Symantec Backup Exec™ 12.5
Agent for VMware™ Virtual Infrastructure

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VMware Virtual Infrastructure Protection

VMware's Virtual Infrastructure 3 (VI 3) and now vSphere 4.0 have become widely adopted in organizations looking to virtualize their IT environments. Companies are becoming dependent on efficient backup and quick recovery of their virtual systems and the host systems they run on to maintain business productivity and cost savings that server virtualization delivers. This includes not only the guest virtual machines, but also the applications that have also been installed on those guest virtual machines such as Microsoft Exchange®, SQL, and SharePoint™ Server. A lost ESX server could impact productivity up to several hours, or even days, for multiple departments while the IT administrator struggles to recover the virtual environment and the individual guest virtual machines.

Administrators looking to protect their VMware environment clearly understand the frustration and time involved with backup technology that was not built specifically for protecting virtual environments. Administrators and companies who have not had to experience recovering a guest virtual machine using basic backup and recovery tools will face several limitations in quickly recovering their data with these older backup tools designed only for physical systems including;

- Having to install a backup agent inside of each guest virtual machine or on the ESX server directly
- Recovery of a single file typically requires a long restore of the entire guest virtual machine
- Separate backups for system level vs. individual file level recovery
- Taking guest virtual machines off-line during backup in order to protect them completely
- Concerns about ensuring applications running inside of the guest virtual machines can be recovered
- Having to use separate backup products for physical vs. virtual machines

Improving Recovery In Virtual Server Environments

VMware's Consolidated Backup (VCB) technology helps address some of these concerns for current backup products by creating a framework to take snapshots of guest virtual machines for off-host backups from existing backup products. However, VCB itself introduces a new set of challenges for IT Administrators including;

- Creating cumbersome and complicated VCB "scripts" to integrate with existing backup products
- Installation of proprietary VCB "integration modules" that require additional testing and setup
- Separate backups for system level vs. individual file level recovery to recover a single file from a .vmdk

Backup Exec 12.5 Agent for VMware Virtual Infrastructure (AVVI) takes the advantages of VCB while removing many of the challenges of implementing a VCB-based backup solution including;

- Integration with key VMware API's to ensure VCB "scripting" or "integration modules" are not required
- Eliminates separate VCB backups for system level vs. individual file level recovery to recover a single file
- Protecting **VSS-aware applications such as Exchange, SQL, or SharePoint as part of the entire guest virtual machine

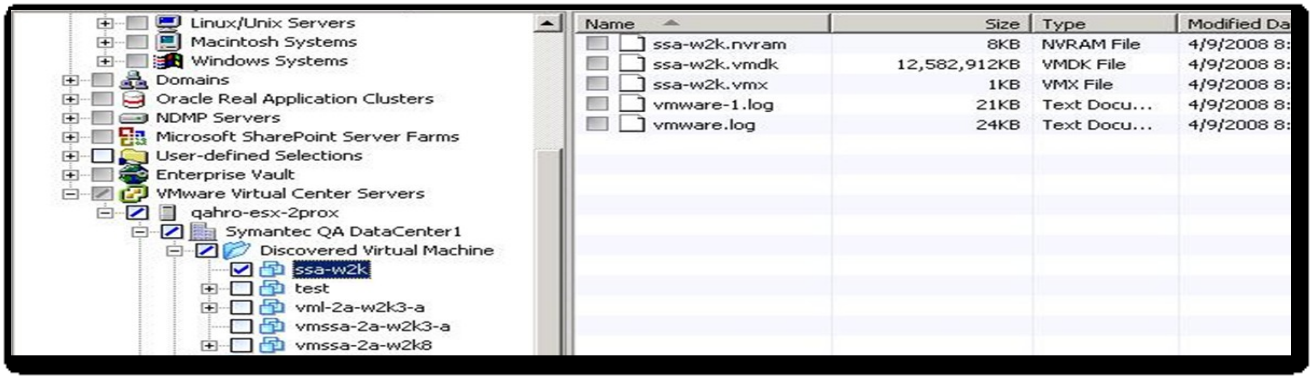
Key Business Benefits

- Protects both online and offline Windows and Linux® Guest virtual machines with off-host snapshots to minimize backup windows
- Integrates with vCenter for automated discovery of VMware 3.x and 4.0 ESX Hosts
- Single Pass Backups for complete virtual machine recovery or individual file/folder level recovery
- Online protection of entire Guest systems running VSS-aware applications such as Exchange, SQL, and SharePoint
- Integration with Backup Exec to allow protection of physical and virtual systems

Platform Support

- vSphere 4.0 and 4i
- VMware ESX 3.02-3.5
- VMware ESXi 3.5
- vCenter 2.x and 4.0
- VMware Consolidated Backup 1.1- 1.5
- VMware Converter 3.03
- Supported Backups- SAN, iSCSI, NBD/NBD-SSL/NFS

The easy to use Backup Exec interface can communicate with VMware's vCenter servers to walk Administrators through the process of identifying the necessary ESX hosts, Groups, and guest virtual machines for fast and simple backup and recovery.



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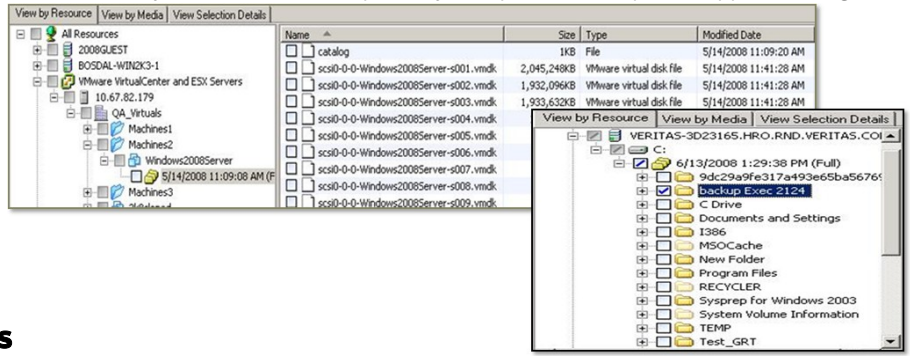
GRT enables simple recoveries of individual files and folders from within a protected guest virtual machine's .vmdk files

Backup Exec 12.5 Agent for VMware Virtual Infrastructure leverages Symantec's innovative Granular Recovery Technology (GRT). The GRT feature helps IT Administrators to save time and money by enabling them to restore individual files and folders within a guest virtual machine from a single-pass image backup of the entire guest virtual machine. There is no need to take the guest virtual machine offline or to perform a separate file-by-file backup on the guest virtual machine to be able to restore single files from within a .vmdk file or the entire virtual machine. Additionally, proper protection and granular recovery of virtualized applications, inside a guest virtual machine, such as Microsoft Exchange, SharePoint, SQL, or Active Directory can be achieved separately via specific Backup Exec application Agents in the VM.



Features and Benefits

Integrated with VMware Virtual Infrastructure 3 (VI3) and vSphere 4.0	Supports and integrates with all key VMware technologies included *VCB, vCenter, VMotion, VMware Converter, ESX/ESXi, and VMware Tools.*
Embedded Granular Restore Technology(GRT)	Included GRT technology provides the ability to restore individual files and folders inside of guest virtual machine *without* restoring the entire guest virtual machine(*Windows guest machines only)
"Agentless" Guest VM backup	Backups can be done without installing a Backup Exec Agent inside of guest virtual machines or on the ESX host server.

Licensing Backup Exec 12.5 Agent for VMware Virtual Infrastructure

The Backup Exec Agent for VMware Virtual Infrastructure is designed to accommodate the needs of large and small deployments – whether it's a single ESX host or a robust, multi-ESX, VirtualCenter managed environment. It is licensed simply on a ***per-ESX host*** basis.

Scenarios	Customer Environment	Licensing
Protecting three (3) ESX or vSphere hosts with eighteen (18) guest virtual machines total	Three (3) ESX host systems with eighteen(18) shared guest virtual machines ten (10) running Windows and eight (8)running Linux	**Qty: 3 of Backup Exec 12.5 Agent for VMware Virtual Infrastructure licenses.** **Note- No Agent for Windows Systems license or Agent for Remote Linux/Unix Servers is required for any guest virtual machine hosted on the protected and licensed ESX 3.x or 4.0 host. *However, application level or granular application level recovery requires a separate Backup Exec Application or Database Agent.* Please see the **Integrated Data Protection Section** below

Integrated Data Protection

Symantec Backup Exec 12.5 Agent for VMware Virtual Infrastructure is one of several agents and options which enable administrators to design and easily implement a comprehensive data and system protection solution for any virtual environment. For specific application recovery, proper transaction log truncation, application level/object level recovery inside of a guest virtual machine (i.e. database, mailbox, message, object, etc), additional Backup Exec Agents are required to be used for backup of those specific applications. The following optional Agents are priced separately and are available from your Backup Exec reseller.

• 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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