

# Product Bulletin 72 Rev B - Revised

Product	All StorNext® releases
Summary	Using EMC PowerPath or other third-party multipath drivers may require configuring cvpaths
Date	April 2012

#### **Problem**

Using EMC PowerPath requires configuring the cypaths file. Using other third-party multipath drivers may also require configuring the cypaths file.

If the cvpaths file is not configured properly, it is possible that EMC PowerPath and other third-party multipath drivers will not be appropriately inserted into the device stack and will not be able to intervene in the event of a path failure.

This issue potentially applies to all platforms except Windows.

**Note:** This issue does not apply to the Linux DM Multipath driver because StorNext scans the appropriate device locations automatically.

### Symptoms

Under normal operation, the only symptom is the logging of raw devices as opposed to the multipath devices.

When cypaths is not configured, cylabel output shows the raw devices:

/dev/sdaq [ADIC FS4500 331N] SNFS-EFI "CvfsDisk\_jbod0406"Sectors:

489682911. Sector Size: 512. Maximum sectors: 489682911.

/dev/sdar [ADIC FS4500 331N] SNFS-EFI "CvfsDisk\_ibod0407"Sectors:

489682911. Sector Size: 512. Maximum sectors: 489682911.

/dev/sdas [ADIC FS4500 331N] SNFS-EFI "CvfsDisk\_ibod0406"Sectors:

489682911. Sector Size: 512. Maximum sectors: 489682911.

/dev/sdat [ADIC FS4500 331N] SNFS-EFI "CvfsDisk jbod0407"Sectors:

489682911. Sector Size: 512. Maximum sectors: 489682911.

#### Solution

Third-party multipath software which creates multipath devices needs an associated cvpaths file to direct StorNext to the multipath devices for the entire lun. The cvpaths file is located in /usr/cvfs/config. Refer to the cvpaths man page for more information.

EMC PowerPath users should create a cvpaths file with the appropriate entry for the multipath software devices. If this is omitted, it is possible that EMC PowerPath will not be appropriately inserted into the device stack and will not be able to intervene in the event of a path failure. Only devices that represent the entire disk should be included.

For Linux EMC PowerPath users, the cvpaths file should contain the following: wildcard=/dev/emcpower\*[!1-9]

Refer to the EMC PowerPath documentation to determine the platform-specific multipath device names.

Using a cypaths file changes the output to the PowerPath devices:

/dev/emcpowera [ADIC FS4500 331N] SNFS-EFI "CvfsDisk\_jbod0406"Sectors: 489682911. Sector Size: 512. Maximum sectors: 489682911.

/dev/emcpowerb [ADIC FS4500 331N] SNFS-EFI "CvfsDisk\_jbod0407"Sectors: 489682911. Sector Size: 512. Maximum sectors: 489682911.

Other third-party multipath drivers may require a similar configuration for the cvpaths file where the wildcard refers to the location of the third-party multipath devices for the character special device name representing the entire lun.

## Bulletin and Alert Automatic Notification

To automatically receive future bulletins and/or alerts for Quantum StorNext via email, go to the location below and enter basic information about yourself, your company, and your StorNext product. You will need to provide your StorNext serial number when you sign up.

Go to this location to sign up for automatic notification:

www.quantum.com/stornextbulletins.

## **Contacting Quantum**

More information about StorNext is available on the Quantum Service and Support website at <a href="https://www.quantum.com/ServiceandSupport">www.quantum.com/ServiceandSupport</a>. The Quantum Service and Support website contains a collection of information, including answers to frequently asked questions (FAQs). You can also access software, firmware, and drivers through this site.

For further assistance, contact the Quantum Technical Assistance Center:

North America	+1 800-284-5101 Option 1
EMEA	00800 9999 3822
Online Service and Support	www.quantum.com/OSR
World Wide Web	www.quantum.com/ServiceandSupport

(Local numbers for specific countries are listed on the Quantum Service and Support Website.)