



# Quantum Scalar i500: Tape Drive Installation

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These instructions explain how to install a new tape drive in your Scalar® i500. The tape drive always resides in a universal drive sled (UDS), and together they are effectively one unit. If you order a new tape drive, it will already be installed in a sled.

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**Note:** For information about permanently removing a tape drive, see the *Quantum Scalar i500 User's Guide*.

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To install the tape drive refer to the following section:

- [Installing a Tape Drive](#) on page 1
- [Adding a Tape Drive to a Partition](#) on page 4
- [Finish Installing the Tape Drive](#) on page 3

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## Installing a Tape Drive

These instructions explain how to add a tape drive to your library. You can add a tape drive while the library is powered on.

**Required tools:** None

- 1 Save the library configuration:
  - a From the Web client, select **Tools > Save/Restore Configuration**.
  - b Select **Save System Configuration** and click **Apply**.



- 2 Detach the tape drive slot's cover plate. Loosen the cover plate's thumbscrews and remove the plate.

Store the cover plate in a separate cabinet. If you later decide to remove the tape drive, you will need to reinstall the cover plate.

- 3 Insert the tape drive into the drive slot. Using the guide rails on both the tape drive and in the tape drive slot, slowly slide the tape drive into the slot. The tape drive must be level to slide in smoothly.

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**Note: Special Instructions for Installing Multiple Tape Drives:**

If you are installing multiple tape drives with the library powered on, do not push the drive in all the way yet. Instead, push it in almost all the way, leaving it out approximately 3 inches so that it does not connect with the library's backplane. Then partially insert all of the other new tape drives in the same manner. When all the new tape drives are partially inserted, push them all the way in at the same time.

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- 4 Tighten the tape drive's thumbscrews to secure the tape drive to the module.

The thumbscrews must be aligned with the module's screw holes. If they are not aligned, the tape drive was not inserted correctly.

- 5 Power on the library (if it is not powered on already).

- 6 If the green LED is solidly lit for three seconds and then blinks twice, wait 10-15 minutes while the universal drive sled (UDS) firmware upgrades.

There are two types of firmware related to the tape drive: firmware for the tape drive itself, and firmware for the UDS that surrounds the tape drive. The UDS firmware is part of the library firmware. The library automatically upgrades the UDS firmware if the firmware on the newly inserted UDS is different than the library's current UDS firmware. Firmware downloads may take about 15 minutes.

- 7 Connect the host interface cables to the tape drive.

- 8 Take the tape drive online:

- a From the Operations menu, select **Drive > Change Mode**.

The **Change Drive Mode** screen appears.

- b Locate the tape drive that you want to take online.

- c In the New column, click **Offline** to change the button status to **Online**.

- 9 Check the tape drive's LEDs to make sure that the drive functions correctly. If the blue or amber LED stays on solid, reseal the tape drive.

- 10 Add the new tape drive to an appropriate partition. You cannot use the tape drive until it is assigned to a partition. See the *Quantum Scalar i500 User's Guide* for more information.

- 11 Save the library configuration:

- a From the Web client, select **Tools > Save/Restore Configuration**.

- b Select **Save System Configuration** and click **Apply**.

- 12 Upgrade the tape drive firmware. See *Scalar i500 Tape Drive Firmware Upgrade Instructions* at <http://www.quantum.com/ServiceandSupport/SoftwareandDocumentationDownloads/SI500/Index.aspx>.
- 13 Due to the way the library logically addresses its tape drives internally (see "Understanding Logical Element Addressing" in the *Quantum Scalar i500 User's Guide*), adding a tape drive to the library may change the tape drive ordering, and this can affect proper communication to a controlling host. Because of this, you must refresh the configuration of any backup application that manages the library to reflect the adjusted tape drive positions and the presence of the new drive. In addition, you may need to reboot the host server(s) or rescan the bus to detect the changes.
- 14 Complete the procedure [Finish Installing the Tape Drive](#) on page 3.
- 15 Add the tape drive to an existing partition (see [Adding a Tape Drive to an Existing Partition](#) on page 4) or create a new partition and add the tape drive to the new partition (see [Manually Creating a New Partition](#) on page 4).

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## Finish Installing the Tape Drive

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These instructions explain how to complete the installation of a tape drive into a library.

- 1 Verify the tape drive firmware. The System Information report enables you to validate the tape drive's current firmware level; this report is accessible only from the Web client using the admin login.
  - a From the Web client, select **Reports > System Information**.  
The System Information report is displayed in a new window.
  - b Compare the current firmware level of the replacement tape drive with the most current firmware versions listed in the *Quantum Scalar i500 Release Notes*.

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**Note:** Release notes and instructions for upgrading library and tape drive firmware can be found at: <http://www.quantum.com/ServiceandSupport/SoftwareandDocumentationDownloads/SI500/Index.aspx>. You can also find step-by-step instructions in your library's online Help. To access the online Help system, click the **Help** icon at the top right of the Web client or Operator panel.

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- c If the firmware is not at the appropriate version, upgrade the tape drive firmware.

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**Note:** The library can use the tape drive immediately after the tape drive firmware is upgraded.

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- 2 Follow the host vendor instructions to confirm that the host has proper visibility to the library.

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## Adding a Tape Drive to a Partition

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### Adding a Tape Drive to an Existing Partition

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These instructions explain how to add a tape drive to an existing partition. You need to follow these steps if the tape drive is new, or if the tape drive is of a different type than the original and you need to add the replacement to a partition.

- 1 From the Web client, select **Setup > Partitions**.  
The **Setup Partitions** screen is displayed.
- 2 From the **Setup Partition** screen, select the partition to which you want to add the replacement tape drive.
- 3 Click **Modify**.  
The **Modify Partition - Basic Settings** screen is displayed.
- 4 Select the check box next to the replacement tape drive.
- 5 Click **Next**.  
The **Modify Partition - EDLM Policy Settings** screen is displayed.
- 6 Click **Apply**.
- 7 Finish installing the tape drive, see [Finish Installing the Tape Drive](#) on page 3.

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### Manually Creating a New Partition

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Follow these steps if you want to add a new tape drive to a new partition. When you create the partition, you will add the new tape drive to it.

- 1 From the Web client, select **Setup > Partitions**.  
The **Setup Partitions** screen is displayed.
- 2 From the **Setup - Partitions** screen, click **Create**.  
The **Create Partition - Basic Settings** screen is displayed. See the *Scalar i500 Online Help* for instructions on how to create a partition.
- 3 When you create the new partition, assign the tape drive you just installed to the partition by selecting the check box located to the left of the new tape drive in the **Basic Settings** screen. See the *Scalar i500 Online Help* for more information.
- 4 When the process of creating the new partition is complete, do one of the following:
  - If **Success** is displayed, click **Close**. and finish installing the tape drive in the library; see [Finish Installing the Tape Drive](#) on page 3.
  - If **Failure** is displayed, the partition was not created. You can do one of the following:
    - Repeat the steps in this procedure.
    - Contact Quantum support at <http://www.quantum.com/ServiceandSupport/Index.aspx>.