

# NEO® Firmware Version 7.2.076 Release Announcement

## July 2016

## **Preface**

This Product Information Bulletin announces the release of the NEO 8000e Library firmware version 7.2.076. The previous general availability firmware release was version 7.2.072.

#### **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. The incorporation of this firmware release requires that the NEO 8000e be at Boot version 11.

NOTE: After upgrading to this firmware release, some libraries may require reconfiguration in the backup server.

Be aware that this update includes the serial number fix grandfathered into this firmware version in an earlier release. For additional information, refer to the Library Serial Number Reporting change below in the Previous NEO 8000e Firmware 7.2 Changes and Enhancements section.

# **Downgrades are Not Supported**

Downgrades are not supported.

# NEO 8000e Firmware 7.2.076 Changes and Enhancements

- **Drive Cleaning** Multiple improvements of drive clean operations to address auto clean a drive multiple times and various handling and reporting issues. New FSC 8014 (Auto Clean Unsuccessful) will be reported if a clean drive is unsuccessful.
- Drawer Inventory No longer re-inventory undisturbed drawers after one or more of the other drawers have been accessed.
- **Magazine Reporting Error** Corrected the possible reporting of "Magazine removed" when the magazine is actually installed and locked.
- **FSC 3090** Corrected attempts to load a drive during an unload while Drive Cycle Diagnostic is running.
- Front Panel Fixes Multiple improvements to front panel default screen to address unresponsive
  and incomplete button presses.

• **Drive Fault Reports** – Errors detected during initialization are now deferred until the drive location data becomes valid at the end of the initial inventory.

## Previous NEO 8000e Firmware 7.2 Changes and Enhancements

- FSC A004 Corrected potential errors during drive cleaning operations under rare conditions.
- Cartridge Move Operations Improved handling of cartridge move operations when using the Web Management Interface to address potential timeouts. New FSC 2082 (Move Command Timed Out) will be reported if a timeout is detected.
- Internal Communications Multiple improvements to internal communications in multi-module libraries to address random slave disconnect issues.
- FSC 3200 Corrected errors during inventory operations with unbar-coded cartridges in rear slots.
- **FSC 3013** Corrected errors during drive fetch/stow operations.
- FSC 3053 Corrected potential errors during Drive Cycle Diagnostic.
- FSC 3300 Improvements to the rotary motion control to prevent random errors.
- **Drive Status** Improvements to updating drive status information for the Web Management Interface and front panel display.
- LTO-7 Beginning with 7.2.065 firmware, the NEO 8000e now supports LTO-7 tape drives and media.
- **Cartridge Drive Insertion** Firmware improvements to the cartridge/drive insertion routine to prevent vertical axis jams during calibration.
- FSC 3102 Fault Improvements to the mail slot cartridge stow routine.
- FSC 0x9011 Added code to ensure that the pass-thru (Horizontal Robotics Assembly) is folded before transit when starting a multi-module sweep.
- **Media Error Reporting** The NEO 8000e now report cartridge and drive information to the front panel as well as through email and SNMP after a media related fetch/stow or load/unload error.
- FSC 3113/3503 Improvements to pass through fetch routine for multi-module systems.
- **Library Serial Number Reporting** Corrected an issue where libraries with 12 digit serial numbers would truncate to 10 digits for Inquiry Page 80 and 83. Note that after upgrading to this firmware release, affected libraries may need to be reconfigured in the backup server for the serial number change.
- **Drive, Media Error Reporting** Improved reporting by adding drive, cartridge and slot information for media related fetch/stow and load/unload errors reported by the library.
- **FSC 200F Failed Move Command** Fixed an issue where the library may go offline after a failed slave module move command.
- Import/Export Operation Results in Full Library Scan The library now returns the correct status when responding to a INITIALIZE ELEMENT STATUS WITH RANGE command.
- Front Panel Operations Various improvements to fix potential Front Panel hangs during certain mail slot operations.
- **Pass-thru Rotary** Various code improvements to improve the reliability of pass-thru servo and opto sensor functionality of the Horizontal Robotics Assembly (HRA).
- **Vertical Pass-thru** Implemented a new calibration algorithm to resolve possible pass-thru fetch errors.
- Mail Magazine Improvements to robotic operations and the Web Management Interface to better handle a partially removed or inserted mail magazine.
- **Drive Error Location** Fixed an issue where the wrong drive location may posted to the Front Panel if a drive activation fails.

- **Slave module hang** Fixed an issue where in a multi-module configuration the slave module may hang when the master is rebooted from the Web Management Interface.
- **Front panel lock up** Fixed an issue where the library front panel touchscreen may lock up when running a drive cycle diagnostic operation.
- **Bridging Drives** Fixed an issue that may result in multiple bridge drives when the geometry changes in an unpartitioned library.
- **Recoverable SCSI Errors** Fixed an issue that may result in random recoverable SCSI task errors (FCS 1001) occurring during virtual mailslot operations.
- **Front panel lock up** Fixed an issue where the library front panel touchscreen may lock up when running an inventory operation.
- Pass-thru Rotary Jam FSC 3400 and FSC 3503 Fixed an issue to correct a false home position if the Horizontal Robotics Assembly (pass-thru) shuttle was left open due to a failed intermodule move.
- **Host Command may not Complete and Report FSC 1001** Fixed a condition where host commands may time out (FSC 1001) on a NEO 8000e under certain operating conditions.
- The Library can go Offline to the Host Fixed an issue where under certain conditions a NEO 8000e medium changer reports a continuous NOT READY state.
- **Drawer Access Resulted in FSC A00A/A003 Fault** Fixed an issue where certain drawer access operations may result in an FSC A00A fault and possibly an FSC A003 hard fault.
- **Library Posts FSC 301C Fault after Reboot** Fixed an issue where drives with ejected media may not initialize after a library reboot.
- Library Alerts Fixed library not reporting loss of redundant power supply to SNMP or SMTP (email).
- **Library Hang Conditions** Fixed various library hang conditions where the front panel, host access, and robot access becomes unavailable.

#### **Downloads**

The NEO firmware version 7.2.076 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

For additional documentation on the NEO 8000e, search the NEO community Knowledge Base:

https://community.sphere3d.com/community/documentation/libraries