NetApp®

Network Appliance™ SnapVault™ Software

Simple and efficient data protection.

Key Features

- **ONLINE BACKUPS AND RESTORES**
  Dramatically simplifies and increases the reliability of data backup and restoration.
- **INCREMENTAL FOREVER BACKUPS**
  Uses CPU and network resources more efficiently with minimal disk storage needs.
- **SEAMLESSLY INTEGRATED WITH SNAPSHOT™ TECHNOLOGY**
  Efficiently stores weeks of backups online, eliminating incremental tape backups and reducing tape media costs.
- **LEVERAGES STANDARD NETWORKING INFRASTRUCTURE**
  Stores backups locally for fast restores or remotely for disaster protection.
- **EASY AUTOMATED OPERATION**
  Lowers the cost of backup administration.

The Challenge: Protecting Growing Data Volumes in Less Time

Historically, enterprise data backup has been a time-consuming, expensive, and sometimes unreliable process. Today, while the volume of data generated in the average organization is increasing, the time available for backup is decreasing. Building an effective data protection system also requires a large investment in servers, networks, tape technology, and people—plus the recurring cost of tape media. Backup and restore operations can also interrupt access to important information, leading to lost productivity and revenue.

The Solution: Automated Data Backup with NetApp SnapVault Software

To ensure that important data is always protected and easily restored, NetApp created SnapVault. By frequently backing up data stored on NetApp or any other storage platform to Network Appliance enterprise storage or NearStore® appliances, SnapVault provides a centralized disk-based backup solution for heterogeneous storage environments. Storing backup data in multiple Snapshot copies on the SnapVault secondary storage system lets enterprises keep weeks of backups online for faster restoration. SnapVault also gives users the power to choose which data gets backed up, the frequency of backup, and how long the backup copies are retained.

Increase Your Confidence in Data Backup and Recovery

SnapVault uses RAID-protected disk storage as the backup medium, which provides a high level of reliability. When the backup data is on disk, administrators can easily verify the data to gain extra confidence in the backup information. By taking advantage of the hourly backup capability of SnapVault, enterprises can significantly improve their recovery time objective and recovery point objective, meeting the ever-increasing needs for business continuity.

Lower Your Total Cost of Backup

SnapVault helps reduce costs in a number of different ways. First, SnapVault is automated, saving administration time and resources as well as cutting the ongoing cost of backing up data. Second, SnapVault is so easy to use that employees can do their own restores, increasing productivity. Third, SnapVault allows administrators to restore the most important, mission-critical data first, getting business operations back up fast. Fourth, by enabling centralized and consolidated backup, SnapVault requires much lower infrastructure costs than competing solutions, reducing overall backup costs further. Finally, since SnapVault can store multiple long-term Snapshot copies online, it also reduces the need for frequent tape backups, cutting media costs.

SOFTWARE

Network Appliance provides the industry's most reliable storage software solutions, optimized specifically for the job, easy to use and administer, and built to deliver the lowest TCO and maximum ROI.

Reduces the Impact of Backup on Your Production Environment

Backing up data to tape can degrade performance, consume network bandwidth, and often require an expensive, dedicated backup network. SnapVault eliminates these problems. SnapVault reduces the backup infrastructure needed by providing true incremental forever backup. Once the first full backup has been completed, all subsequent backups send only changed data (incremental blocks) over the network. Since only changed data is copied, SnapVault doesn't drain client CPU resources. All tape backup operations can now be offloaded to the SnapVault secondary storage system, eliminating the impact on production servers and networks.

Centralized Management Using DataFabric® Manager

DataFabric Manager (DFM) Business Continuance Module allows you to centrally manage and administer the entire backup and recovery operation for your heterogeneous storage environment. DFM provides an easy-to-use interface for setting up backup groups, backup schedules, and retention policies. DFM also provides an intuitive tool for manual backups and restores.

Centralized Backup

By backing up multiple SnapVault primary storage systems to a single Snapshot copy on a large SnapVault secondary storage system, enterprises can now centralize their backup and restore operations in a single location. SnapVault primary storage systems can be filers or Windows® or UNIX® servers connected via a LAN or located in remote offices connected over a WAN. The SnapVault secondary storage system can also be located at a remote disaster recovery site to protect against production site failures. All tape backup operations can be performed from the SnapVault secondary storage system, consolidating and centralizing all data protection resources.

Easy to Use and Administer

DataFabric Manager simplifies the SnapVault setup and configuration process. Once set up, backups are completely automated and require minimal intervention.

Since the backups are online, users can restore files without help from the administrator. They can browse the file system to see which files were backed up and restore the appropriate files and directories by simply dragging and dropping. Since SnapVault backups are read-only, they are protected from being accidentally overwritten by users or applications.

Unleash the Power of Information

See how NetApp SnapVault software can dramatically improve your data protection strategy by providing online backup and restore capabilities for your heterogeneous storage environment. Simply visit our Web site at *www.netapp.com*. And let us show you what "The evolution of storage™" means for your business.

SNAPVAULT CAN BE USED FOR:

- **CONSOLIDATING REMOTE OFFICE BACKUP**
- **CENTRALIZING DATA CENTER BACKUPS**
- **REMOTE VAULTING OF BACKUPS**
- **TAPELESS DATA RESTORATION**

SNAPVAULT SUPPORTED PLATFORMS:

- **NETAPP STORAGE SYSTEMS**
- **HP-UX**
- **IBM AIX**
- **LINUX®**
- **MICROSOFT® WINDOWS NT® 4.0**
- **MICROSOFT WINDOWS 2000**
- **MICROSOFT WINDOWS 2003**
- **SGI IRIX**
- **SUN™ SOLARIS®**

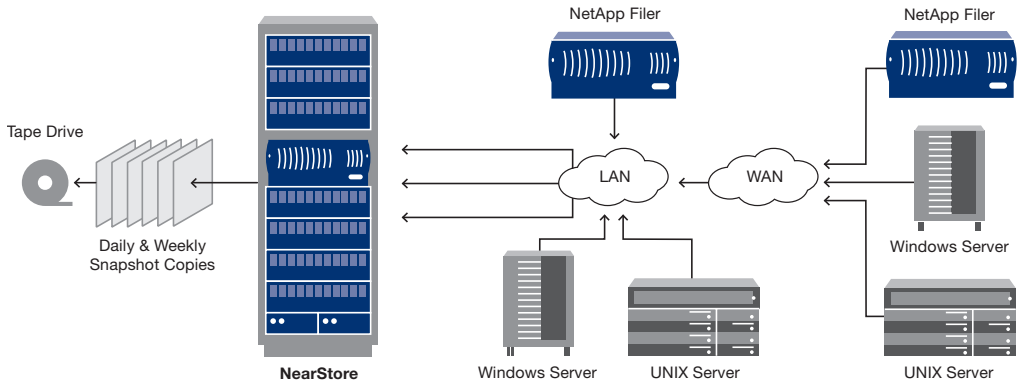

Figure 1) SnapVault Configuration

Multiple local and remote primary storage systems are being backed up to a NearStore system using SnapVault.

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