Product Bulletin 59

Product	StorNext® 4.0, 4.1 and 4.1.1
Summary	Read of a file stub causes retrieval of the file from tape
Date	August 2011

Problem

A read within the file stub boundary can cause a full retrieval in StorNext 4.0, 4.1 and 4.1.1. StorNext releases 4.0.1.1, 4.1.2 and newer contain a fix that restores traditional stub behavior when neither Replication nor Deduplication is configured.

For more information, contact the Quantum Technical Assistance Center and reference CR 31157.

Symptoms

A read within the file stub boundary causes the full file to be retrieved.

Solution

Upgrade to StorNext release 4.0.1.1, 4.1.2 or newer.

Workaround

The workaround is to make the stub size larger than it needs to be by an amount equal to or greater than the desired stub size rounded up to the cache-buffer size boundary (default of 64 KB) plus the product of the read-ahead window size (default of 16) and the cache-buffer size.

In a default configuration, the total amount to add would be between 1 MB and 1 MB plus 64 KB - 1.

For example:

Current stub size:	10 KB
Read-ahead window size:	16 (default)
Cache-buffer size:	64 KB (default)

Stub size rounded up to cache-buffer size boundary: 64 KB

Product of the read-ahead window size and the cache-buffer size: 1024 KB (1 MB)

New target stub file size: 64 KB + 1024 KB = 1088 KB

The amount added to the current size: 1088 KB - 10 KB = 1078 KB, which is between 1 MB and 1 MB plus 64 KB - 1

Note: Files already stubbed that are smaller than the workaround size will not change until they are retrieved and truncated again.

For more information on stub size, see "man fsfileinfo". For more information on read-ahead window size and cache-buffer size see "man mount_cvfs", including buffercache_readahead and cachebufsize.

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Contacting Quantum

More information about StorNext is available on the Quantum Service and Support website at www.quantum.com/ServiceandSupport. 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 5
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