

# **Product Alert 45**

Product	StorNext Storage Manager
Summary	In rare cases, StorNext Storage Manager customers may encounter a Linux problem that can cause a duplicate data block. The problem is isolated to instances where a pse_snapshot is collected during a store to tape. No data is lost, but intervention is required to correctly retrieve the entire file and remove the duplicate block.
Date	March 2014

#### **Problem**

A defect in the SCSI generic driver in the Linux kernels used in RedHat 5.x, 6.x, SLES 10, and SUSE 11 can cause a duplicate data block to be written during a store to tape if a pse\_snapshot is taken during the store processing. Reference Red Hat Bug 1073124.

This issue applies to StorNext versions 4.0 through 4.7.0.1, and StorNext 5 version 5.0.0. No data is lost due to this condition, but intervention is required to correctly retrieve the entire file and remove the duplicate data block.

For more information, contact the Quantum Technical Assistance Center and reference Bug 47022.

#### Symptoms

Symptoms include the following:

- A corrupted copy of the file will be retrieved from the tape.
- A checksum error will be reported on file retrieve, if the feature was enabled at the store time.
- If checksums are enabled and multiple copies are stored, StorNext will automatically retrieve the alternate copy.

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#### Cause

A duplicate data block may be written due to a Linux bug that can be triggered when collecting a pse\_snapshot during a file store to tape processing.

#### Solution

The pse\_snapshot process has been changed in StorNext versions 4.7.1 and StorNext 5 version 5.0.1 (and later releases) to avoid this problem.

To determine if this problem occurred, while running an at risk release, contact Quantum Technical Support and request the script **find duplicate record**.

**Note:** The script will use the database to analyze files written to a tape and identify files with an extra data block.

If any file is found containing a duplicate block and a second copy of that file does not exist, contact Quantum Technical Support for help retrieving the complete file without the duplicate data block.

### Workaround

To avoid this issue until an upgrade to StorNext version 4.7.1 or StorNext 5 version 5.0.1 or later, the following workaround is available:

- 1 Edit the file: /usr/adic/TSM/config/filelist
- 2 Look for the line: snap cmnd: 8: tsm-stacks: 5
- 3 And comment it out: # snap\_cmnd : 8 : tsm-stacks : 5

**Note:** If upgrading to a release which does not have this work around, you will have to repeat this procedure.

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## **Contacting Quantum**

More information about StorNext is available on the Quantum Service and Support website at <a href="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:

United States	800-284-5101 Option 5 (toll free)
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