

# Fast, Reliable, Cost-Effective Disk-Based Backup for Distributed Servers

## Protecting Critical Server Data Ensures Business Continuity

### Key Features:

**Industry-standard backup that's easily deployed on a wide range of servers**

**Supports industry-standard backup applications including Veritas, Legato, CA, BakBone, and others**

- Reduces backup time and costs
- Provides rapid rebuilds

**Easy scalability from 320GB to 66TB**

- Provides 24/7 online availability for backups
- Stage stored data to a tape drive without the limitations of a backup window
- Built on familiar TCP/IP and Ethernet standards

**Instant Capacity Expansion<sup>™</sup> (I.C.E.) allows backup volumes to be created or grown on demand**

- Protects virtual volumes with the same RAID that underlies the file-based data

Businesses store some of their most valuable information on a variety of small- to medium-class server platforms in departments, remote sites, retail offices, satellite data centers, and other locations outside the central data center. This data is vulnerable to malicious acts, accidental erasure, modification, corruption, and even catastrophic loss. It is critical that businesses secure these distributed assets — the impact of unavailability or loss of information ranges from decreased productivity and revenue shortfalls to business failure.

### The Challenge: Managing and Protecting Data on Distributed Servers

In response to changing demands, businesses face the challenge of storing and protecting an increasing amount of data on servers outside the data center. Attempting to manage distributed data with traditional methods is impractical, due to the complexity and cost. Increased business demands for 24/7 application availability have reduced backup windows, limiting backup opportunities over the company LAN. Backing up each server individually to tape is slow, unreliable, costly, and unmanageable for multiple locations. Restoring data and verifying data from tape takes a long time, and 20% to 40% of backup tapes are unreadable. The increased complexity in managing backup and restore for the various hardware and software platforms in the distributed network takes more effort and requires a greater administrative skill set (if administrators are even available at remote sites.).

### The Solution: Snap Server Disk-to-Disk Backup for Data Protection and Fast Data Recovery in Distributed Enterprises

Snap Server<sup>™</sup> by Adaptec helps administrators sidestep this shrinking backup window with data protection solutions based on disk-to-disk and disk-to-disk-tape backup and recovery. This approach removes the typical constraints imposed by the LAN and resolves the conflict between data backups and shrinking backup windows. Instead of backing up data one server at a time, the Snap Server disk-to-disk backup solution backs up data from multiple servers simultaneously onto a central repository, dramatically reducing the total backup time.

Support for industry-standard backup applications enables this Snap Server Data Protection Solution to use many third-party server agent modules. This provides fast online backup and recovery that ensures continuous availability for many widely used business-critical applications, including DB2, Informix, Exchange, SQL Server, Oracle, SAP, and Sybase.

This Snap Server Data Protection Solution offers a common set of improvements to the traditional backup process, including a fast, online repository for single or group file recoveries and separating the tape archiving process from the server backup process to overcome the limitations of the backup window.

### How it Works

The Snap Server disk-based backup solution can be deployed either as the site's primary backup server or as a tape displacement solution placed between the backup server and the tape unit. This solution establishes a nearline repository for the backup file-sets from client servers or the existing backup server. Data is backed up and retrieved to/from the solution under control of the backup application. For permanent archives or offsite vaulting, files stored on the Snap Server can be directly up to a tape unit directly attached to the Snap Server (disk to tape) or virtual tape can be replicated to physical tape (disk to disk to tape).

**Network Transport Protocols**

- TCP/IP
- UDP/IP
- AppleTalk

**Network File Protocols**

- Microsoft Networks (CIFS/SMB)
- Linux/UNIX (NFS v2/v3 over TCP & UDP)

**Solution Elements**

**Third-Party Backup Applications:**

- BakBone NetVault WorkGroup Edition – (integrated into Snap Servers, including a 500GB VTL license)
- BakBone NetVault Enterprise Edition
- Computer Associates BrightStor ARCserve
- Microsoft Backup
- Dantz Retrospect Professional
- Legato NetWorker
- VERITAS NetBackup
- VERITAS Backup Exec

**Snap Server Platforms**

**Fixed Capacity:**

- Snap Server 510, 410, 210, 110

**Scalable Capacity:**

- Snap Server 650, 520
- SANbloc S50 JBOD

**Solution Elements**

All application servers to be backed up, including any existing backup server, should have an available Gigabit Ethernet port. Although Snap Servers work with any Ethernet network, Gigabit Ethernet provides maximum speed and optimal throughput. The backup application determines the protocol used over this connection. It is recommended these servers be connected to a switch that supports Gigabit Ethernet.

In environments where a backup application exists, management and scheduling of the backups is done through the backup environment's existing client management interface. If the backup application supports NDMP, it can also be used for managing local backup files to the local tape unit.

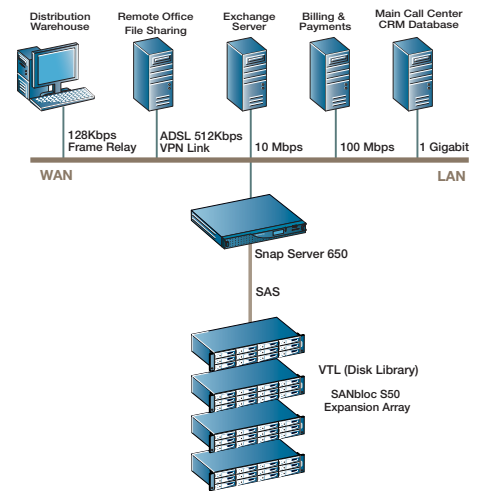
If the Snap Server is placed as the primary backup server, it includes a native implementation of BakBone's NetVault WorkGroup Edition with a 500GB Virtual Tape Library (VTL). Backup is managed through the BakBone client interface installed on one available client on the network.

BakBone Application Plugin Modules can be loaded onto each server to provide open file management for business-critical applications, including DB2, Informix, Exchange, SQL Server, Oracle, SAP, and

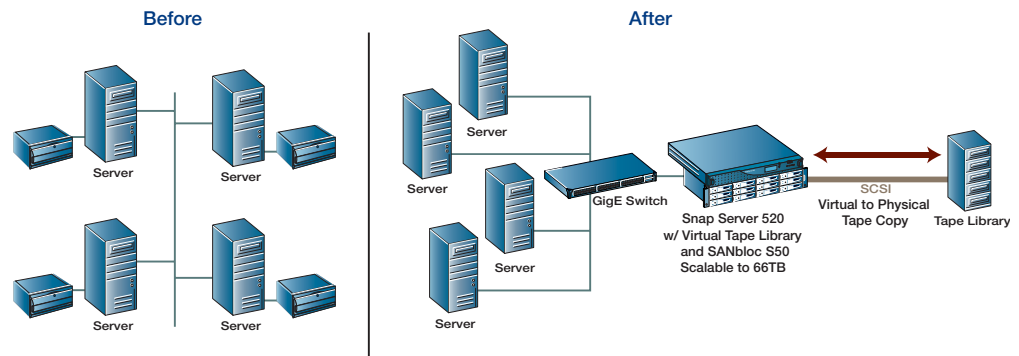
Sybase. Plugin Modules are also available for both disaster recovery and NDMP.

**Better Data Backup and Recovery**

This Snap Server Data Protection solution offers a common set of improvements to the traditional backup process, including a fast, online repository for single or group file recoveries and separating the tape archiving process from the server backup process to overcome the limitations of the backup window. It reduces the time and cost involved in data protection.



Enterprise Disk-Based Backup



Distributed Disk-Based Backup



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