STORServer

WHITE PAPER ›

WHAT IS A STORSERVER ENTERPRISE BACKUP APPLIANCE?

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Every business has data management requirements revolving around the three data protection areas: backup, archive and disaster recovery. Traditionally companies purchased each component separately. That is, a library, software, and server.

Colorado-based STORServer®, Inc., pioneered the "Backup Appliance," designed as a single box that includes everything, from disks and tape libraries, to software, to the case it's all housed in. As an all- in-one appliance, it's as easy to use as "plug and play."

21st Century Backup

One of the key features of the STORServer Enterprise Backup Appliance and the Disaster Recovery Traditional backup products typically don't offer online data retrieval, making immediate access to saved information next to impossible. A backup appliance allows companies to retrieve both their backup and archived information within minutes. Backup copies of data are stored on tape within the appliance, and archived data can be stored on local shelves, near-line storage, or also in the appliance. Disaster recovery planning with a backup appliance STORServer White Paper requires an off-site copy of both the backups and archives, but backups and archives also remain on-site for quick restore when needed.

A backup appliance provides do so for the cost and time savings. Customers make the switch to a backup appliance for a number of reasons, not the least of which was the time it saves to retrieve critical information.

Taking Care of all Three Storage Needs

A true Backup Appliance must provide backup, archive and disaster recovery capabilities. It should be quick and easy to install and simple to use. The definition of each component within a backup appliance include:

- **Backup**: on-line copy of every file a customer has identified for restore. The customer, should be able to set the data retention time for a file at any length. Backup files should include all files – op/sys, hidden files, databases (DB), flat files, DOC/XLS/PPT files, etc.

- **Archive:** on-site point-in-time capture of any file or set of files. These files need to be saved for some business or legal time requirement, from months to years. Also, these may be files that no longer need to sit on more expensive active or spinning disks so they can be moved to a cheaper media.

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- **Disaster Recovery:** copies of all on-line (backup data) and on-site saved data (archive). Customers can change their disaster recovery copies to one or more locations, preferably copied simultaneously. Off-site copies can be media removed manually, or copies electronically vaulted. A daily Disaster Recovery Plan can be optionally provided as a function of DR.

In addition, a backup appliance must allow for automation and long-term management flexibility around:

- **Media**: since media specifications are constantly changing for disk, tape and optical technologies, a backup appliance should provide for virtualization of data storage, allowing the media in a storage pool or bucket to be changed, migrated, updated, distributed and consolidated across locally attached, network attached or SAN managed locations. Over time, the data on media should not be limited by media decisions, and should not require later restoration in order to be moved to a new media.

- **Platforms:** IT departments have to remain flexible in managing their data across many platforms and many networks. The backup appliance should allow for backups and archives to be performed in a like manner across all popular platforms.

Finally, a backup appliance must include all the hardware, software and integration of a backup solution in one appliance. Optimally, the appliance should include a logical plug and play mix of the hardware components for both:

- **Scalability:** a backup appliance must offer a customer the flexibility to grow seamlessly. A backup appliance should be is expandable by design, ie: expanded by simply upgrading tape drives and/or doubling tape storage slots.

- **Support:** with all the hardware, software and integration for a backup solution included in one appliance, one warranty, one support maintenance capability should cover everything.

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Plug & Play

By definition, a backup appliance must plug into a data environment through whatever network path is most logical for data movement, and provide a true "enterprise" capability. Users should be backed up, whether they are on a LAN, WAN or whether their data is located locally or in some virtual NAS or SAN location:

- **LAN friendly**: in circumstances where data must be copied off a LAN location over a fiber or other backbone, the backup appliance must operate without problem, but most data should be handled over the common traffic area used by the bulk of users, without additional burden to the network. As networks increase in speed, the backup appliance must operate without burdening the normal traffic patterns on the LAN. In the case of WAN users, options for byte-level change backups must be provided.

- **Data agnostic**: data can be located by the backup appliance on any of the many locations where users access files, including locally attached, mapped drives, NAS locations, SAN locations, and remotely managed data over intra or internets.

Ease of Use

Backup, archive and disaster recovery begin with ease of use for any person who manages data. This includes individual users, system managers, database administrators, etc. Also, a backup appliance must apply services to all systems, including laptops, workstations, servers, clusters, etc.

- **Easy to use:** minutes a day to manage and administer – simple to navigate.

- **Plug and Play:** installs in minutes – network connectivity, component connectivity, and client connectivity

- **Heterogeneous:** backs up and restores all popular platforms. Clients can be added to the system easily and remotely

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Functionality

Backup will move data to an on-line location where all files can be restored. This on-line backup should be managed by data retention policies set by the customer.

Restore functions allow users at any level (from laptop to large RISC systems) to bring back files by communicating directly with the backup service or server, if needed. Restores should be available at the file level or some backup level identified by a user.

Archive is a point-in-time capture of any set of active data required to be saved for any period of time, which can be kept on-site. Retrieve is the ability to bring back any set of data described as an archive.

Users with permissions should have access to their restores and retrieves, unassisted by a system manager. This should be an easy-to-use function of their workstation utilities and tools.

ABOUT STORSERVER

STORServer is a leading provider of data protection solutions and offers the only enterprise data backup appliance that is built to order. Each backup appliance solution is tailored to the customer's unique environment to simplify management of complex backup, archive and disaster recovery needs. STORServer's appliances feature enterprise class data backup, archive and disaster recovery software, hardware, services and U.S.-based customer support. Companies of all sizes trust in STORServer's proven appliances to solve their most complex data protection problems. For more information on STORServer, please visit storserver.com.

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