Quantum Scalar i500:
Tape Drive Replacement

These instructions explain how to remove a tape drive from your Scalar® i500, and replace it with a new one.

The tape drive always resides in a universal drive sled (UDS), and together they are effectively one unit. If you order a new or replacement tape drive, it will already be installed in a sled.

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

To replace the tape drive refer to the following sections:

Removing a Tape Drive

These instructions explain how to remove a tape drive.

Required tools: None

> **Note:** Before you remove the tape drive or make any changes to the library, you should save the library configuration. This allows you to restore the most current settings if necessary.

1 Save the library configuration, complete the following steps:

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

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

2 Prepare host applications by following the vendor instructions for tape drive removal.

3 If there is a cartridge in the tape drive, unload it; do one of the following:

- From the Web client, select **Operations > Drive > Unload**.

- From the Operator panel, select **Operations > Unload Drive.**

Note: If a cartridge is stuck in a tape drive, call Quantum support.

4 Take the tape drive offline.

a Do one of the following:

- From the Web client, select **Operations > Drive > Change Mode**.

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

The **Change Drive Mode** screen is displayed.

b In the list, locate the tape drive that you want to take offline.

c In the **New** column, click **Online** to toggle the mode to **Offline** and click **Apply**.

5 Label the cables so that you can reconnect them to the correct ports.

Removing the Tape Drive from the Library

These instructions explain how to physically remove a tape drive from the library.

1 Check the LEDs on the tape drive to be sure it is ready for removal.

When the tape drive is ready for removal, its blue LED will be solidly lit (see Figure 1).

Figure 1 Tape Drive LEDs
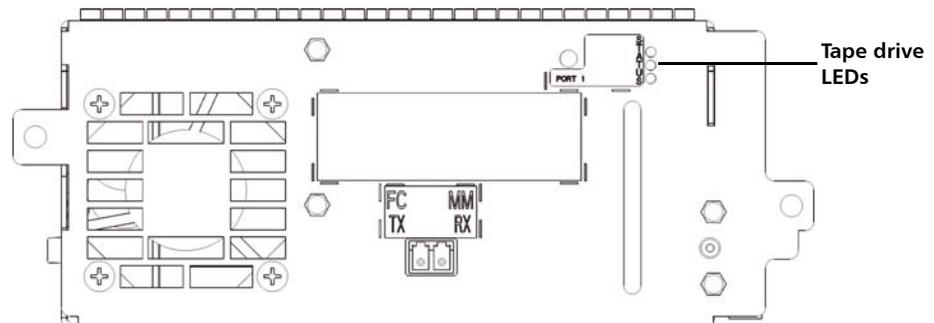
2 Disconnect the host interface cables from the tape drive that you want to remove.

3 From the back of the library, loosen the tape drive's thumbscrews.

4 Remove the tape drive by gripping the tape drive handle and pulling the entire tape drive toward you.

Replacing a Tape Drive

These instructions explain how to replace a tape drive and bring it online.

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

2 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.

3 Wait for initialization to complete.

   If the green LED on the tape drive is solidly lit for three seconds and then blinks twice, wait 10-15 minutes while the universal drive sled (UDS) firmware upgrades. The UDS (sled) firmware is automatically autoleveled and may take additional time to complete.

   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.

4 Connect the host interface cables to the tape drive.

5 Bring the tape drive online:

   a Do one of the following:

   • From the Web client, select **Operations > Drive > Change Mode**.

   • From the Operator panel, select **Operations > Change Drive Mode**.

   The **Change Drive Mode** screen is displayed.

   b Locate the tape drive that you want to bring online.

   c In the **New** column, click **Offline** to toggle the mode to **Online**.

   d Click **Apply**.

   When the screen refreshes, it will indicate that the drive is online.

Finish Installing the Tape Drive

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 library's Release Notes.

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.

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

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

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