Big data offers valuable opportunities and insights for organizations of all sizes. At the same time, exponential growth in data volume and type can potentially escalate the cost and complexity of data backup and restore. Data centers and remote sites face challenging factors such as increasing operating costs, growing pressure to comply with regulatory compliance, and rising complexity in maintaining a consistent approach to data protection. These factors can be particularly demanding for organizations considering opportunities to virtualize their production environments or expand virtualization to remote locations.

Many organizations that adopt virtualization deploy two approaches to data protection: the first approach is for the physical environment and the second approach for their virtual environment. This dual-protection strategy can increase cost and complexity. Symantec Backup Exec 2012 backup software—now with V-Ray technology—helps organizations operating Dell™ server–based data centers to efficiently address these challenges using a comprehensive set of data protection features for both physical and virtual environments.

Understanding complex backup requirements
Increasing complexity of the data environment presents different data protection challenges depending on the size and requirements of an organization. Remote or branch office (ROBO) locations may have enterprise purchasing power, but they often operate more like small businesses than enterprises. Remote sites may rely on part-time IT staff sourced from other internal business functions. Leveraging central IT teams to support remote IT staff can lead to unbudgeted or excessive travel costs and unacceptable response times. Remote offices need a simple purchase experience followed by easy setup and management.

Midsize organizations with constrained or limited budgets may have only IT generalists on staff. These organizations are focused on increased productivity, including ways to reduce time spent on backups. They require easy day-to-day management, quick response to remediate failures, and the ability to detect and solve problems before they occur.

Distributed enterprises with complex infrastructure and multiple site locations have their own requirements, including managing backup and recovery by site using industry-standard, yet customizable, approaches. Many also are looking to replicate data from their large, remote sites back into the main IT data center for centralized monitoring, management, and reporting.

Streamlining data protection
Symantec Backup Exec 2012 delivers a fresh, updated approach to data protection, providing advanced features that enable organizations to perform the following tasks:
• Manage information rather than devices and media
• Streamline setup, daily use, and support
• Connect backup and business continuity functions by converting backups to bootable virtual machine—Microsoft® Hyper-V™ hypervisor and VMware® virtualization software—formats

To help simplify backup and recovery, Backup Exec 2012 is designed to discover the data automatically in a given environment and present administrators with relevant information and applicable backup options based on that data (see Figures 1 and 2). Armed with this information, administrators can simply apply a backup strategy. Administrators can also use the interface to select multiple systems, and then group them and deploy a backup strategy for all the systems at once.

Backup Exec 2012 also provides a comprehensive portfolio of built-in recovery options to help take the complexity out of data recovery processes. Data can be automatically restored on a scheduled basis or instantaneously. Administrators can recover data from practically any type of media—DVD, hard drive, USB, and others—to a variety of backup and restore systems.

By leveraging the snapshot capabilities of Dell EqualLogic™ PS Series storage area network arrays, the Backup Exec 2012 Enterprise Server Option provides comprehensive, quick recovery and off-host backup support for Microsoft Exchange Server and Microsoft SQL Server® environments. This approach helps eliminate backup windows, reduce the performance load on application servers, and quickly bring applications back online after resolving data corruption problems.

Figure 1. Symantec Backup Exec 2012: Comprehensive management in a single view

Providing enhanced, easy-to-use virtual protection
Organizations using Microsoft Hyper-V or VMware software to deploy virtualization in their environments can benefit from Symantec Backup Exec 2012, now with V-Ray technology. Administrators can unite backup protection for physical and virtual environments and manage both environments from the Backup Exec 2012 console. The Simplified Disaster Recovery feature enables organizations to automatically build data into virtual instances that are ready to use if primary hardware fails (for more information, see the sidebar, “Simplified Disaster Recovery: Get back to work fast”). Additionally, deduplication enhancements help improve data reduction in both Microsoft Hyper-V and VMware virtualization environments.

When deploying Backup Exec 2012, organizations can reduce management costs because managing comprehensive data, application, and system protection for physical and virtual environments can be accomplished from the unified console. Storage capacity can be managed efficiently
using enhanced deduplication of physical and virtual backups and granular file and application recovery from a single online, image-level backup.

Backup Exec 2012 also helps simplify virtual machine protection because there is no need for multiple agents. Organizations can use an agentless approach to optimize for virtual performance or use an agent-assisted approach to optimize for advanced recoverability. Administrators can back up unlimited Microsoft Windows® and Linux® OS–based guest virtual machines to disk or tape with a single agent licensed for each Hyper-V or VMware vSphere™ virtualization platform host.

Speeding off-site replication for business continuity

Off-site replication enhancements help make disaster recovery simple to implement for organizations of any size. Organizations can maintain business continuity by moving data from a local site to a cloud computing platform or to another site across the street, city, county, or country to protect against site failure, fire, natural disaster, human error, or other catastrophic events. Symantec Backup Exec 2012 helps greatly increase replication performance by quickly and efficiently replicating backups from the primary environment to a disaster recovery location.

Deduplication built into Backup Exec 2012 enables optimized backup and replication for organizations spread out across multiple sites. Part-time ROBO IT staff, which may be borrowed from other positions, can efficiently back up data from remote sites to a headquarters location for centralized management to help ensure regulatory and policy compliance. Deduplication compresses the data within the remote site, so only a minimal amount of data needs to be transmitted across the network. As data changes occur, only the changes move across the network, helping to reduce ongoing expenses for network bandwidth.

Managing data, not devices

Symantec Backup Exec 2012 enables administrators to transition from managing individual backup tasks to managing backup strategies. By approaching backup management from a systems or asset point of view, rather than at the level of individual data, administrators can help reduce IT operating costs, maintain a consistent approach to data protection, and efficiently meet regulatory and business policy requirements.

Rapid growth in data volumes presents ongoing data protection opportunities for today’s organizations. Backup Exec 2012 enables organizations to address unabated data growth by helping to reduce the cost and complexity of backup and restore for physical and virtual environments. By speeding recovery and reducing downtime, Backup Exec 2012 on Dell platforms helps increase overall productivity, agility, and competitiveness for organizations of any size.

Authors

Charles Butler is a director of product management in the information management group at Symantec.

Chandra Mukhyala is a product marketing manager in the Storage Business unit at Dell.

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