

HP StoreEver LTO-6 Ultrium SAS Full-Height Tape Drives Firmware Revision O53D release notes

HP Part Number: EH963-90919
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Description

The release includes updated firmware for HP StoreEver LTO-6 Ultrium SAS full-height tape drives. HP Library and Tape Tools (HP L&TT) must be used to download firmware to the tape drive.

Drive firmware version

O53D

Update recommendation

Recommended

Supersedes

O39D

Product models

- LTO-6 Ultrium 6650 SAS internal EH963A
- LTO-6 Ultrium 6650 SAS external EH964A

Operating systems

- Operating systems supported by HP Library & Tape Tools. See <http://www.hp.com/support/tapetools>.

Languages

- English (American)
- English (International)

Fixes

The following issues are resolved in firmware version O53D:

- New tape usage could lead to a read or write failure tape alert followed by a cleaning request.
- The drive could not decrypt data from an LTO-4 tape after the previously loaded cartridge was an LTO-5 or LTO-6 tape.
- The drive could report write error 0x40AA if the update of the cartridge memory timed out during writing.
- Removed a drive reset that could occur if the L&TT Drive Assessment test was run after the Data Assessment test.
- Corner cases:
 - The drive reported 0x508F/0x5090 read errors.
 - An uninitialized LTO-5 or LTO-6 WORM cartridge could incorrectly be marked as read only until the cartridge was reloaded.
 - The drive could appear unresponsive while reading an encrypted tape.
- Rare cases:
 - In LTFS (Linear Tape File System) environments where the drive incorrectly reported end of tape (EOT).
 - The drive could append data in the incorrect location.
 - The drive could become unresponsive if an end-to-end data protection error occurred when writing in an unbuffered mode.

- A drive configured for encryption would report error 0x3804 after a specific command sequence.
- A tape could not be read if the cartridge memory was not accessible.
- Increased the reliability of future firmware downloads.

Enhancements

- The following functionality has been added:
 - Firmware image protection.
 - A cleaning request now follows a space failure.
 - Ability to append to a tape with an invalid CRC in the cartridge memory for the end of data (EOD).
- Support for the following features has been added:
 - Verify to end-of-data (VTE) bit in the VERIFY command.
 - Two new Host-type MAM attributes to support new LTFS functionality being defined in the LTFS standard.
 - Last Logical Object Position for the READ POSITION command.
- Enhanced or improved the following features:
 - Enhanced Cartridge Memory (CM) information logging and added support for correcting data if a CM CRC error is reported.
 - Tape space usage improved for a few corner case patterns.
 - Retry algorithms enhanced to reduce the incidences of 0x7519 errors.
 - Improved supportability by enhancing internal drive logging.

Installation instructions

Use HP Library & Tape Tools (L&TT) to update the tape drive firmware. You can download L&TT from <http://www.hp.com/support/tapetools>. Installation instructions for the L&TT utility and firmware update instructions are available in the latest version of the User Guide that is available after clicking the Documentation link on <http://www.hp.com/support/tapetools>. Online help is also included with the utility.

Most versions of L&TT have the ability to obtain new firmware from the utility itself. If your version does not have this functionality or L&TT is not installed on a server with internet access, the L&TT firmware files can also be obtained on the external HP support website: <http://www.hp.com/support/storage>.

To locate the firmware:

1. Select your product from the **Tape Storage** list.
2. Navigate to the **Download Drivers and Software** page.
3. Select the operating system.
4. Select Category = **Firmware – Tape Storage**.
5. Locate an entry containing the phrase: “for use with Library and Tape Tools.”

NOTE: If no match is found, then L&TT is not supported on the selected combination of product and OS.

6. After an entry is found, click the **Download** button to begin the download of the desired firmware file.

NOTE: If you have trouble finding your product or firmware, use the Product Search function from <http://www.hp.com/support/downloads>.

NOTE: Once the firmware update has started, do NOT power off the unit or interrupt the firmware update process until it is complete. Doing so could leave the tape drive in a non-usable state.

Determining current version

You can check your current firmware revision from HP Library & Tape Tools (L&TT). Launch L&TT, select the product from the lower left hand frame and click on the identity button at the top (if necessary).

NOTE: Any firmware version not listed in the following table is inactive.

Firmware Version	Released	Status
O53D	12/2014	Active
O39D	05/2013	Active

Effective date

December 18, 2014