



Data Archiving – Moving Inactive Data Out Of the On-line NAS Servers

Abstract

Two things in common for most NAS servers – storage usage always outgrows the plans and they are often filled with inactive data. It is recommended and necessary to archive less-used data to offload the NAS servers and to deliver improved response time, stability and availability. The NASTorage™ servers are integrated with the data archiving function, helping storage administrators to archive data on a regular basis according to different data retention policies.

The Benefits

Without proper data management, NAS servers are often filled with unneeded data which are rarely accessed. The situation will not be improved by adding additional storage. This short-term fix merely defers the problem as users will keep throwing in files, useful or not, when they realize there are more storage space available. With the NAS servers full of inactive data, server performance is impacted and response time lags. Most companies upgrade their storage infrastructure to tackle the problem. It means more investment and it is not hitting at the root cause of the problem.

It is necessary to “clean up” storage occasionally. By moving out inactive data out of the NAS servers, there can be an efficient use of storage capacity and NAS computing power.

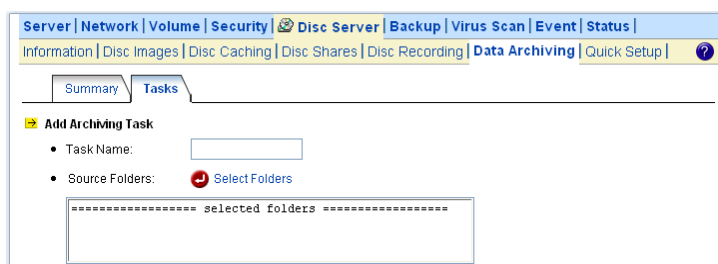
But how? It will be an extremely tedious job by manually selecting the files to be moved out. There must be rules for the storage system to do it automatically. So the first job of archiving data is to set up the policies according to the needs and requirement, like keeping files updated in the past 3 months in the on-line NAS servers, moving out files which are older than a specified date, etc.

Once the policies are set, the NASTorage data archiving feature can help moving out historical data regularly. It allows storage administrators to filter out files by

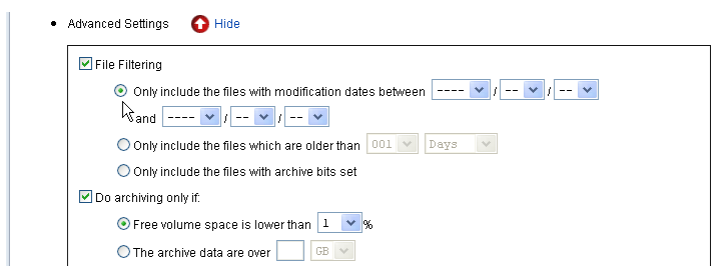
their ages, last modified time or archive bits, and then move them to a less expensive optical media.

How to Archive Data in the NAStorage Servers?

With the NAStorage Disc Server function activated, you will see the “**Data Archiving**” sub-menu under the “**Disc Server**” menu. Click the “**Tasks**” tab to set up a new archiving task.



On the “**Add Archiving Task**” page, it provides several options for file filtering. Click the “**Show**” hyperlink next to the “**Advanced Settings**” item.



- By the data range – to archive the files which are in the specified data range
- By the age of data – to archive the files which are older than the specified age
- By the archive bits – to archive the files which have the archive bits set

In addition, a NAStorage data archiving task can be activated conditionally. Two options are provided. One is to activate the archiving task only when free volume space is low. Another is to activate the archiving task only when the total archive data exceed the specified threshold. Choose the one that best fits your needs.



Supporting Double-layer DVD+R Writing

The NAStorage servers support dual-layer DVD+R writing, which write up to 8.5GB of data on one single disc. It makes the data archiving feature more powerful than single-layer DVD's 4.7GB. If two DVD writers are installed, the NAStorage server can archive up to 17GB of data without changing discs.

Combining the power of NAStorage Disc Servers and the data archiving function

The data archiving feature of the NAStorage servers becomes more versatile by integrating with the NAStorage Disc Server function. During data archiving, the NAStorage servers will firstly turn the archive data into disc images, then burn them out, while the NAStorage Disc Servers manage and share CD/DVD discs in the form of disc images. You can choose to turn some less-frequently-used files to read-only disc images first, which can be mounted and shared to network users by using the Disc Server function. When the archived disc images are not in use for a long time, you can then choose to burn them to discs, further freeing up hard disk space.

Comparison of the data archiving functions between NAStorage and FISC CDH

	NAStorage	FISC CDH
Max no. of archiving tasks	8	10
Keep archived CD/DVD images	Yes	Yes
Read/Share archived CD/DVD images	Yes	Yes
File filtering - date range	Yes	Yes
File filtering – ages of data	Yes	No
File filtering - archive bit	Yes	Yes
Scheduling	Yes	Yes
Conditional task activation	By free space or by archive data size	By free space
Temporary disc image	Split disc images	One big disc image



Supporting multiple CD/DVD writers	Yes	Yes
Summary logs	Yes	No
Records of which discs are burned	Yes	No