Symantec NetBackup™ 7.5 Options

Complete protection for your information-driven enterprise

Data Sheet: Data Protection

Overview

Symantec NetBackup™ provides a comprehensive selection of innovative disk and tape options to increase data protection capabilities in your backup and recovery environment. Customers with licensed disk or tape options gain access to additional features that simplify the management of backup policies, improve the speed of disk-based backups, and improve backup server virtualization. Data protection environments can be customized to better utilize disk capacity, leverage specific architectures such as storage area networks (SANs) or network-attached storage (NAS), enable better disaster recovery practices, or add a new level of data security for tapes being taken off-site.

Customers with licensed disk or tape options gain access to additional features that can simplify the management of backup policies, improve the speed of disk-based backups, and improve backup server utilization. The features are summarized as follows:

Storage lifecycle policies—Automates the backup and duplication process from data creation to expiration, ensuring that all the necessary copies of a backup are created in the correct locations with the correct retention periods, but without the need to create separate duplication jobs

Media server load balancing—Automatically redirects jobs to different backup/media servers in a group based on existing server load conditions (such as CPU and memory utilization)

Innovative NetBackup Disk Options Unlock the Power of Disk

Symantec NetBackup delivers the ultimate in choice for licensed options that deliver additional features:

- NetBackup Data Protection Optimization Option
- NetBackup Accelerator
- NetBackup Replication Director
- Enterprise Disk Option
- RealTime Option

NetBackup Data Protection Optimization

NetBackup Data Protection Optimization allows NetBackup 7.5 customers to use integrated data deduplication and replication features. NetBackup Data Protection Optimization radically transforms traditional deduplication by applying the best approach for a specific backup without the need for computationally intensive processing. Symantec NetBackup 7.5 with V-Ray technology includes the intelligence that gives NetBackup deduplication the unique ability to exactly identify the data formats and object boundaries for optimized deduplication performance.

Customers can install and configure deduplication and optimized duplication (via replication available at no additional cost) from the NetBackup console. Some key benefits include:

- NetBackup client deduplication moves deduplication closest to the source, thereby eliminating the need to send full backup streams across the entire network
- NetBackup media server deduplication at the target for workloads where deduplication needs to be offloaded from the client
- Flexibility to deploy on commodity storage or using turnkey NetBackup appliances
- Deduplicate across physical and virtual environments
- Seamless support for NetBackup Accelerator

For more information, please refer to the *NetBackup Data Protection Optimization Brief* document.

NetBackup Replication Director

NetBackup Replication Director enables integrated end-to-end control for the management and recovery of array-based snapshots and replicated snapshots, by leveraging the array vendor's underlying snapshot and replication technology. Array-based snapshot and replication technology provides an efficient means to create local copies and send replicated copies of user data (files, applications, databases) to offsite

storage as part of a disaster recovery plan. Replication Director offers a single, unified NetBackup interface for end-to-end data protection management of Backups, Snapshots and Replication that includes the following tasks:

- **Unified policy management**
  Use a single NetBackup policy to provide end-to-end management of the entire data lifecycle, from the creation of a local snapshot and replication of the snapshot, to tape backup support for long-term retention. Control schedules and retentions uniquely for each copy. Multiple data centers can replicate to one disaster recovery domain or one data center. Additional media servers are not needed in the remote data centers.
- **Single point for monitoring, alerting, and reporting**
  Use NetBackup OpsCenter to monitor the status and health of not only the backup environment but also the snapshot and replication environment, including real-time job status of snapshot and replication jobs, alerts for problems in the storage environment, and extensive reporting on the entire replication environment.
- **Optimized, granular file recovery**
  Use a NetBackup search interface to quickly find all copies of a given file and enable recovery from any replicated snapshot on any storage device in the environment that is defined to NetBackup. This includes recovery from the primary copy or any replicated copy on disk, or from any duplicated copy on disk or tape, at the volume or file level.

NetBackup Accelerator

NetBackup Accelerator significantly reduces the amount of resources (client I/O, time, network, and storage) that a traditional full backup takes. By using NetBackup Accelerator, a very large file system with millions of files can be fully backed up in the amount of time required for an incremental backup. Systems which were problematic to back up during the backup window can now be backed up much more quickly, allowing the backup to complete in the allotted time.

NetBackup Accelerator employs change tracking to dramatically reduce the file system overhead associated with traversing a large file system identifying and accessing only changed data. This reduced set of data can be deduplicated at the client or media server, further reducing the demand on network and storage resources. An optimized synthetic full backup is created and catalogued inline, providing full restore capabilities and shortened RTO.

The net results include:

- Much faster backups for a significantly reduced backup window
- Reduced CPU and I/O overhead on the client
- Reduced usage of network resources
- Reduced usage of network resources, and a great way to send backups to cloud storage units

All of these results combine to deliver lower operating expenses and reduced capital expenses.

Enterprise Disk Option

This option includes support for third-party deduplication devices such as virtual tape libraries (VTLs) and OpenStorage storage solutions from Symantec partners.

OpenStorage

Protect your data using third-party disk appliances that support the NetBackup open integration standard, OpenStorage (OST). NetBackup OpenStorage extends unique features, that improve the management and operations through of third-party devices by taking advantage of the unique capabilities of each device, such as deduplication and replication. A number of Symantec Technology Enabled Program (STEP) partners are participating and have brought unique solutions to the market. Key benefits include:

- **Fully leveraged intelligent disk appliances**—Take advantage of high-speed backup and recovery over a Fibre Channel or IP connection, along with disk sharing, virtualization, and deduplication technologies.
- **Enhanced disaster recovery**—Fully leverage advanced features such as backup image replication between multiple data centers, eliminating the need to ship, encrypt, or store tapes.

Virtual tape features

This enables the use of virtual tape devices (VTLs) with NetBackup. Some key benefits include:

- **Media management**—Leverage NetBackup's powerful media management capabilities just like a standard tape drive.
- **Enhanced functionality**—Use NetBackup to create physical tape copies of virtual tapes (requires supporting VTL capability).

RealTime Option

Provides disk-based, continuous data protection to dramatically reduce data loss and recovery times of critical applications, helping organizations meet even the most demanding recovery objectives. With its scalable off-host architecture, RealTime eliminates the impact that backups normally have on production applications. RealTime seamlessly integrates with NetBackup to provide easy administration, including storage lifecycle policies and application intelligence to ensure transactional consistency for applications like Oracle®, Microsoft® Exchange, and SAP®.

- **Continuous data protection**—This eliminates potential data loss by tracking and protecting all changes to application data.
- **Fast and simple recovery**—Recovery operations allow instant read-and-write use of disk-based images, eliminating the need to move data from one target to another.
- **Integrated off-host backups**—Avoid application performance impact during backup cycles with NetBackup managed off-host backups directly from the RealTime server.

Symantec Desktop and Laptop Option

This option provides continuous disk-based protection and automated file protection for desktops and laptops, whether online or offline. Files can be backed up continuously, on a schedule, or manually. Key benefits include:

- **Offline backup and restore**—When offline, files will be backed up to a local folder. When a connection is restored, data will be moved from a local file to the network share.
- **Flexible user restore**—Users can easily find and restore their own data wherever and whenever they need it, saving time for both users and IT administrators.
- **Decreased total cost of ownership**—Use the existing network infrastructure to protect and synchronize files between multiple machines.

Options for Fully Leveraging Tape Environments

Symantec NetBackup offers unparalleled media management and control of the overall tape environment, including tape library and drive-sharing capability, encryption of tapes, and support for tape within a variety of storage network architectures.

Shared Storage Option—Share tape drives across NetBackup media servers and a SAN for enhanced performance, and deliver a higher return on investment for tape drive and library hardware. Some key benefits include:

- **Minimized backup costs—**Increase tape drive usage and lower the total number of drives required.
- **Rapid deployment—**Graphical wizards quickly discover and configure shared tape drives.
- **Increased fault tolerance—**Access additional tape resources in the event of a drive or network failure; this includes support for multiple paths to tape drives.

Network Data Management Protocol (NDMP) Option—Provide reliable, high-performing backup and recovery services for NDMP-enabled NAS to local attached tape, to tape attached to another NDMP-compliant NAS device, or to an existing NetBackup media server. Some key benefits include:

- **Optimized NAS environments—**Create point-in-time snapshots of data on an NDMP-enabled NAS device, and leverage the Shared Storage Option to share tape drives between NAS devices and NetBackup Media Servers.

- **Decreased performance impact—**Support for Direct Access Recovery greatly reduces the time to restore a single file from tape-resident backup images.
- **Simplified setup—**A wizard-driven device configurator reduces the complexity of discovering and configuring NDMP-attached tape resources.

Media Server Encryption Option (MSEO)—Help ensure that tapes being transported off-site cannot be read in the event they are lost, mishandled, or stolen. MSEO provides maximum flexibility and performance by providing parallelized and selectable encryption and compression as well as "set it and forget it" key management. Some key benefits include:

- **Easier management and control—**Encrypt within the Symantec NetBackup policy, eliminating the need for a separate process or an extra dedicated device to manage.
- **Maximum flexibility—**Choose what data you want to encrypt, and then choose the appropriate compression and encryption strength (AES 128-bit or AES 256-bit).
- **Support for most common backup configurations—**This includes support for disk staging to tape, the creation of tape copies for off-site purposes, and the backup of NAS devices (via NDMP).

Vault Option—Keep mission-critical data safely off-site in the event of a disaster by automating the complex and tedious process of backup duplication and off-site media management. Some key benefits include:

- **Increased efficiency—**Automate and track the movement of backup tapes to and from an off-site storage facility.
- **Simplified duplication tasks—**This provides necessary redundancy in case the primary backup tape is lost or destroyed, allowing for one copy to be kept on-site and another off-site.
- **Manual ejection of tapes eliminated—**Tape ejection is handled automatically, based on profiles that determine which tapes should be sent off-site each day.

More Information

Visit our website

http://enterprise.symantec.com

To speak with a Product Specialist in the U.S.

Call toll-free 1 (800) 745-6054

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About Symantec

Symantec is a global leader in providing security, storage, and systems management solutions to help consumers and organizations secure and manage their information-driven world. Our software and services protect against more risks at more points, more completely and efficiently, enabling confidence wherever information is used or stored. Headquartered in Mountain View, Calif., Symantec has operations in 40 countries. More information is available at www.symantec.com.

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