

Upgrade Instructions

Scalar i500 Tape Drive Firmware

This document contains instructions on how to download and upgrade tape drive firmware.

Before upgrading tape drive firmware, read the Compatibility Matrix in the *Scalar i500 Release Notes*, 6-01378-xx, to determine the tape drive firmware compatible with your library firmware. To identify the tape drive firmware currently installed on your tape drives, access the library web client and view the **System Information** report (**Reports > System Information**).

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Downloading Tape Drive Firmware

Required item: Computer with Internet access

- 1 Using a web browser on a computer, do the following:
 - a. Go to www.quantum.com.
 - b. Click the **I want to...** drop-down list and select **Download Software**.
- 2 Select the i500 library from the product list. Select **Tape Libraries > Scalar > Scalar i500**.
- 3 On the Scalar i500 page that opens, click on the **Firmware** link.
- 4 Both the library firmware and drive firmware are contained in the same download file. Locate the firmware you need depending on the type of tape drives in your library and click on the **Download Now** button.

The **Export Regulation and End-user License Agreement** appears in a new browser window.
- 5 Accept the **License Agreement** and click **Accept**.
- 6 If your Web browser prompts you to decide what to do with the firmware download file, save the file to a known location on your computer.
- 7 Open the firmware download file, which is a ".zip" file, and extract its contents to a known location on your computer. The contents of the zip file include:
 - The current library firmware release notes
 - The library firmware upgrade instructions
 - The tape drive firmware upgrade instructions

- The “.tgz” file containing the current library firmware
 - The “.fmr” files representing the supported tape drive firmware for SCSI drives and Fibre Channel (FC) drives
- 8 If it is still open, close the license agreement Web browser window by clicking on the **X** button located in the upper-right window corner.
 - 9 To upgrade tape drives with the firmware, continue with [Upgrading Tape Drive Firmware](#).

Upgrading Tape Drive Firmware

Tape drive firmware can be upgraded by the following methods:

- [Using the Tape Drive Manufacturer's Utility](#)
- [Using an Image File](#)

Using the Tape Drive Manufacturer's Utility

Using a tape drive manufacturer's utility is the recommended method for upgrading tape drive firmware. To obtain the latest drive utility, contact the drive vendor.

Using an Image File

If you cannot use a tape drive manufacturer's utility, the next recommended method to upgrade firmware is to download an image file directly to a tape drive using the web client. This method takes up to 30 minutes (less if the upgrade is performed using I/O blades).

Because drives can be updated in parallel, updating multiple drives does not require more time than updating a single drive. You can upgrade multiple tape drives at one time if they are of the same tape drive type (for example, LTO-3) and interface type (for example, SCSI).



CAUTION

Since tape drives restart after a firmware upgrade, make sure that cartridges are not loaded in the applicable tape drives before upgrading firmware.



Note

This operation must not be performed concurrently by multiple administrative users logged in from different locations. You can access the appropriate web client screens, but you cannot upgrade tape drive firmware while another administrative user is performing the same operation.

- 1 Stop any processes on the host application that are communicating with the tape drive.
- 2 Access the library using the web client.



Note

The web client supports the following web browsers: Microsoft® Internet Explorer 6.0 and later versions and Mozilla Firefox™ 1.0.6 and later versions.

- 3 From the **Tools** menu, select **Drive Operations**.
The **Tools - Drive Operations** screen appears.

- 4 Select **Update tape drive firmware using a firmware image file** and click **Next**.

The **Update Drive Firmware By Image** screen appears.

- 5 Do one of the following:

- If your library contains different drive types (for example, LTO-2 and LTO-3) and/or different interface types (for example, SCSI and Fibre Channel), continue with [Step 6](#).
- If your library contains tape drives of the same drive and interface type (for example, LTO-3/SCSI), continue with [Step 7](#).

- 6 Select the tape drive and interface type you need to upgrade and click **Next**.

The **Update Drive Firmware By Image** screen appears. This screen lists the location, installed firmware, and status of each tape drive of the selected interface type.

- 7 Select the tape drive(s) you want to upgrade and click **Next**. (You can update multiple drives at the same time.)

The **Update Drive Firmware By Image** screen appears.



Note

If there is more than one page of tape drives, use the **Page 1 of x** arrows to view the additional tape drives.



Note

Bold column headings in the table can be sorted. For example, selecting the **Firmware** column heading will sort by firmware version.

- 8 Click **Browse**.

The **Choose File** dialog box appears.

- 9 Locate the firmware file that you downloaded in [Downloading Tape Drive Firmware](#) on page 1 and click **Open**.

- 10 Click **Apply**.

A caution dialog box appears noting that the affected partition will be taken offline.

- 11 Click **OK**.

The **Progress Window** appears containing information on the status and elapsed time of the firmware upgrade. The firmware upgrade can take up to 30 minutes (less if the upgrade is performed using I/O blades).

- If **Completed** appears in the **Progress Window**, the tape drive firmware upgrade completed.
- If **Failure** appears in the **Progress Window**, the tape drive firmware upgrade did not complete. Follow the instructions listed in the **Progress Window** to resolve any issues that occurred during the upgrade.

Downgrading IBM LTO-4 Tape Drive Firmware

IBM LTO-4 drive brick firmware PGA3 (82FB) and newer contains special security restrictions that prevent downgrading this firmware to previous versions that are not FIPS-compliant [for example, PGA1 (77BE)].

If you need to downgrade LTO-4 tape drive firmware from level 82FB or higher to level 77BE or lower, contact Quantum Technical Support for instructions and assistance.