Symantec NetBackup™ 5020

A turnkey, end-to-end, global deduplication solution for the enterprise.

Data Sheet: Data Protection

Overview

Symantec NetBackup™ 5020 offers your organization a content aware, end-to-end data deduplication solution that integrates with NetBackup. It provides the critical features required to protect all your data. It reduces the size of backups by up to 50 times with a deduplication engine that can be deployed for storage and bandwidth reduction and connected to a NetBackup domain, in a matter of minutes. An open and flexible architecture allows you to easily scale the size of the NetBackup deduplication pool to meet the changing needs of your environment.

Key benefits

• **Operational simplicity**—Set up backups in a matter of minutes.
• **Flexible and scalable architecture**—Maximum capacity of 192 TB usable deduplicate storage. Protect petabytes of data in one deployment.
• **End-to-end global deduplication**—Leverage deduplication across physical hosts, virtual machines (VM), Network-Attached Storage (NAS) devices, and application hosts.
• **NetBackup integration**—Integration with NetBackup and NetBackup 5200 series appliances for scalable, load-balanced, disk-backup for the data center.
• **Space reduction**—Up to 10-50 times in storage and 99 percent in bandwidth consumption.

**Integrated source and target deduplication**

The NetBackup 5020 offers both source and target side deduplication in a single, end-to-end integrated solution. Source deduplication is built into the NetBackup 7 clients and eliminates duplicate backup data before transmission, allowing for better utilization of bandwidth and storage. The NetBackup 5020 can also be used as a deduplicated storage target for NetBackup backups, if source deduplication is not preferred on specific clients. Once set up, the appliance simply appears as a disk pool within NetBackup and can be controlled via NetBackup policies.

**Storage and bandwidth efficient backups**

With built-in global deduplication technology, the NetBackup 5020 globally eliminates the backup of duplicate data offering storage savings of up to 50 times versus traditional backups. This allows for cost-efficient, long-term retention of data on disk, resulting in faster and more reliable backup and recovery of data. The source deduplication option eliminates duplicate backup data at the source, making the backups more bandwidth efficient.

**Ease of operation**

NetBackup 5020 comes pre-installed with all necessary hardware and software components, and can be set up within minutes for production use. Day-to-day monitoring of backup operations also requires minimal administrative intervention, allowing for lower setup and operational costs.

**Scalable capacity and performance**

NetBackup 5020 can scale up in increments of 32 TB to a maximum usable deduplicate capacity of 192 TB which can easily allow protection of petabytes of source data. Performance in the data center can be scaled by adding additional nodes and/or media servers.
Figure 1. NetBackup 5020 Scalability

**Built-in replication with optimized deduplication**

The backups in a NetBackup 5020 deduplication storage pool can be replicated to other compatible targets. Replication is bandwidth optimized; the source will not send data segments that are already present in a target deduplication pool, thereby minimizing the bandwidth usage between sites. Encryption may also be used for replication at no additional cost. In contrast with traditional replication solutions where source and targets are in sync using remote mirror retention, NetBackup appliances use optimized duplication where retention levels can be controlled independently at both source and target. This allows customers to delete data from a primary site after a short retention period, but maintain a copy longer at a secondary site, thereby optimizing use of their storage. NetBackup 5020 appliances can send/receive replicated data through Ethernet or Fibre Channel offering customers the ability to utilize existing infrastructure and a path for future upgrades.

**Support for Symantec Backup Appliances**

NetBackup 5020 global deduplication pool can be used by software based NetBackup and Backup Exec media servers and the equivalent appliance series-NetBackup 5200 series and the Backup Exec 3600 backup appliances. This allows customers the ability to start small with a single 5020 appliance and grow their deduplication storage pool with additional appliances. As the number of appliances grow, a single deduplication can be maintained to maximize storage efficiency.

**Multiple use cases—single solution**

The NetBackup 5020 is ideal for many cases including remote office backups, VM backups, and data center backups. The built-in, source side, deduplication allows bandwidth efficient centralized backups of remote offices while reducing dependence on tape and IT personnel at the remote offices. Alternately, NetBackup 5220 appliances may be deployed as media servers at remote offices and backups may be replicated to NetBackup 5020 global deduplication pools. In virtual environments, NetBackup 5000 series appliances offer flexible backup options including guest or image level backup for both VMware® and Microsoft® Hyper-V™ environments with the option of recovering single files or entire VMware Virtual Machine Disk Format (VMDK) or Virtual Hard Disks (VHD) images. NetBackup 5020 can be used both as a source side and target side deduplication tool for data center backups allowing for bandwidth and storage efficient backup for core data center servers.

**Compatibility**

**Target side deduplication**

Target side deduplication is supported on NetBackup 6.5 or higher media server and Backup Exec 2010 or higher media server. In addition, NetBackup 5200 series backup appliances and Backup Exec 3600 appliance are supported for use with NetBackup 5020 appliances.

**Source side deduplication**

Client side deduplication is supported for NetBackup domains with software version 7.0 or higher and clients at NetBackup 7.0 or higher.

**Fibre Channel support**

NetBackup 5020 deduplication pools have Fibre Channel support. Backups via Fibre Channel require a NetBackup 5220 appliance to act as the media server. Replications from a deduplication pool hosted in NetBackup 5220 or another 5020 based deduplication pool are also supported.
Platform and application support

All core NetBackup software agents and Backup Exec software agents and options can be utilized with NetBackup 5020 global deduplication pools. NetBackup agents optimize the performance of critical databases and applications. Symantec Backup Exec Agents and Options enhance and extend platform and feature support for Backup Exec environments.

Advanced backup and deduplication reporting

Available with NetBackup OpsCenter Analytics.

Hardware specifications

Each NetBackup 5020 appliance is a 4U device with dual Intel Xeon E5620 CPUs, 32 GB DDR2 memory, 24 x 2 TB disks, systems disks configured in RAID 1, data disks in RAID 6, LSI disk management, redundant power modules, redundant fan modules, hot-pluggable disk modules, and power entry modules. In addition to standard 2 X Gb Ethernet ports, each NetBackup 5020 appliance has one of the following sets of port options:

- 2 X 10 Gb Ethernet ports, LC Optical connection
- 4 X 1 Gb Ethernet ports, Copper connection
- 2 X 10 Gb Ethernet ports and 4 X 8 Gb Fibre Channel ports

Management

Web-based user interface and NetBackup Console.

Protocol Standards Followed

IPMI 2.0, SMBIOS 2.5, SAS 1.0a, ACPI rev 3, IP RFC0791

Safety and EMC standard compliance


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1. For more information, please refer to the NetBackup Clients and Agents Data Sheet
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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