Symantec Backup Exec 2012 SP2 Administrator's Guide Addendum

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Administrator's Guide Addendum

This document includes the following topics:

- About the Administrator's Guide Addendum
- Revisions to the Backup Exec 2012 Administrator's Guide
- Additions to the Backup Exec 2012 Administrator's Guide

About the Administrator's Guide Addendum

The addendum contains additions and changes to the Symantec Backup Exec 2012 Administrator's Guide.

See "Revisions to the Backup Exec 2012 Administrator's Guide" on page 5.

See "Additions to the Backup Exec 2012 Administrator's Guide" on page 15.

Revisions to the Backup Exec 2012 Administrator's Guide

The following table lists the revised topics:

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide

Topic	Chapter	Revisions
Special considerations for installing Backup Exec to remote computers	Installation	The following item should be added to the table of special considerations: 32-bit and 64-bit computers If you try to push-install Backup Exec from a 32-bit computer to a 64-bit computer, you may be prompted to insert the 64-bit installation media.

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
About push-installing the Agent for Windows to remote computers	Installation	Windows Server 2012 has been added to the following item: Windows Vista/Server 2008/7/Server 2012 To push-install Backup Exec options to a computer that runs Windows Vista/Server 2008/7/Server 2012, you must enable certain items on the destination computer's Windows Firewall Exceptions list. You must enable the following items: ■ File and Printer Sharing ■ Windows Management Instrumentation (WMI) For more information refer to your Microsoft Windows documentation. To push-install Backup Exec options to Windows Vista/Server 2008/7/Server 2012 computers that do not belong to a domain, do one of the following: ■ Make sure that the Administrator account on the computer from which you push-install the agent or option is also defined on the destination computer ■ Disable User Access Control temporarily on the destination computer during the installation process For more information, refer to the Microsoft knowledge base.

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
Files and Folders options	Backups	The description for the item **Backup method for files** should include the following note for the **Using catalogs** method: The Advanced Disk-based Backup Option off-host backup feature does not support the Using catalogs method.
Changing the location of a disk storage device	Disk-based storage	Additional steps have been included in this procedure for environments in which the Agent for VMware or the Agent for Microsoft Hyper-V is installed. See "Changing the location of a disk storage device " on page 13.
About storage trending for disk storage and virtual disks	Disk-based storage	The following information has been included in the descriptions for the storage trending statuses of **History of used space is still being gathered** and **Not enough statistical information is available**: After you create disk storage, Backup Exec may take approximately one month to gather enough information to provide a storage estimate.

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
About using Backup Exec with firewalls	Configuration and settings	The example port number that was provided in the following example entry is incorrect. ndmp 100000/tcp #Network Data Management Protocol Port 100000 is not a valid NDMP port. The correct port number for NDMP is 10000. If that port number is in use by another process, you can change the NDMP port to something else, such as 9999 for example.
About configuring Backup Exec to determine if a file has been backed up	Backup strategies	This topic should include the following note: The Advanced Disk-based Backup Option off-host backup feature does not support the Using catalogs method.
Requirements for backing up Microsoft application data on virtual machines	Backup Exec Agent for VMware	The following sentence is incorrect: If you want to use Backup Exec's Granular Recovery Technology (GRT), you must purchase and install the Agent for Applications and Databases on your virtual machines. The following sentence is correct and should replace the existing sentence: If you want to use Backup Exec's Granular Recovery Technology (GRT), the Backup Exec Agent for Applications and Databases must be installed on the Backup Exec server and the Agent for Windows must be installed on the virtual machines.

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
About the Agent for Enterprise Vault	Symantec Backup Exec Agent for Enterprise Vault	The following items should be removed from the **User credentials** column of Table I-1, for the component **Enterprise Vault databases and components (vault store, indexes, partitions, vault store database, Directory, Monitoring, Fingerprint, FSA Reporting, and Audit databases)**: ■ The user account must be included in the Backup Operators group on all computers where Enterprise Vault databases reside. With Enterpise Vault partitions, the user account must be included in the Administrators group. ■ **Note:** To back up a computer that has a partition, or a partition and a database, you must be a member of the computer's Administrator's group. To back up a computer that has only an Enterprise Vault database on it, you need only to be a member of the Backup Operators group.
About off-host backup	Symantec Backup Exec Advanced Disk-based Backup Option	The following item should be included in the list of features that are not supported by the Advanced Disk-based Option off-host backup: The Using catalog file backup method

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
Changing a Backup Exec server to a managed Backup Exec server	Symantec Backup Exec Central Admin Server Option	The steps in this topic are incorrect. For the correct steps, see the topic "Push-installing a managed Backup Exec server from the central administration server" in the Central Admin Server Option chapter.
Virtual machine conversion option	Virtualization	In Table 16-6, the definition for the option **Full path of VMware Tools ISO image**contains the following incorrect sentence: If you use a network disk, Symantec recommends using a mapped drive on the local Backup Exec server. In Table 16-7, the definition for the option **Full path of Hyper-V Integration Components ISO image** contains the following incorrect sentences: Note: You cannot use a UNC path for remote shares. However, you can map a drive to a remote share. For both VMware and Hyper-V, the ISO image cannot be on a mapped drive.

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
Deduplication methods for Backup Exec Agents	Backup Exec Deduplication Option	In the table named **Deduplication methods for Backup Exec agents**, in the column labeled **Client-side deduplication (file system/VSS)**, the entry for the Agent for Enterprise Vault should be **No**. The client-side deduplication method for file system backups does not support the Agent for Enterprise Vault. Additionally, the column labeled **Client-side deduplication (file system/VSS)** should instead be labeled **Client-side deduplication (file system backups or VSS-snapshot enabled backups, whichever is supported)**.
Requirements for using the Exchange Agent	Symantec Backup Exec Agent for Microsoft Exchange Server	In the table named **Exchange Server requirements**, in the column labeled **For operations on all Exchange Servers**, the entry should include that the user account must be a member of the following groups: ■ The Exchange Organization Management group (2010/2013) ■ The Exchange Organization Administrators group (2007)

Table 1-1 Revisions to the Backup Exec 2012 Administrator's Guide *(continued)*

Topic	Chapter	Revisions
Opening a SQL port in CASO for a SQL 2005 or 2008 instance	Symantec Backup Exec Central Admin Server Option	The steps in this topic are incorrect. The following steps are correct: 1. On the central administration server, click **Start > Microsoft SQL Server (version number) > Configuration Tools > SQL Server Configuration Manager.** 2. Expand the **SQL Server Network Configuration**, and then click **Protocols** for the SQL Server instance that is in use by the central administration server. 3. Double-click **TCP/IP**, and then click the **IP Addresses** tab. 4. Write down the TCP dynamic port number. 5. Create an alias for the managed Backup Exec server to allow it to connect to the SQL port on the central administration server.

Changing the location of a disk storage device

You can change the location of an existing disk storage device.

Note: When you copy files from the original disk storage device to the new location, do not copy .cfg files.

To change the location of a disk storage device

1. Ensure that no jobs are running or are scheduled to run until you have completed the process of changing the location of a disk storage device.
2. Do one of the following:

If the Agent for VMware or the Agent for Microsoft Hyper-V are not installed	Use the **Configure Storage** wizard to create a new disk storage device with a different name and drive letter than the original disk storage device.
If the Agent for VMware or the Agent for Microsoft Hyper-V are installed	You must use the same drive letter for the new disk storage device location that was used for the existing disk storage device. Do the following in the order listed: ■ In Windows, assign a new drive letter to the disk volume of the existing disk storage device. ■ In Windows, assign the drive letter that the existing disk storage device originally had to the new disk storage volume. ■ Use the **Configure Storage** wizard to create a new disk storage device with the same drive letter that the existing disk storage device originally had.

3. In Windows Explorer, copy and paste all of the files except the .cfg files from the \BEData folder on the original disk storage device to the \BEData folder on the new location.
4. In Windows Explorer, delete all of the files from the original disk storage device.
5. Delete the original disk storage device.
6. Rename the new disk storage device with the name of the original disk storage device.
7. On the Backup Exec Administration Console, right-click the new disk storage device, and then click **Inventory and Catalog**.

   See the following topics in the *Symantec Backup Exec 2012 Administrator's Guide*:

   ■ Deleting a storage device

   ■ Inventorying and cataloging a storage device

Additions to the Backup Exec 2012 Administrator's Guide

The following topics are new for Backup Exec 2012 SP2:

- Support for Windows Server 2012
- About including or excluding files for backup definitions
- Special considerations for converting a physical computer to a Windows Server 2012 Hyper-V host
- Agent for Hyper-V notes

Support for Windows Server 2012

Backup Exec 2012 SP2 supports Windows Server 2012 with some limitations. You cannot install a Backup Exec server on a Windows Server 2012 computer. However, you can use the Agent for Windows to back up and restore Windows Server 2012 computers with their operating systems and legacy features. You cannot install the Agent for Windows on ReFS volumes or any volumes that have been enabled for deduplication in Windows.

Backup Exec supports the backup of non-deduplicated data on any volumes that have Windows deduplication enabled. If you try to back up data from a volume that has Windows deduplication enabled, Backup Exec backs it up in its original, non-deduplicated format. Ensure that you have enough storage space for the non-deduplicated data before you run a backup.

Backup Exec supports the non-deduplicated restore of volumes that have Windows deduplication enabled. When you restore files from a volume that has Windows deduplication enabled, Backup Exec places the files on the disk as non-deduplicated. Ensure that you have enough disk space to restore the non-deduplicated data before you run a restore job.

Simplified Disaster Recovery (SDR) is not supported for Windows Server 2012. If you run an SDR backup job to back up a Windows Server 2012 computer that was upgraded from an earlier version of Windows, you cannot use SDR remote recovery to restore either the earlier version of Windows or Windows Server 2012. However, if you have the disaster recovery information file and the backup sets from when you backed up the earlier version of Windows, you can perform an SDR local recovery. If you do not have the disaster recovery information file, you can use Backup Exec to perform a manual disaster recovery. Refer to the "Disaster preparation and recovery" chapter in the *Backup Exec Administrator's Guide* for more information about performing a manual disaster recovery.

For more information about specific limitations, refer to the Backup Exec 2012 SP2 Readme document.

About including or excluding files for backup definitions

If you want to modify a backup definition's backup selections, you can open the backup definition and choose **Edit** in the **Selections** box. Then, on the **Backup Selections** dialog box, you can select the **Selection Details** tab.

The **Selection Details** tab lets you quickly include or exclude files for backups by specifying file attributes. Exclusions apply to all of the jobs in a backup definition.

You can do any of the following:

- Include or exclude subdirectories. For example, you can choose to back up a parent folder without backing up any folders that reside inside it.
- Include only modified files. For example, you can choose to back up only the files that have changed since the last backup job.
- Include only read-only files.
- Include or exclude files by file name attributes. For example, you can select only files with .txt extensions, or exclude files with .exe extensions from a backup. If you exclude files by an attribute that does not exist, all files of that type are excluded. For example, excludes based on SQL database dates result in global SQL excludes since SQL databases do not have date attributes.
- Select only any files that fall within a specified date range. For example, you can select any files that were created or modified during the month of December.
- Specify the files that have not been accessed in a specified number of days. For example, you can select the files that have not been accessed in 30 days from your "My Documents" folder. Then, run a full backup job for which you select the method to back up and delete the files.
  The Backup Exec Archive Option offers more features for data archiving.

You can configure specific exclusions for incremental and differential backup jobs within a backup definition using the **Exclusions** option on the **Backup Options** dialog box.

You can also configure global exclusions. Global exclusions apply to all the backup jobs that you create.

Special considerations for converting a physical computer to a Windows Server 2012 Hyper-V host

Before you create a job to convert a physical computer to a Windows Server 2012 Hyper-V host, review the following information:

- Disk data is stored in VHDX files for conversion of a physical computer to a Windows Server 2012 Hyper-V host.
- The conversion of simple GPT disks is supported.
- Storage Spaces are not supported.
- If the physical computer runs Windows Server 2012 with an ReFS volume, conversion to a Windows Server 2012 Hyper-V host is supported. Conversion to any previous versions of a WindowsHyper-V host is not supported, so those jobs fail.
- If the physical computer runs Windows Server 2012 with one or more Windows deduplication volumes, conversion to a Hyper-V host is possible, but it may fail. The converted disk data is not deduplicated. In other words, an unoptimized data transfer is performed. For this reason, the conversion may fail if the amount of unoptimized data is greater than the capacity of the destination volume.

Agent for Hyper-V notes

This section contains specific information about how the Agent for Hyper-V works with Windows Server 2012 and general notes for using the Agent for Hyper-V with any supported version of Windows in this release of Backup Exec.

See the section called “Notes about how the Agent for Hyper-V works with Windows Server 2012” on page 17.

See the section called “General notes about the Agent for Hyper-V” on page 20.

Notes about how the Agent for Hyper-V works with Windows Server 2012

The Backup Exec 2012 SP2 Agent for Hyper-V lets you back up and restore Hyper-V virtual machines that are hosted on Microsoft Windows Server 2012. This version of Backup Exec supports the Windows Server 2012 VHDX file format and Microsoft incremental backups.

Microsoft's new VHDX file format supports virtual disks that are up to 64 TB in size. Backup Exec supports backups and restores for VHDX-based virtual machines. Backup Exec processes the VHDX files similarly to how it processes VHD files.

Virtual machine file/folder-level Granular Recovery Technology (GRT) and application-level GRT are handled in the following ways for VHDX files:

- If a virtual machine has only VHD files, then both file/folder-level GRT and application-level GRT are fully supported.
- If a virtual machine has only VHDX files, file/folder-level GRT and application-level GRT are supported if the VHDX has a capacity of less than 2 TB. If the VHDX files have a capacity larger than 2 TB, then file/folder-level GRT and application-level GRT are not supported. The job will complete with a status of success with exceptions, but no GRT restore capability will be available. A full restore of the virtual machine will be available.
- If a virtual machine has a mixture of VHD and VHDX files, but all of the VHDX files have a capacity of less than 2 TB, then both file/folder-level GRT and application-level GRT are fully supported.
- If a virtual machine has a mixture of VHD and VHDX files, but one or more VHDX files have a capacity of greater than 2 TB, then file/folder-level GRT and application-level GRT are not supported. The job will complete with a status of success with exceptions, but no GRT restore capability will be available. A full restore of the virtual machine will be available.

Application-level GRT is supported for Microsoft Active Directory 2012 and SQL 2012. Limited application-GRT is supported for Microsoft SharePoint Server 2013 and Microsoft Exchange Server 2013. For SharePoint 2013, individual documents cannot be restored, but the entire content database can be restored. For Exchange 2013, individual mailbox items cannot be restored, but the entire database and logs can be restored.

Microsoft's incremental backups for Hyper-V differ from Backup Exec's incremental backups. No options are available within Backup Exec to configure the Microsoft incremental backup method for a virtual machine. Instead, you must use PowerShell on the Hyper-V host to configure the Microsoft incremental backup. The Microsoft incremental backup setting is applied as a property of each individual virtual machine, so some virtual machines may use the Microsoft incremental backup method while other virtual machines do not use it. You must configure a virtual machine to use the Microsoft incremental backup method before you run a backup job. For virtual machines that do not have the Microsoft incremental backup method enabled, Backup Exec incremental backups will be performed. For virtual machines that do have the Microsoft incremental backup method enabled, the Microsoft incremental backup is performed instead of the Backup Exec incremental backup. The Backup Exec job log lists the incremental backup method that was used. A Backup Exec differential backup of virtual machines that have Microsoft incremental backup enabled is not supported, so a job with that configuration will fail

Note: To use Microsoft's incremental backups, the Hyper-V host must have Windows Server 2012 installed and the virtual machine must use the Windows Server 2012 version of the Hyper-V Integration Services.

Note: A one-time backup job may cause virtual machines that have Microsoft incremental backups enabled to perform a full backup during the next scheduled full/incremental job.

The following limitations apply to using the Agent for Hyper-V with Windows Server 2012:

- Virtual machines that are configured with Fibre Channel HBAs are skipped during backup jobs. The job log lists a message to indicate that the virtual machine was skipped.
- The deduplication stream handler for VHDX files is not supported.
- Remote VSS is not supported.
- A VSS Copy backup of a Windows 2012 Hyper-V virtual machine is not supported.
- File/folder-level GRT is not supported for volumes that use the Windows 2012 Resilient File System (ReFS). In addition, application-level GRT cannot be performed for the virtual machine on which the ReFS volume is located.

  Note: File/folder-level GRT is supported for volumes that are configured with NTFS.

- File/folder-level GRT is not supported for volumes that have Windows 2012 deduplication enabled. In addition, application-level GRT cannot be performed for the virtual machine on which Windows 2012 deduplication is enabled.

  Note: File/folder-level GRT is supported for volumes that are configured with NTFS.

- A virtual machine that was backed up from a Hyper-V 2012 host cannot be restored to a virtual machine with an earlier version of Hyper-V, such as 2008 or 2008 R2.
- Virtual machines that have storage spaces are not supported because Microsoft Hyper-V VSS is unable to take snapshots of virtual machines with storage spaces.

- Hyper-V Replication virtual machine backups may result in redundant backups of the primary virtual machine and the replicated virtual machine.
- GRT is not supported for virtual machines that have VHDX image files with a logical sector size of 4096 bytes. This applies to both application-level GRT and file/folder-level GRT. A full restore of a virtual machine with that configuration can be performed.
- Virtual machines that are configured with remote storage are skipped during backup jobs. The job log contains a message about the skipped jobs.
- Virtual machines that run non-Windows operating systems and have VHDX image files are not supported.

For details about the new features of Microsoft Windows Server 2012, see the Microsoft website.

General notes about the Agent for Hyper-V

The following notes detail information about using the Agent for Hyper-V with Backup Exec 2012 and any other supported versions of Microsoft Windows.

- GRT is not supported for virtual machines that use dynamic disks, such as spanned, mirrored, striped, or RAID 5 disks.
- You must assign shadow storage to each NTFS volume that exists on a virtual machine if the virtual machine uses the Windows 2008 operating system. Otherwise, the backup job fails.
- The restore of a Hyper-V virtual machine that is created within a mount point fails if the mount point does not exist at the time of the restore. To avoid this issue, configure the virtual machine to use volume GUID paths with no mount points. To solve this issue, recreate the mount point path or restore the volume that contains the mount point before you restore the virtual machine.
- GRT is not supported for backups to tape of an Exchange 2003 virtual machine that runs on a Hyper-V host that is installed as a server role on a Server Core installation of Windows Server 2008 or later. Backup to a disk storage device is supported.
- Backup Exec does not support virtual machines that have duplicate names.
- When using the Agent for Hyper-V to back up a virtual machine that runs any supported version of Microsoft SharePoint, you may experience a pre-processing time of more than 30 minutes if application-level GRT for SharePoint is enabled for that virtual machine.