# The Power of the NAStorage<sup>TM</sup> Disc Servers

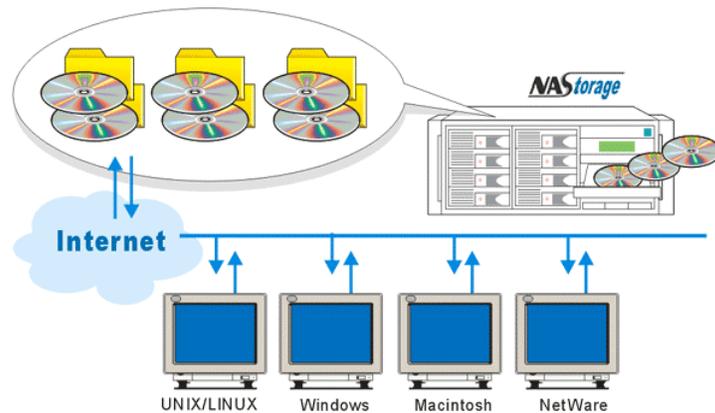## *Versatile CD/DVD Sharing and Management*

The NAStorage<sup>TM</sup> disc server creates and manages CD and DVD disc images for easy and fast disc sharing. It relieves the efforts of handling huge amount of discs. Thousands of discs can be kept online for user access. To protect those disc images, all NAStorage<sup>TM</sup> servers are equipped with a robust RAID sub-system, which features hot-spare disks and strong data protection.

## Features

- Central CD/DVD disc management and sharing
  - Concurrent disc sharing for Windows, Macintosh and UNIX clients
  - Mount ISO-9660 and HFS simultaneously for hybrid discs
  - Grouping of multiple discs under a share
  - Support various CD or DVD formats, including ISO-9660, Joliet, Rock-ridge, HDF, UDF, hybrid and multi-session discs, etc.
- Easy to create and manage CD and DVD images
  - Duplicates a CD image in minutes
  - Hosts up to 4,000 disc images
  - Supports CDs or DVDs of any size
  - Easy-to-use web interface to manage disc images
- Seamless security integration into any network environment
  - Security controls with local accounts and Windows domain accounts
  - Support of up to 10,000 user accounts
  - Set permissions on an individual disc under a group share
- Robust data protection
  - RAID 0, 1, 5 with hot-spare disks
  - Hot-swappable hard drives with the MR-423I mobile rack
  - Creates data redundancy with the fast "SmartSync" data replication
- Comprehensive virus protection*
  - Partnered with Trend Micro to provide virus protection for the NAStorage<sup>TM</sup>
  - Real-time virus protection prevents virus attacks around the clock
  - Features manual and scheduled virus scanning to screen out any infected files
  - Automatic virus pattern updates from the Trend Micro Update Server on Internet

* Optional feature

## Creating and managing CD and DVD discs



By duplicating CD or DVD images into the NAStorage$^{TM}$ server, space is greatly reduced since they are all stored on hard drives in an electronic form. Clients of various OS platforms can access those discs simultaneously. Management costs are largely reduced since all discs are virtually on-line.

There are three ways to create disc images in the NAStorage$^{TM}$ server.

1.  Duplication of the CD/DVD disc images using the locally attached CD/DVD drives –
    If the NAStorage$^{TM}$ server is installed with a CD/DVD drive, administrators can choose to duplicate any CD/DVD title inserted in the drive. The duplication is fast. It only takes about several minutes to duplicate a 650MB CD disc.

2.  Use of the bundled NAStart software to remotely build images –
    The NAStart is Windows software, which is used to remotely build CD/DVD images into the NAStorage$^{TM}$ server from the Windows client. It duplicates a CD/DVD image using the Windows client's CD/DVD drive, or collects files and builds them as a disc image in the NAStorage$^{TM}$ server.

3.  Use of the SmartSync feature to copy existing CD/DVD disc images to another NAStorage$^{TM}$ server –
    Once created, disc images are stored in a special folder in the NAStorage$^{TM}$ server, called the "disc image folder". Administrators can use the SmartSync synchronization software to copy those disc images to another NAStorage$^{TM}$ server. The destination folder must be, of course, a disc image folder. In this case, copies of disc images can be kept in another system for backup purposes or for load-sharing. The mirror site must be re-scanned for the new disc images after the copy.

## Sharing CD/DVD discs

Once created, disc images will show up in the default MIRROR share, which hosts all the disc images discovered by the server. Administrators have other alternatives to share CD/DVD discs, in addition to the MIRROR share.

1. Sharing a single CD/DVD disc

   A single CD/DVD disc appears as a share. By default, the share name is derived from the CD/DVD label. Administrators can modify the share name at any time. The content of the share is the content of the CD/DVD disc.

2. Sharing multiple CD/DVD discs using a single share

   Several CD/DVD discs appear as sub-folders in a share. The sub-folder names are derived from the CD/DVD labels.

3. Sharing a disc image folder

   Administrators can choose to share a disc image folder. Once shared, all the disc images existing in the disc image folder will appear as sub-folders in the share. The sub-folder names are derived from the CD/DVD labels.

## Central administration of CD/DVD burning

For most businesses, security issues and management problems arise if everyone in the office has a CD/DVD writer installed in his or her PC. To prevent these issues, administrators simply prohibit employees from installing any CD/DVD writers on their PCs. However, there are some circumstances where employees need to burn their files to CD/DVD discs. How can a business balance between security concerns and the need for CD/DVD burning?

Central management is one of the solutions.

The NAStorage$^{TM}$ disc servers can help centrally manage the CD/DVD burning jobs. The CD/DVD writers are installed on the NAStorage$^{TM}$ server, not on employees PCs. If anyone needs to burn CD/DVD discs, he/she can use the NAStart software to remotely burn CD/DVD discs and administrators can monitor and check if the content of the burned CD/DVD discs has any security concerns.
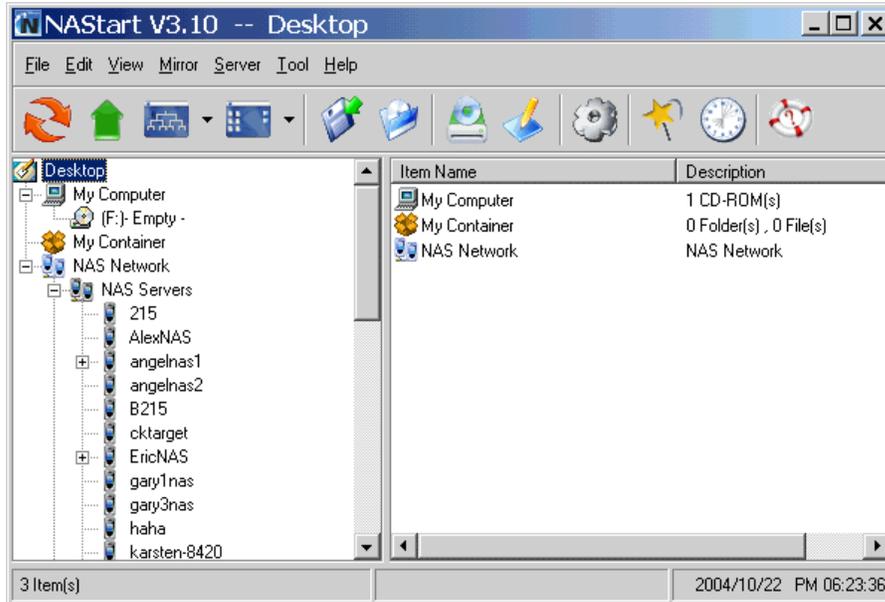
## Archiving data onto CD/DVD discs

Operating for over months or years, the NAStorage<sup>TM</sup> servers might be overwhelmed by huge amounts of data, old and new, important and trivial, all stored on-line in the server. They consume storage space and drag down the system performance. It is necessary to clean up the storage and free up disk space by occasionally moving some obsolete files out of the server. The NAStorage<sup>TM</sup> server's data archiving function helps the IT people in this.

The data archiving function collects the files to be archived based on some filtering conditions and move them to CD/DVD discs. Administrators can set schedules to perform these tasks regularly.

## Remote building and burning of CD/DVD images in the NAStorage server using the NAStart software

NAStart is a powerful utility for the administration of NAStorage<sup>TM</sup> disc servers. It provides two major functions: discovering all the NAStorage<sup>TM</sup> disc servers on the LAN and remotely loading CD/DVD images into the NAStorage<sup>TM</sup> disc server. You can either duplicate a whole CD or build an image from a bunch of files. It also provides remote CD/DVD burning function for the NAStorage<sup>TM</sup> disc server.
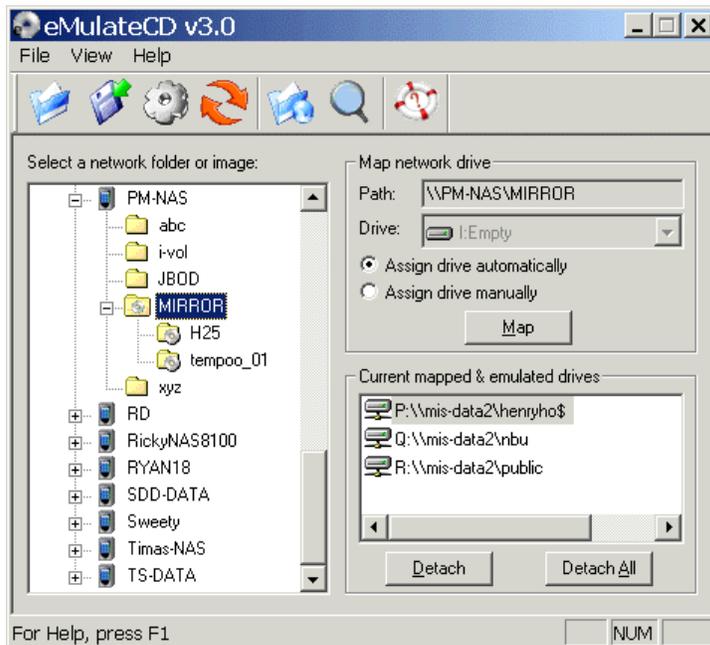
## eMulateCD – emulating network CD/DVD images as local CD-ROMs

The eMulateCD software is a utility which emulates the network CD/DVD images located in either NAStorage disc server or other workstations on the LAN as

native CD-ROM drives at your own workstation. It solves the problem of some CD titles needing to be in local CD-ROM drives for execution and which cannot be run across the network.

You can also use eMulateCD to map several network drives at the same time. It is far more powerful than the built-in "Map Network Drive" function in the Windows system.



## eContent – for title management and program launching

The eContent software is CD/DVD management software for NAStorage disc server.

Having a client-server architecture, eContent is consisted of two programs:

– eContent Manager
– eContent Client

eContent Manager categorizes and manages CD/DVD titles on the NAStorage disc server.

eContent Clients get the results from eContent Manager, allowing the access of CD/DVD titles as easy as from the local CD drive.

eContent Manager also has the capability of controlling and broadcasting messages to eContent Clients, making of the eContent Manager a fully controlled

and interactive CD/DVD management item, and as such becoming an excellent tool for a multimedia educational classroom and training center.