

Veritas NetBackup™ 6.5

NetBackup Enterprise Server- Next Generation Data Protection

Overview

As an established market leader in enterprise backup and recovery, Veritas NetBackup provides unparalleled data protection for enterprise backup and recovery environments. Minimize cost and complexity by implementing a unified data protection solution that provides desktop, remote office, and data center protection across the entire enterprise. NetBackup delivers centralized and simplified real-time management to help organizations manage all aspects of backup and recovery including disk- and tape-based data protection (see Figure 1). It unlocks the power of disk to help make backup and recovery faster, more reliable, and more secure than ever. Service Level Agreement (SLA) commitments can be met by using storage lifecycle policies to create storage tiers and automatically move backup data through its lifecycle. Also achieve advanced and automated disaster recovery with integrated Bare Metal Restore™, enabling full system recovery on any platform within 15 minutes and granular recovery of critical applications. To help ensure data is secure before it is taken offsite for long-term storage, NetBackup offers a wide variety of authorization and access controls as well as encryption options.

With no hardware agenda, NetBackup is the enterprise data protection software layer upon which to standardize. It offers the broadest range of options to optimize backup and recovery and support for all major operating platforms, including HP-UX®, HP® Tru64, IBM® AIX®, Linux®, Microsoft® Windows®, Novell® NetWare®, SGI IRIX,

and Sun™ Solaris™. For online and granular recovery of mission-critical databases and applications, NetBackup offers a comprehensive list of agents for IBM, Microsoft, Oracle®, SAP®, and Sybase®.

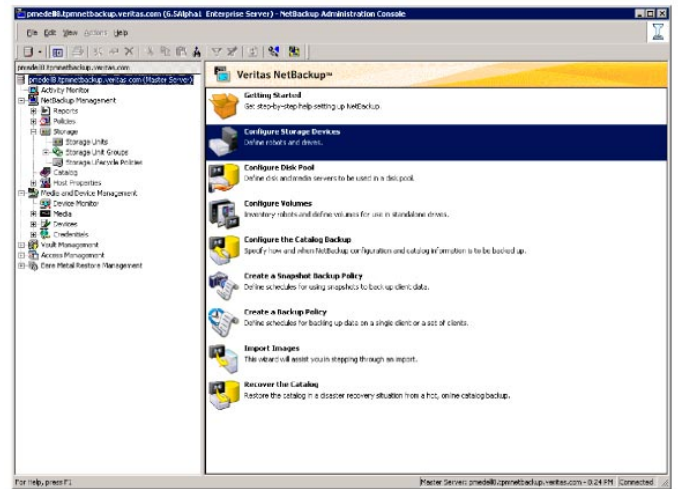


Figure 1. The NetBackup Administration Console provides a centralized location to simplify backup administration and recovery

Product highlights

- **End-to-end data protection** — Data protection for all environments, from desktop to data center
- **Centralized management** — Increase efficiencies by managing all data protection technologies and multiple NetBackup servers from one location
- **Comprehensive disk-based data protection** — NetBackup delivers the ultimate in flexibility and choice by allowing disk to be used for data protection in any architecture and across storage platforms

- **Flexible data deduplication** — NetBackup enables customers to easily deploy and manage deduplication wherever they need it – from remote offices to virtual servers to data centers
- **Unique integration with storage appliances** — Symantec’s OpenStorage API for NetBackup allows customers to better utilize advanced, disk-based storage solutions from qualified partners (e.g., EMC®, Data Domain®, Quantum®, and others). NetBackup also supports a wide number of virtual tape libraries
- **Award winning virtual machine protection** — Increase the speed of backups and recovery for VMware and Hyper-V environments with NetBackup. Leverage NetBackup PureDisk deduplication features to minimize the bandwidth and storage required to protect virtual servers
- **Fast, granular recovery of critical applications** — Help to ensure granular recovery of critical applications that include SAP, Microsoft Exchange, SharePoint®, Hyper-V™, and VMware as well as major databases
- **Virtually unlimited scalability** — Benefit from a flexible, three-tiered architecture that scales with the needs of today’s growing data center
- **Unparalleled performance** — Use synthetic backups to consume less network bandwidth and decrease the impact on the application host, since files are backed up only once. Multiplexing up to 32 different data streams to a single tape drive helps to achieve the maximum rated throughput of your storage hardware
- **Automated disaster recovery** — Fully automated system recovery with Bare Metal Restore to help ensure

servers are up and online quickly in the event of a disaster. For offsite tape management, the NetBackup Vault Option creates and manages tape duplicates for offsite vaulting

- **Data security** — Help ensure the access level and identity of those who access your data and that any tapes taken offsite are encrypted

Real-time centralized management of global data protection operations

Effective data management and analysis tools are required to address the proliferation of data in today’s computing environments. Monitoring and managing this growth is becoming more complex and should be an integral part of any backup application. NetBackup Operations Manager (NOM) is the advanced, easy-to-use Web-based graphical user interface (GUI) for NetBackup that provides administrators with real-time operational monitoring, management, trouble-shooting, and alerting across multiple NetBackup domains (see Figure 2). Key highlights include:

- Policy-based alerts aid administrators with the proactive updating of critical events and allow for a health check of NetBackup server status 24 hours a day, 7 days a week
- SNMP is integrated with event management frameworks such as HP OpenView® and Microsoft Operations Manager
- Point-and-click operational reports support day-to-day operations

- Comprehensive data management and reporting solution when used in conjunction with Veritas Backup Reporter

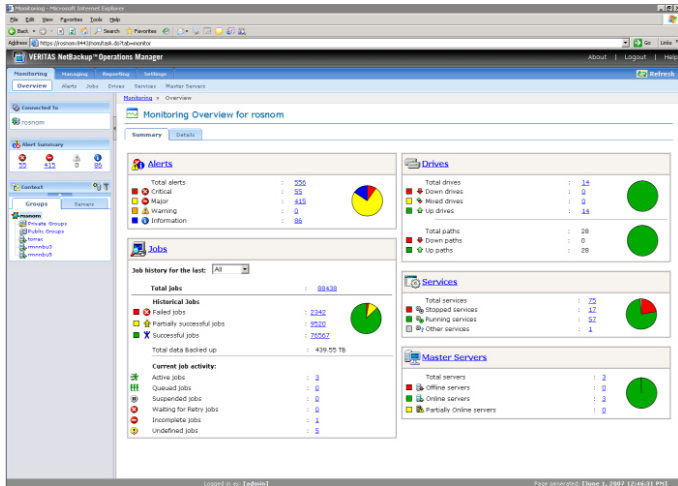


Figure 2. The NetBackup Operations Manager's centralized Web-based graphical user interface.

Changing the data protection landscape with disk

Although tape continues to be part of backup and recovery operations, disk has become the technology of choice to achieve better recovery point objectives (RPOs) and recovery time objectives (RTOs) or as a means to optimize replication for fast disaster recovery. NetBackup enhances disk-based data protection with features that make backup and recovery faster, more reliable, and easier to manage. NetBackup disk features include source and target-based deduplication, unique support for deduplication appliances through the Symantec OpenStorage API, synthetic backups, and support for both array and host-based snapshots (e.g., Veritas Storage Foundation), and more. Because enterprise environments require a variety of disk-based backup methods,

NetBackup can centralize administration across multiple disk platforms—whether direct attached storage (DAS), network attached storage (NAS), storage area network (SAN), or storage appliances.

NetBackup enables customers to easily deploy and manage deduplication wherever they need it – from remote offices to virtual servers to data centers. Customer can choose NetBackup PureDisk, which offers both client and target-based deduplication using commodity storage hardware, or they can leverage third party deduplication appliances with the unique value of Symantec OpenStorage. The OpenStorage initiative tightens the link between backup software and storage which allows customers to increase the efficiency and performance of their existing assets.

The NetBackup Enterprise Client bundles together a wide and flexible variety of advanced disk snapshot technologies for faster backups, faster restores, or lower impact backups. This enables more frequent backups and, in many cases, significantly enhances the types of restores that are possible for platforms like VMware and Microsoft Hyper-V; applications like SAP, Microsoft Exchange® and SharePoint; and databases like Oracle, IBM DB2 and more. A simple, easy-to-use client interface and a snapshot wizard help you configure snapshots.

With storage lifecycle policies, NetBackup introduces a new paradigm for data protection management by allowing protection service levels to be defined so that

backup data can be classified based on business value. This type of policy establishes a template that allows backup data to be treated uniquely with respect to how it moves through a tiered backup infrastructure. With storage lifecycle policies, you can assign tiers of backup service to backup data to help meet backup windows and recovery objectives. Create service levels—such as gold, silver, and bronze—to help ensure data is kept on the right media for the right amount of time before expiration and deletion(see Figure 3).

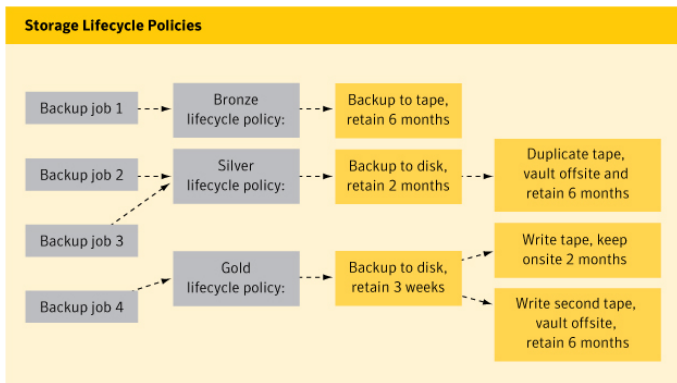


Figure 3. Storage Lifecycle policies enable definition of automated backup service levels which you can apply to applications according to business value.

Comprehensive virtual server backup & recovery

NetBackup offers a comprehensive approach to protecting virtual machines providing customers with the ability to meet both short and long-term recovery needs. Key advanced features include off-host (server-less) backup which minimizes application impact and the ability to use both client and target-based deduplication to reduce storage consumption and improve backup performance.

- File and image-based recovery from one backup image for both VMware and Microsoft Hyper-V maximizes recovery options with no impact to storage consumption
- Simplify administration with auto-discovery of virtual machine guests and automated reporting of unprotected guests
- Eliminate the performance impact from backups with both snapshot and off-host backup capabilities
- Manage the replication of virtual machines backup images to alternate locations with NetBackup

Advanced and automated disaster recovery

Uptime is money, and when mission-critical systems are offline, every second counts. Precious time is wasted installing operating systems and configuring hardware, or chasing down the people skilled enough to perform these complicated tasks. Bare Metal Restore is fully integrated with NetBackup and automates and streamlines the server recovery process on any platform, including the ability to restore to dissimilar hardware. This makes it unnecessary to manually reinstall operating systems or configure hardware. With simple commands, complete server restores can be accomplished in a fraction of the time without extensive training or tedious administration. To help enable fully automated disaster recovery, the NetBackup Vault Option simplifies tape rotation and the creation and management of tape duplicates for offsite vaulting. Vault manages the ejection of tape duplicates and the monitoring of retention periods for offsite media. This facilitates the management of duplicate media

created either concurrently with the primary backup or at a scheduled time, such as during nonproduction hours.

Data security assurance

Data security is paramount in any organization. A security breach in a company's data storage can result in business interruption, lost valuable assets, and reduced consumer confidence. Backup administrators are tasked with protecting data from a variety of different areas, and NetBackup provides some flexible means to secure data, including the ability to validate the identity of administrators accessing information and authorization control to identify who has access to what. For companies that send tapes offsite, which may include company or customer confidential information, NetBackup offers the ability to encrypt at the client and an option to encrypt data on the NetBackup media server. Highlights include:

- The highest security, as data is encrypted at the source/client. Thus, data is protected while in transit and in media
- Protection for smaller, yet dedicated clients and/or databases
- Uses both disk and tape as a target
- Supports a variety of encryption algorithms, including 128-bit and 256-bit and legacy 40-bit and 56-bit encryption methods
- Media Server Encryption Option provides the highest flexibility and leverages the NetBackup media server, which is more I/O bound than CPU bound

- Avoids client performance impact
- Provides parallelized and selectable encryption and compression and “set it and forget it” key management
- Supports 128-bit and 256-bit encryption methods

Flexible deployment offerings for environments of all sizes and levels of sophistication

Veritas NetBackup is available in three editions to support organizations ranging from SMBs to large enterprises (see table).

- **Veritas NetBackup Enterprise Server** — The most comprehensive solution designed for the data center. Supports multiple NetBackup media servers, including support of all advanced NetBackup Agents and Options such as snapshot, database and application agents, and advanced disk backup features.
- **Veritas NetBackup Server** — Designed for heterogeneous workgroups or remote offices. Includes support for most NetBackup options¹
- **Veritas NetBackup Starter Pack** — Designed for small workgroups or remote offices. Includes 5-, 20-, and 40-client versions and database/application agents in 20- and 40-client versions.

1. Veritas NetBackup Server does not support NetBackup Enterprise Client or features enabled by the Enterprise Client such as array-based snapshots

Veritas NetBackup editions comparison

| Edition | Market | Architecture | Number of Clients | Available Agents and Options | Bundled |
|-------------------------------------|---------------------------------|--|-------------------|--|---|
| Veritas NetBackup Enterprise Server | Enterprise and large enterprise | 3-tier (client, media server, master server) | Unlimited | All | No |
| Veritas NetBackup Server | SMB to enterprise | 2-tier (client, master server) | Unlimited | All except for Shared Storage Option and Snapshot Client | No |
| Veritas NetBackup Starter Pack | SMB | 2-tier (client, master server) | 5, 20, or 40 | All except for Shared Storage Option and Snapshot Client | Yes (includes server, clients, tape drive, and database agent(s)) |

Additional NetBackup features and benefits

Performance

- **Synthetic backups** — Enable quick client restore from a single backup image. Synthetic backups consume less network bandwidth and decrease impact on the application host
- **Advanced disk staging** — Facilitates faster backups and restores since there is no tape device latency, and nonmultiplexed backup images can be used for faster recovery
- **Checkpoint/restart** — Allows a failed backup or recovery job to be resumed from the last checkpoint. If either a backup or a recovery job fails, the issue causing the failure can be corrected, or the job can be resumed from the last checkpoint rather than started at the beginning, saving valuable time. Backup and recovery jobs can also be suspended and resumed, as necessary
- **Multiplexed backup** — Writes multiple data streams from one or more clients/servers to a single tape drive for optimum performance

- **Inline copy** — Enables the creation of multiple concurrent backup images, each with unique retention attributes, run either simultaneously with the primary backup or after completion of the primary backup. For disk-to-disk and/or disk-to-tape backups
- **Online NetBackup catalog backup** — Provides full or incremental NetBackup catalog backups while backup and recovery jobs are running. Significantly improves data RPOs and RTOs

Management and reporting

- **Tape volume, drive, and library viewing** — Report on tape utilization, drive configuration, tape logs, tape contents, and more
- **Operational report for disk** — Report on images on disk, disk logs, and disk storage unit status
- **Error message identification, categorization, and troubleshooting** — Easily diagnose problems without having to parse transaction logs. Error explanations and recommended actions have been integrated into NetBackup interfaces to further simplify troubleshooting

Media management

- **Automatic robotic/tape drive configuration** — Provides the ability to specify policies for the automatic generation of drive names and automatically configure swapped tape drives. Helps greatly reduce the time required to configure tape devices
- **Media sharing** — Allows multiple NetBackup media servers to actively share a given tape media for write purposes. Media sharing reduces tape media-related expenses by enabling increased media utilization which

in turn reduces amounts of partially full media and total number of tape media required to store a given amount of backup data

- **Broad tape device** — Supports all leading tape device providers, including Dell, Exabyte, HP, IBM, Overland Data, Qualstar, Quantum, Sony, Spectra Logic, and Sun StorageTek. Enables enterprises to select best-of-breed technologies

Heterogeneous support

- **Broad platform coverage** — Supports all major UNIX platforms, Microsoft Windows, Linux, Novell NetWare, and others, allowing enterprises to leverage their current infrastructure or choose best-of-breed technologies to handle their data protection requirements

Agents and Options for databases, applications, disk, tape, and disaster recovery

NetBackup Agents

NetBackup Agents optimize the performance of critical databases and applications²

- Lotus Notes® and Lotus Domino® Server
- IBM DB2®
- Informix®
- Microsoft Active Directory®
- Microsoft Exchange Server
- Microsoft SharePoint® Portal Server and Microsoft Office SharePoint Server
- Microsoft SQL Server

2. For more details on all NetBackup 6.5 Options, refer to the NetBackup 6.5 Options data sheet

- Oracle
- SAP
- Sybase
- Symantec Enterprise Vault™

NetBackup Options

NetBackup Options allow you to enhance and extend your deployment of NetBackup with features like virtual tape library support, deduplication, off-site tape media management, and more.³

- Standard Disk Option (new)
- Enterprise Disk Option (new)
- PureDisk™ Deduplication Option (new)
- Shared Storage Option
- NDMP Option
- Media Server Encryption Option
- Desktop and Laptop Option
- Vault Option
- Bare Metal Restore Option⁴
- Client Encryption Option⁴

3. For more details on all NetBackup Agents, refer to the NetBackup 6.5 Agents data sheet

4. The NetBackup Bare Metal Restore and Client Encryption Option are now included with all NetBackup client components

Data Sheet: Data Protection Veritas NetBackup™ 6.5

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<http://www.netbackup.com>

or

<http://enterprise.symantec.com>

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About Symantec

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