



Product Bulletin 64

Product	StorNext® 4.1 and all prior versions
Summary	Recommendation for saving StorNext logs
Date	February 2011

Problem

Resolving issues involving StorNext sometimes requires old log data to be available. For example: A problem accessing data on a tape may require logs from the time the tape was written. (This issue does not apply to StorNext File System-only systems without Storage Manager.)

Symptoms

The default logging configuration saves data for approximately one month, depending on activity levels. Quantum recommends that log data be kept for a minimum of two years.

Solution

Configure “cron” to periodically copy log files to a managed directory from which they will be stored. The following steps cause TSM and MSM tac log files to be stored.

A new storage manager class named `_snsn_log_backup` will be created, which will require additional media or `sdisk` space. The size of the data stored depends on activity levels. The backed-up logs will be compressed to approximately 1/20th of their original size before being stored.

Identify the managed file system containing the `.ADIC_INTERNAL_BACKUP` directory (typically `/stornext/snfs1`.) See the `BACKUPFS` environment variable in `/usr/adic/TSM/config/fs_sysparm` to determine the directory. Change `/stornext/snfs1` (or whatever your directory is named) as necessary to the appropriate file system name.

- 1 If this is a High Availability (HA) configuration, perform the following `mkdir` on both MDCs:

```
# mkdir -p /stornext/snfs1/.SNSM_LOG_BACKUP/`/bin/hostname`
```

2 fsaddclass and fsaddrrelation must be done on only the active MDC:

```
# fsaddclass -d 1 -f i -m 5 _snsm_log_backup
```

3 fsaddrrelation may need to unmount or mount /stornext/snfs1, depending on file system contents. The following command is all one line with a space after -c.

```
# fsaddrrelation /stornext/snfs1/.SNSM_LOG_BACKUP -c  
_snsm_log_backup
```

4 Modify the DEF_SIZE environment variable in /usr/adic/util/sn_log_update.cfg (in an HA configuration this must be done on both MDCs):

Old:

```
# Default size at which logs are rolled (in bytes)  
DEF_SIZE=2000000
```

New:

```
# Default size at which logs are rolled (in bytes)  
DEF_SIZE=10000000
```

5 Save the original crontab for user "tdlm" so it may be restored if an error occurs while updating the tdlm crontab entry:

```
# /usr/bin/crontab -l -u tdlm > /tmp/crontab.tdlm.save
```

6 Replace the existing tdlm crontab sn_log_update entry using "/usr/bin/crontab -e -u tdlm" on the active MDC. The following command is all one line. There is a space preceding every hyphen (-), every occurrence of /usr/adic and every occurrence of /stornext/snfs1.

```
55 * * * * /usr/adic/www/bin/cmdwrap  
-NO_END_OF_FILE /usr/adic/util/sn_log_update  
-s /stornext/snfs1/.SNSM_LOG_BACKUP`/bin/hostname` /usr/adic;  
/usr/adic/www/bin/cmdwrap  
-NO_END_OF_FILE /bin/gzip /stornext/snfs1/.SNSM_LOG_BACKUP`/bin/  
/hostname`/?SM/logs/tac/tac_00.??:?:20?:?:?:?:?
```

Important: For systems running StorNext 4.x, replace /usr/adic/www/bin/cmdwrap with /usr/adic/gui/bin/cmdwrap in both instances above.

Caution: These changes may need to be reapplied if StorNext is reinstalled or upgraded. This includes the cmdwrap modification above if systems are upgraded from StorNext 3.x to StorNext 4.x.

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
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.)