS?](#)

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Figure 5 Scalar LTFS Scalar LTFS Appliance Power Button

