

## Backup Data to Tape Drive, Network Attached or a Virtual Tape Library?

When it comes to setting up a system for multiple computers operating on a network, backing up your data to a tape drive, network attached storage (NAS) or a Virtual Tape Library are some of the solutions the end user should consider!

Although they ultimately perform the same function, the methods of operations are somewhat different. In some cases, specific software is needed, files encrypted; resulting in a more secure environment. Speed is not necessary what every IT engineer wants, in some case, ease of use. Finding a balance is not always that easy.

### Reliability:

The use of magnetic tape to encode computer data was first marketed by IBM in the 1950s. Today, tape drives are still regarded as a very reliable forms of data storage. Perhaps the largest benefit of using tape drives is that the data can be stored offsite to minimize risk of destruction by theft, floods or fires. In terms of pure functional reliability, network attached storage systems, virtual tape libraries and tape drives are comparable.

### Retrieving Data:

Retrieving data after a loss is generally faster with a disk based system than with tape drives. Speed, however shouldn't be the only consideration when choosing a backup medium. For businesses that require a daily "snapshot" of data on any particular day, the speed of data recovery isn't as critical as incremental date stamped data imprints.

### Speed:

There's no doubt that disk based operations are faster than backing up to tape drives. Tape drives can take hours to copy data while NAS and VTL storage offers real-time data storage. This is an important consideration for businesses that operate round the clock because recording to tape drives requires a backup window when computers are not in use. However, for those who prefer the benefits of storing tapes but don't have an adequate backup window, a "disk to disk to tape" system is a common solution. With this solution, data is copied to a secondary hard disk and then recorded to tape for archiving.

### Space:

The capacity of a network attached storage solution is dependant on the number of disk drives installed. A NAS for a small business could technically be a personal computer with enough disk space to hold the entire data contents of the companies systems. On the other hand, professional grade network attached storage machines can hold between 3 to 40 plus terabytes of data.

Tape drives can essentially be customized to fit the storage needs of a business. With tape drives, you can essentially "pay as you grow" for additional storage by adding tape drives to tape drive libraries. Instead of paying for the amount network attached storage space you anticipate you'll need 5 years from now, you can purchase tape drives with space enough to meet your current demand. The tape drives fit into a storage case called a tape library with racks that can be filled as the data load increases.

No matter which system your business chooses, the important thing is to get some sort of system in place to back up your company's critical data. The decision to choose network attached storage or to use tape drives is a decision best made with the assistance of a professional who can recommend the most cost effective way to achieve your goals and protect your valuable data.

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### About the Author

The author is a freelance copywriter. Visit <http://www.SunstarCo.com> to find additional manufacturer information on network attached tape drives or a virtual tape library.