



Product Bulletin 56

Product	StorNext® 3.5.0 and 3.5.1
Summary	Backup failures are possible when Xsan clients utilize managed file systems using Stornext MDCs
Date	June 2010

Overview

On a managed file system, setting hidden flags on Xsan files can cause a backup failure. This problem is most likely to occur when running an Xsan 2.2 client, although it's possible in previous versions.

This issue can occur because StorNext drops the Xsan hidden flag when an inode is retrieved from disk. This issue doesn't occur until an inode has been flushed from the inode cache and retrieved for a later update. When `snmetadump` processes a restore journal with the inode update, it fails due to the unexpected change of the flag's value. There are other mechanisms which mark a file as hidden, so the omission of the hidden flag is not usually noticed by a StorNext user. The backup failure results in needing a new metadump.

For more information, contact the Quantum Technical Assistance Center and reference CR 30120.

Symptoms

If the Xsan client is utilizing a managed file system, the backup may fail in the `snmetadump` step. Other file systems will be backed up successfully, but the managed file system used by Xsan clients may fail.

When applying restore journals during a backup, the metadump may fail with this error message:

```
Stage 6---apply restore journals.: 7.32 secs Processing journal
file 'restore_journal_SNFS_ARCHIVE.000098.completed'
```

```
Processing Error:
```

```
/home/workareas/35X/snmetadump/obj/linux_SuSE100ES/x86_64/
snmetadump
```

```
"Invoked at line 263 of process_drjournal.c: Transaction out of
order (17):
```

```
Sequence number error: cookie 0x800002df86b5 dinode type CHILD,  
dump seqno 0xbc  
journal seqno 0xbe dump hash 0x1ee729aa rollback hash 0x72c40442.  
" file sn_debug.c, line 114
```

This failure is due to the detection of inconsistent inode information, which causes backup failures for which a new metadump is needed.

This problem can also result in a hidden file being incorrectly shown as a regular file.

Recommendation

If you are running a managed file system with Xsan clients, don't upgrade the Xsan clients to 2.2 or later until first upgrading the StorNext MDC to 3.5.2 or later. Xsan clients running 2.2 set the hidden flag more frequently than previous versions.

Solution

This issue is fixed in StorNext 3.5.2 and StorNext 4.0.

There is currently no workaround for this issue.

Contacting Quantum

More information about StorNext is available on the Service and Support website at www.quantum.com/support. The 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, or if training is desired, contact Quantum:

Quantum Technical Assistance Center in the USA:	+1 800-284-5101
For additional contact information:	www.quantum.com/support
To open a Service Request:	www.quantum.com/osr

For the most updated information on Quantum Global Services, please visit: www.quantum.com/support