

NEO 8000e Firmware Version 7.1.056 Release Announcement

October 2013

Preface

This Product Information Bulletin announces the release of the NEO 8000e Tape Library Version 7.1 (7.1.056) firmware. The previous general availability firmware release was Version 7.1.050.

Models Affected

All current NEO 8000e models are affected, including all HP and IBM LTO-drive configurations.

Upgrade Considerations

Make sure that either all active jobs to the NEO 8000e (backup/recovery) are completed or on hold prior to performing the upgrade.

If upgrading from Version 6.xx, it is recommended that the library configuration be reset to the factory default values (Front Panel options **Menu > Maintenance > Set User Defaults**).

 **CAUTION: Set User Defaults** will reset ALL customer configuration settings such as IP addresses, master/slave, bridge drive, partitioning, and drive configurations. The library will reboot upon completion.

The incorporation of this firmware release requires that the NEO 8000e be first upgraded to firmware version 7.1.048 prior to installing version 7.1.056. For more information, refer to the ***NEO 8000e Field Boot Code Upgrade Procedure (7.1.048)*** product information bulletin on the NEO Support website (<http://docs.overlandstorage.com/neo>).

Downgrades are Not Supported

Downgrades are not supported.

Changes and Enhancements in 7.1.056

- **Library Lock-up when Ethernet Cable Connected** – Fixed an issue whereby the Web Management Interface and library can lock up during excessive network activity, such as security scans.
- **COMM Free List Empty (FSC A003)** – Fixed a number of issues that under rare circumstance can result in an A003 fault.
- **Enhanced Drive Error Reporting** – Added drive ID number, plus physical/logical location for all drive related faults.

- **Cartridge Handling** – Improved orphan cartridge recovery.

Previous NEO 8000e Changes and Enhancements

The following is a list of changes since Version 6.37:

- **Tape Drive Fiber Channel Connection** – An issue was fixed where the connection to a FC tape drive could be lost when changing certain custom library settings.
- **Read Element** – An issue was fixed where the incorrect “srcLocation” may be reported in the Read Element Status reply for inter-module moves.
- **Support for IBM Tape Drives Added** – Prior to version 7.x, the NEO 8000e only supported HP LT0-4 and LT0-5 tape drives. With the Version 7.x release, both HP and IBM version LT0-4 and LT0-5 tape drives are now supported.
- **Support for IBM LT0-6 Tape Drives Added** – With the release of Version 7.1.022 the NEO 8000e supports IBM LT0-6 tape drives.
- **More Drive Information Reported** – More drive information is now reported by the detailed drive status pages of the Web Management Interface.
- **Support for FC and SAS Tape Drives Added** – The NEO 8000e now supports both Fibre Channel (FC) and SAS tape drives.
- **Explicit Tape Unload Mode for Move Media Command** – The NEO 8000e now fully supports Explicit Tape Unload mode. Host move media commands can be either implicit or explicit. If implicit, (the default), the library unloads a tape drive before moving a cartridge from that drive. If explicit, the host must issue an unload command to a tape drive before issuing the move command to the library to move the tape from that drive. In Explicit Tape Unload mode, the library will respond with an Illegal Request sense key 5h and ASC/ASCQ 3B/90 if a move command is attempted from a drive that is already empty.
- **Added User Defined Host Capacity** – The library can be configured for a slot count to be visible to the host that is less than the total number of physical slots available. This option is available for either each partition in a partitioned library or for an un-partitioned library. Reference *NEO 8000 E-series Customizing Host Slot Count* technical bulletin for additional information.
- **Improved Tape Drive Position Calibration** - The tape positioning calibration process takes place the first time a tape cartridge is moved to an LTO tape drive after install, or when a tape drive has been installed in a drive bay. If updating from 6.xx firmware to 7.xx.xxx, an initial calibration is performed on all tape drives on the first move to the tape drive, even if the drives are already present.

The initial tape move can either be done from the backup software or from the NEO library itself. We recommend using the Front Panel Touchscreen to manually move a cartridge to each of the drives prior to configuring the library with the Backup Software.

- **Improved Tape Move Reliability** – Several small changes made to tape handling to improve reliability.
- **Improved User Interfaces** – Several improvements to both the Front Panel user interface and the remote Web Management Interface have been incorporated.
- **Speed Up of Host Interface** – Changes were made to improve the host interface data transfer rate for medium changer commands for libraries using IBM tape drives.
- **Improved Library Reliability** – Two instances of missing handlers for stray interrupts were identified and corrected to prevent the processor from halting execution.
- **Improved Reliability of PassThru Fetches and Stows** – Improved reliability of fetches and stows of the inter-module PassThru by using the existing servo calibration data and making the target positions more accurate.

- **New Fault Symptom Codes (FSCs)** – New FSCs were added since Version 6.37:

Code	Description	Details
301F	Unsupported drive type	An unrecognized or unsupported drive type has been detected by the library. The drive has been deactivated.
3503	PassThru Rotary Jammed	A jam of the inter-module PassThru (HRA) rotary servo has occurred. This is a new code to facilitate field troubleshooting. Previously it was part of the PassThru shuttle jam error code and simply reported as a “PassThru jam.”
8012	A drive has been removed while active. The associated drive bay has been powered off.	This is a soft fault that is posted if a drive is removed from a drive bay without first disabling it from the Front Panel or the Web Management Interface.

Downloads

The NEO firmware version 7.1.056 is available for download by supported NEO 8000e users with active software entitlement agreements from:

ftp://ftp.overlandstorage.com/Firmware/Neo_Series/NeoE/NEO8000E/

A link to the FTP site plus additional documentation on how to operate, configure, and support your NEO 8000e is available on the NEO library support website:

<http://docs.overlandstorage.com/neo>