

NetBackup PureDisk™ 6.6 Data Sheet

Next Generation Data Deduplication

Overview

Across the globe, enterprise information technology (IT) groups have begun a transition to disk-based data protection. As companies adopt disk and discover its benefits, they soon realize that they cannot keep all of their backup data on disk. Despite declines in the cost of disk storage, they still lack the available capacity to recover most data from disk locally in the data center. Data deduplication is a disk-based technology that enables companies to eliminate duplicate backup data and significantly decrease the storage, and in some cases bandwidth consumption. However, successful adoption and use of deduplication requires consideration of more than just the storage benefits.

The Symantec solution

NetBackup PureDisk offers customers a software-based data deduplication solution that integrates with NetBackup and provides customers with the critical features required to protect all their data – from remote office to virtual environment to data center. It reduces the size of backups with a deduplication engine that can be deployed for storage reduction, using integration with NetBackup, or for bandwidth reduction using PureDisk clients. An open architecture allows customers to easily deploy and scale NetBackup PureDisk using standard storage and servers.

Key features and benefits

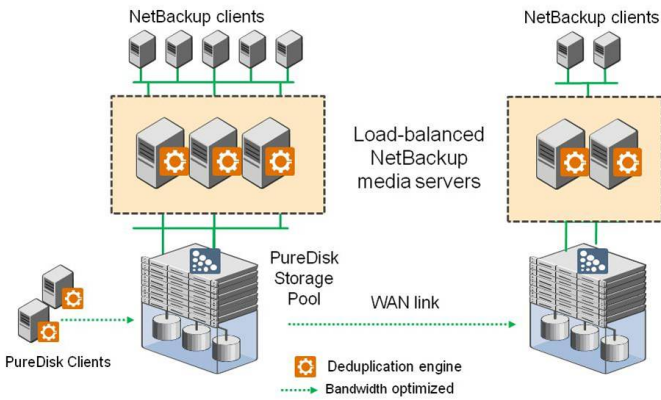
- Integration with NetBackup server for scalable, load-balanced disk-backup
- 10-50x reduction in backup storage (1)

- Efficient disaster recover (DR) replication and expiration of backup copies with NetBackup policies
 - Up to 99% reduction in bandwidth consumption with client-side deduplication (1)
 - Modular storage architecture scales from 250 GB to 96 TB usable storage
 - Integrated high availability with Veritas Cluster Server
-

Integration with NetBackup makes disk-based recovery more cost effective

NetBackup PureDisk offers a data deduplication engine that integrates into the NetBackup server. It supports in-line deduplication of backup streams coming from clients as well as post-process deduplication of staged images. It provides customers with a means to retain backup data on disk for longer periods of time and to recover it more quickly. Through integration with NetBackup, PureDisk deduplication throughput can scale with the addition of media servers and it can leverage features such as storage lifecycle policies, media-server load-balancing, shared disk pools, and media-server failover. This unique combination of features can improve performance and simplify administration.

- Supports LAN and SAN-based backups
- Supports in-line and post-process deduplication with NetBackup storage lifecycle policies
- Scale deduplication speed with additional NetBackup media servers



PureDisk Integration with NetBackup (with replication)

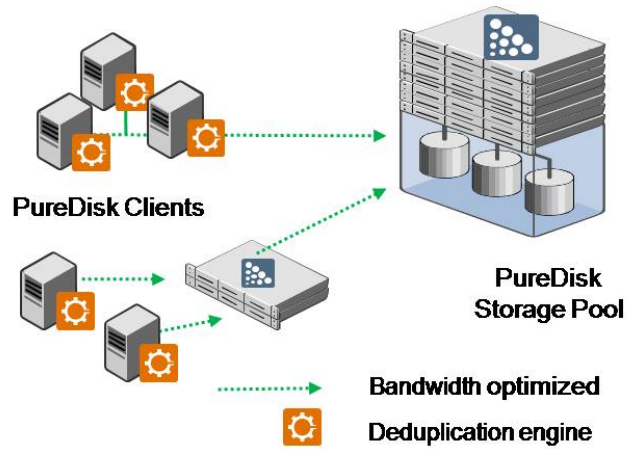
Bandwidth efficient multi-site disaster recovery integrated with NetBackup

NetBackup PureDisk integration with NetBackup also enables customers to reduce their reliance on tape for disaster recovery with secure replication of backup data. Because NetBackup PureDisk dramatically reduces the size of backups and only moves unique segments of data, it provides a bandwidth-efficient means to transfer large amounts of data to disaster recovery sites. More importantly, NetBackup manages all copies of backup data based on defined policies which expedites restores from these DR copies and simplifies expiration of old data both from the data center and the disaster recovery site.

Bandwidth optimized protection of remote offices and virtual environments

Traditional network-based methods are increasingly insufficient for protecting both remote office and virtual servers. NetBackup PureDisk clients can perform source data deduplication at the client which enables companies to overcome network limitations and centralize backup data into the data center.

- Eliminate backup applications and storage at remote offices
- Efficient backup of virtual guests
- Manage and recover remote office data with a web-based interface.



PureDisk for Remote Offices

Manage backup storage growth with an open and scalable storage system

NetBackup PureDisk provides an open, reliable, and scalable disk solution to store backup data. Customers can use DAS or SAN storage as a target for deduplicated data and a wide range of enterprise servers or virtual machines to host NetBackup PureDisk software. NetBackup PureDisk storage capacity and performance scales with the addition of storage nodes and it performs deduplication across all nodes in a cluster. The market-leading Veritas™ Cluster Server from Symantec and Veritas™ Storage Foundation from Symantec (Volume Manager and File System) are integrated in the PureDisk storage system to provide automatic node failover, redundant storage paths, and ease of storage management.

NetBackup PureDisk deduplicated data can be replicated to a secondary storage pool or backed up efficiently with NetBackup to guarantee data recoverability.

- Easily increase capacity and performance with additional server nodes while maintaining deduplication benefits
- Integrated Storage Foundation technologies for high availability, server-failover and storage management
- Deploy NetBackup PureDisk into VMware™

Examples of PureDisk Storage Pool Capacity Configurations			
Storage Nodes per Storage Pool	12	6	1
Max Usable Storage/node (TBs)	8	8	8
Total Usable Capacity (TBs)*	96	48	8
Est. Retention Capacity @ 10:1 (PBs)**	960 TBs	640 TBs	80 TBs
Est. Retention Capacity @ 50:1 (PBs)**	4.8 PBs	2.4 PBs	400 TBs

* All capacity values calculated with Base 10 arithmetic (i.e., 1 TB = 1000 GB). RAID 5 requirements not calculated here. Usable disk capacity refers to available disk space after RAID.
 ** Based on a sample of enterprise data (file systems, mixed OSs). Actual storage reductions may vary based on data types and full/incremental/differential ratios.

What's new in NetBackup PureDisk 6.6

Improved Usability: New NetBackup PureDisk storage pool installer and new web-based user interface make configuration and navigation easy.

Optimized backup for physical and virtual environments: Optimized deduplication for VMware off-host backups of vmdk (image) files.

Scalability: NetBackup PureDisk 6.6 delivers 16TB per storage node, protecting over a petabyte of data.

Comprehensive protection of critical applications:

NetBackup PureDisk 6.6 allows customers to manage applications better by eliminating redundant data and by freeing up precious bandwidth resources.

- **NEW:** Exchange Granular Recovery; restore entire mailboxes, public folders, and contents without restoring the entire database. Mailbox level browse and restore for Microsoft® Exchange 2003 and Microsoft® Exchange Server 07 backups.
- **NEW:** Oracle® RMAN Agent; RMAN based full or partial, online or offline backups of the Oracle database.

Other features & benefits

New NetBackup PureDisk virtual synthetics: Enables customers to quickly create a virtual full backup image on the storage device, providing improved utilization of existing infrastructure by eliminating backup server I/O.

Increased performance: Up to 3.5TB/Hr of aggregate throughput, increasing the speed and success of backups.

NEW: Command line API: Better integration with third party solutions, provides a platform to connect easily with third party and supports GUI-less restores.

NEW: Multi-stream replication: Allows customers to speed up data transfer from a primary site to a secondary (DR) facility.

High availability options for NetBackup PureDisk storage pool

- Hardware or software-based RAID 1 or 5 with Storage Foundation
- Redundant storage paths with Storage Foundation
- Automate server fail-over with Cluster Server

System and platform support

NetBackup PureDisk is a software appliance that can be installed on a broad range of server/storage combinations. In addition to a server with PureDisk software, deduplication of backup data requires either a NetBackup PureDisk client or a NetBackup client and a NetBackup media server.

NetBackup media server deduplication

This feature requires a NetBackup 6.5 media server with the PureDisk deduplication plug-in running on one of the following operating systems - Microsoft® Windows, Red Hat® Enterprise Linux®, SUSE Linux®, or Solaris™.

- Any NetBackup client
- Any NetBackup application or database agent

NetBackup PureDisk client platform support

- Microsoft Windows - Windows Server 2000, Windows Server 2003, Windows Storage Server 2003
- Linux - Red Hat Enterprise Server and SUSE Linux Enterprise Server
- UNIX - IBM AIX (on Power 3, 4, 5), Solaris™ Operating System for SPARC, HP-UX on (PA-RISC and Itanium)
- Mac OS®

NetBackup PureDisk application agent support

- Microsoft Exchange Server 2007
- Microsoft SQL 2005 Server
- Microsoft Exchange 2003 Server
- Microsoft SQL 2000 Server

* Always check the NetBackup PureDisk compatibility list on the Symantec support site for the latest information on supported versions and patch levels.

Advanced backup and reporting across multiple backup applications

- Available with Veritas Backup Reporter from Symantec

Visit Our Web Site

<http://enterprise.symantec.com>

or

<http://www.symantec.com/puredisk>

Contact Us Today

Call toll-free 1 (800) 745 6054

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

For specific country offices and contact numbers, please visit our website.

About Symantec

Symantec is a global leader in providing security, storage, and systems management solutions to help businesses and consumers secure and manage their information. Headquartered in Mountain View, Calif., Symantec has operations in more than 40 countries. More information is available at www.symantec.com.

Symantec World Headquarters

350 Ellis Street

Mountain View, CA 94043 USA

1 (800) 721 3934

www.symantec.com

Confidence in a connected world.

