Symantec Backup Exec™ 2010
Deduplication Option

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Deduplication Everywhere with Backup Exec 2010

Today's businesses are challenged with managing and protecting the ever-increasing amounts of data that is created on a daily and even hourly basis. In these tough economic times, customers face a serious challenge: making do, and making the most, of their current resource investments - specifically, their hardware environment. In the face of skyrocketing digital asset growth, it is all the more critical that administrators can easily tune and optimize their current storage infrastructure to meet the needs of their data growth in the coming year.

The Symantec Backup Exec 2010 platform provides solutions that help customers grow their data capacity intelligently and cost-effectively. Strategies include deduplication solutions from the remote office and branch office to the data center across physical and virtual machines, coupled with integrated archiving technology to reduce the length and size of backups. Deduplication has the power to transform information management; it is great for backup, it is great for archiving, and can even make virtualized server backup manageable. Symantec believes that deduplication should live in every part of the information architecture.

Key Business Benefits

- Significantly reduces the amount of backup data stored by 9:1 (90%) or more for File System backups
- Significantly reduces the amount of backup data stored by 6:1 (80%) or more for Application backups
- Client Deduplication provides significant bandwidth savings over traditional backups, making remote office backup practical
- Media Server Deduplication provides significant storage savings for VMWare ESX and vSphere 4.0 backups
- Integration with Deduplication Appliances through Symantec's Open Storage protocol allows Backup Exec to manage appliance deduplication and replication functions
- Improve backup performance while using Appliance Deduplication when compared to CIFS or NFS transfers.

Deduplicate Everywhere to Reduce the Cost of Storing Information

Backup Exec's Deduplication Option offers three methods for deduplicating data across the enterprise. These methods are Client Deduplication, Media Server Deduplication, and Appliance Deduplication. Backup Exec's Deduplication Option enables customers to use any of these methods to achieve deduplication across file servers, application servers, and virtualized servers in the enterprise.

- Client Deduplication – Deduplication at the Source

Backup Exec 2010's Deduplication Option can enable client deduplication. This is the act of performing deduplication at the source, and removing redundant data as close to the source as possible maximizes the benefits of deduplication. Backup Exec 2010 offers source deduplication at the client, built into the product for fast, efficient backup and recovery. Client deduplication removes redundant data at the source, which leads to lower memory and bandwidth utilization compared to a traditional backup, thereby freeing up more client resources for production services in both physical and virtual environments. Deduplicating information closer to the source will decrease network traffic and reduce the storage footprint, helping to beat backup windows and make backup strategies more successful.

Client Deduplication delivers:

- Significant reduction in backup data – up to 9:1 (90%) or higher reduction in amount of data stored for file system backups
- Significant reduction in Microsoft Exchange backup data – up to 6:1 (80%) or higher reduction in the amount of data stored for Exchange backups.
- Significantly reduced network bandwidth – up to 90% or more reduction in network bandwidth for backups

- Media Server Deduplication – Reducing the Cost of Storage

Backup Exec 2010's Deduplication Option also enables media server deduplication – deduplication that takes place on the Media Server at backup time. Backup Exec 2010's Deduplication Option enables deduplication that is integrated with the media server. Setup is as easy, creating a Deduplication Storage Folder via an integrated Backup Exec Wizard. The Backup Exec media server offers inline deduplication by processing data streams in flight; requires no extra staging disks for processing, leading to more optimal use of storage.

Media server deduplication delivers:

- Significant reduction in backup data – up to 9:1 (90%) or higher reduction in amount of data stored for file system backups
- Significant reduction in Exchange Backup data – up to 6:1 (80%) or higher reduction in the amount of data stored for Exchange backups.
- Cost reduction by utilizing commodity disk and servers

- Appliance Deduplication – Leveraging investment in Intelligent Disk Appliances

OpenStorage (OST) - An OpenStorage application program interface (API) for Backup Exec 2010 is available through Symantec's OST partner program. There is no need to emulate tape with virtual tape libraries (VTLs), because the OST API allows Backup Exec to see disk as disk - which enables users running an intelligent disk appliances with Backup Exec to get better integration. Finally, day-to-day management can be

executed from the Backup Exec interface, enabling greater ease of use and making it possible to leverage the advanced feature set of the intelligent disk appliance, such as deduplication, optimized duplication, and synthetic backups.

Deduplication in Remote Offices

In remote and branch offices, the traditional backup infrastructure and process are not sufficient. These outdated processes are typically decentralized from the data center and use tape-based data protection as the preferred medium. Backup Exec 2010's Client Deduplication method is WAN optimized, making it ideal for large and small remote sites.
Backup Exec 2010 and the Deduplication Option deliver:

- Decreased data footprint for remote and branch offices
- Centralized data protection on disk in remote and central offices
- Dramatically reduced WAN consumption by backups when compared to backups with Client Deduplication – can reduce the amount of data sent over the WAN by up to 90%

Features and Benefits

Client Deduplication	Deduplication at the source of data, allowing for significant storage savings and bandwidth reduction.
Media Server Deduplication	Deduplication in-line at the Media Server, allowing for significant storage savings.
Appliance Deduplication	Leverage investments in Deduplication Appliances, improving backup times and management of deduplication and replication functions built into intelligent Deduplication Appliances.

Licensing Backup Exec 2010 Deduplication Option

The Backup Exec Agent Deduplication Option is designed to accommodate the needs of large and small deployments – whether it's a single media server environment to a robust, multi-site environment. It is licensed simply on a ***per-Media Server*** basis. Any remote machine backing up to the Licensed Media Server can use deduplication.

Scenarios	Customer Environment	Licensing
Protecting 5 Remote Servers with deduplication to a single Backup Exec Media Server	5 Windows 2008 R2 File Servers with 1 Backup Exec Media Server.	**Qty: 5 of Backup Exec 2010 Agent for Windows Systems.** **Qty: 1 of Backup Exec 2010 Deduplication Option license.**

Integrated Data Protection

Symantec Backup Exec 2010 Deduplication Option is one of several agents and options which enable administrators to design and easily implement a comprehensive data and system protection solution for physical and virtual environment.

• **Agent for SharePoint Server**	• **Agent for Exchange Server**	• **Agent for Lotus Domino**
• **Agent for SQL Server**	• **Agent for Active Directory**	• **Agent for Oracle**

FOR MORE INFORMATION

Backup Exec on the Symantec Web Site : http://www.symantec.com/backupexec/index.jsp

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