



Product Alert 30

Product	All versions of StorNext®
Summary	Changing target devices by adding or removing devices during active disk-to-tape writes (stores) without changing the OS mapping of the Stornext metadata controller can result in data corruption. Changes to the physical drive layout in the library must be reflected in the library configuration presented by the StorNext GUI.
Date	April 2009

Overview

Data loss on tape media has been observed in the following scenario:

- Data is actively being moved from disk to tape (stores)
- The target devices are in an automated tape library that have multiple modules with separate power sources
- The power is turned off on some, but not all modules in the automated tape library
- The module with power contains tape devices that are target devices to StorNext, and data is actively being written to those devices

For more information, contact the Quantum Technical Assistance Center and reference CR 26900

Symptoms

After tape library maintenance where devices are removed during active write (powered off), attempts to read files from the tapes fail.

Cause

The write from disk to tape does not check to see if the target tape drive has changed between blocks. If the target device has changed between blocks, the next block written will be written to the changed target unless the fabric is rescanned from the MDC.

Resolution

To avoid this risk, make sure all writes from the StorNext MDC have completed before performing library maintenance. This can be done by using the StorNext GUI to take the StorNext Storage Manager offline.

Whenever performing automated tape library maintenance, make sure all modules are powered off. Best practice is to verify that the drive configuration present by the library has not changed after maintenance has completed. Verify that the drive layout matches the configuration previously input into StorNext via the GUI.