NetApp®
Go further, faster

Software

NetApp Open Systems SnapVault

Fast, reliable heterogeneous disk-to-disk backup

THE CHALLENGE

Protect your data!
Backup and recovery is still a big challenge. Backups take too long. They can be unreliable and time consuming to manage. Data in remote or branch offices is tough to consistently protect. Disk-based point products and deduplication appliances aim to solve these problems, but they suffer when it comes to data recovery—and they are often expensive, complex, and difficult to scale. Meanwhile, data volumes keep growing, tape costs keep rising, and it's increasingly difficult to meet backup windows.

THE SOLUTION

Open Systems SnapVault— modernized D2D backup
Open Systems SnapVault® (OSSV) solves these problems with replication-based disk-to-disk backup for any supported server with SAN or DAS storage. Instead of a minor evolution or an appliance-based band-aid for decades-old technology, OSSV uses Snapshot® copies and block-level incremental updates to completely modernize backup and recovery. OSSV backs up data from Windows, Linux, UNIX, and VMware servers *directly* to a centralized NetApp disk target—eliminating the need for intermediate "media servers."

OSSV creates full point-in-time backup copies on disk using block-level replication: After the first full backup, it transfers and stores only new or changed blocks. This minimizes data transfer over the wire and reduces the backup footprint, making OSSV ideally suited to centralize remote office backups. Each block incremental update is captured in a Snapshot copy to create a logical full backup copy in native format. Restoring from native-format copies is typically much faster than restoring from alternative deduplication appliances. OSSV's native format copies can also be mounted up and accessed directly by end users to simplify individual file restores.

With OSSV, backups and recoveries can finish in minutes instead of hours or days. They can achieve 100% success rates. Weeks, months, or even years of backups can be kept online. And disk capacity requirements can be reduced by up to 90%.

OSSV and SQL
OSSV can create quick, consistent backups of Microsoft® SQL databases. It can stagger backups of databases and log files to minimize network traffic and still offer multiple recovery points. OSSV can do block incremental updates as often as every hour, and can create local log backups as often as every five minutes. No additional license is required for OSSV SQL backups.

Additional features

OSSV provides the following value-added features:

- **Support for Microsoft Cluster Service**—Back up SQL Server databases or file system data from a 2-node MSCS cluster in active-active or active-passive configuration
- **Link compression**—Compress data over the network to reduce network traffic
- **VSS integration**—To back up open Windows files
- **Deduplication integration**—Back up multiple OSSV sources to a single target; engage FAS deduplication as a post-process to further shrink the backup footprint
- **Checkpoint restart**—Take checkpoints every five minutes and restart an interrupted backup from the most recent checkpoint
- **Dynamic bandwidth throttling**—Throttle KB/sec from the client per configurable schedule to avoid saturating WAN links
- **System state backup**—Protect Windows system state information including Registry
- **Filter driver**—Track changed blocks within a Windows file system to reduce backup time

- **FlexClone® integration**—Create virtual clones of backup data for test, development, or data mining
- **Protection Manager integration**—Protection Manager can coordinate all OSSV policy and job creation, data discovery, backup provisioning, and job monitoring

Zero-dollar agent

OSSV agents are available as free licenses. You can download as many OSSV licenses as you need from our secure customer Internet portal. OSSV simply requires a NetApp FAS target enabled with a SnapVault Secondary license.

Efficient backup—achieved

OSSV disk-to-disk backups can significantly reduce backup and restore times, minimize storage and network requirements, increase reliability, and reduce tape costs. Multiple OSSV source systems can back up to a single secondary system to centralize backup operations and resources. OSSV can also eliminate the need for additional investment in backup infrastructure and dedicated deduplication appliances. With free software agents, OSSV can be extremely cost effective, especially for remote offices. For faster, more efficient backup and recovery, turn to NetApp OSSV.

OSSV can:
- Back up open systems servers with free, lightweight agents.
- Reduce your total cost of backup.
- Provide faster application, virtual machine, or user-driven file restores.
- Centralize data center and remote office backups.
- Reduce or eliminate tape.

APPLICATION SUPPORT
- Microsoft SQL Server 2005/2008

PLATFORM SUPPORT
- Microsoft Windows 2003/2008 (support for Microsoft Cluster Services and Windows Server 2008 Failover Clustering solution)
- HP-UX
- IBM AIX
- Solaris™
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server
- VMware ESX
- Hyper-V™

ABOUT NETAPP

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate performance breakthroughs. Discover our passion for helping companies around the world go further, faster at *www.netapp.com*.
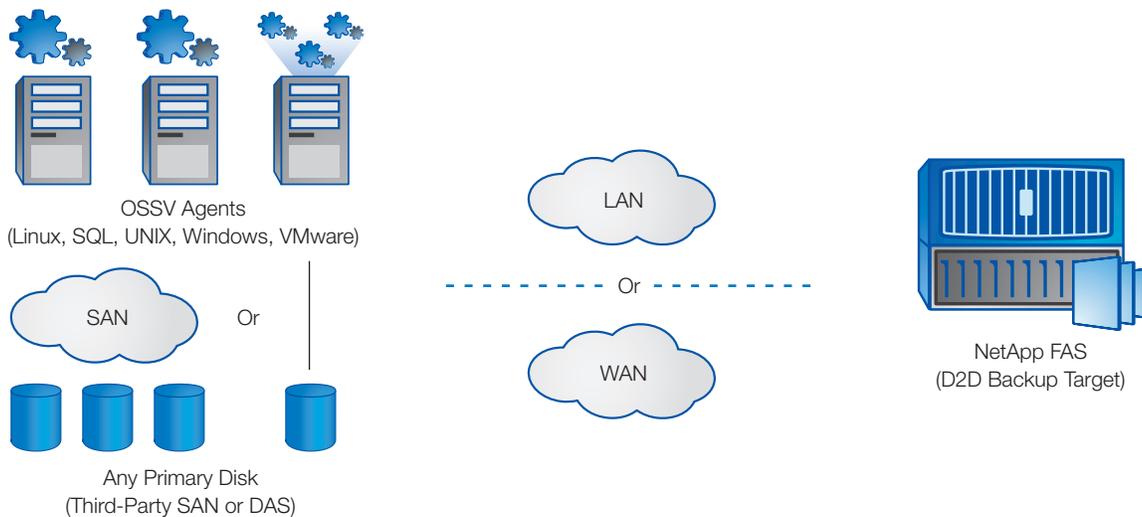

Figure 1) Modern backup with Open Systems SnapVault.
Snapshot copies and block-level incremental replication create space-efficient point-in-time backup copies on NetApp disk.

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