IBM LTO-8 Firmware Version N9M1 (HH) Release Announcement

December 2021

Preface

This Product Information Bulletin announces the release of IBM LTO-8 firmware update N9M1 for half-height (HH) drives. These updates are intended, among other things, to increase overall reliability, improve tape handling, further reduce any possibility of error, and provide continued enhancements to diagnostic capabilities.

Models Affected

This firmware affects all IBM LTO-8 HH drives.

Upgrade Considerations

All systems running code IBM LTO-8 N4Q1 can be upgraded to LTO-8 N9M1.

⚠️ **CAUTION:** To prevent data corruption, verify that all active backup and recovery jobs to the NEO tape library are completed prior to performing the upgrade.

Downgrades

Downgrades are not supported.

Fixes That Affect All Drives

- **Preserve dump across code change**: The drive did not properly handle dump collection after a code update which caused a corrupted drive dump.
- **Drive fails with FSC 7060 during Read**: Improved the iterative ERP process to reduce 7060 failures and eliminate occasional drive hangs.
- **Fix transfer permission release issue**: Due to a code bug, the drive couldn't release transfer permission correctly so other transfers could not occur.
- **Fix Drive Panic**: Drive was not properly handling some repositioning which caused the drive to Panic when detected.
- **Drive failed UNLOAD with FSC 2E13**: Due to a firmware issue, the drive might draw more current than expected and cause the drive to fail a mid-tape unload.
- **Drive fails with FSC 601D on READ**: Areas with poor read quality can lead to mis correction iterative error recovery process methods. Adding code to reset mis-correction counter.
- **FSC 7C30 on load of WORM Cartridge**: Due to a code bug, WORM Tampering error occurred by mistake when no HKDS is read on load.
- **Drive timed out on READ command**: Changed the read command sequence to avoid timeout.
- **Drive failed with FSC 78D1**: The drive reel motors stalled on a direction change. Added a check for motor motion at tape direction change.

- **Drive failed with an incorrect FSC 7246**: The drive incorrectly posted an FSC for recovered operation (SCSI SK1). The drive should post the FSC of the initiating operation instead.

- **FSC 7076 on a LOCATE/SPACE**: A drive used the incorrect position when it started to read during a locate/space to near BOT. Changed code to set the correct position to start reading.

- **Drive failed with FSC 7060**: In an area that was poorly written, the drive did not properly maintain the position and failed the recovery.

- **A SPACE/LOCATE is fenced incorrectly after a WRITE failure**: When a drive has a FSC 7410 on write, the drive could fail a subsequent reposition if the error is deferred.

- **SAS Host interface hang**: Incoming frame processing stopped due to a task management conflict and did not resume processing after the conflict cleared. Changed the code to check for transfer permission after the task management response was provided.

Downloads

Firmware update code IBM LTO-8 N9M1 (HH) is available for download for supported NEO users. To download IBM LTO firmware, browse to this site:

https://download.overlandtandberg.com/Firmware/Tape_Drives/IBM_LTO8_Drive/

Additional documentation on how to operate, configure, and support your NEO library is available at:

https://www.overlandtandberg.com/knowledgebase/