

Backup Exec 2010: Archiving Options

Backup Exec 2010: Archiving Options

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Introduction

Much of the content produced in companies now consists of email, documents, presentations, and other types of unstructured information. This explosion of information has a significant impact on storage spending—as well as on IT's ability to meet the needs of its internal customers and business units—and it can lead to the use of any number of disparate tools just to protect applications and keep them running.

Symantec's archiving and backup information management solutions are engineered to support today's most common Microsoft® environments. Unlike typical solutions focused only at the application level, Symantec archiving and backup solutions address the total data infrastructure (applications, servers, and networks) in order to unify content sources, apply retention policies, reduce backup windows, shorten recovery times, and optimize storage resources. Symantec makes it easier for companies of all sizes to store, manage, protect, and discover Exchange® and Windows® file servers, with Backup Exec's new Archiving Options, powered by market-leading Symantec Enterprise Vault.

What is Archiving?

What is Archiving? According to Answers.com, archiving means: "To compress one or more files and folders into a single file for backup or transport.... "Archive" implies data retention, and archived data are typically stored in a secondary location for backup and historical purposes." PC Magazine defines email archiving in the following way: "Retaining e-mail messages for historical purposes or to be in compliance with industry regulations..."

Backup Exec's Archiving Options offer features that closely resemble these definitions. Archiving is a way of moving data from a "Content Source" – in Backup Exec's case, an Exchange Mailbox or a Windows File Server with File Shares – to more cost-effective storage for long-term retention. This activity has useful benefits for the content source. Generally, Exchange Servers or Windows File Servers often use expensive "Primary Storage", that is, storage arrays that provide a high level of performance for the applications those arrays are serving. Over time, as old data is maintained in Exchange Mailboxes or user shares on File Servers, the sheer mass of this older, infrequently-accessed data can force Administrators to spend a significant amount of money to increase the size of this Primary Storage. However, there are reliable, cost-effective arrays on the market. While Exchange administrators wouldn't want to use these arrays in place of fast primary Fibre Channel or SAS storage, why not move this old data out of the Exchange Server and store it on those cost-effective SATA-based arrays? This is the question that archiving solves – it gives Administrators a way to clear out the older and infrequently-access pieces of data that make it seem like Exchange servers or File Servers are ever-expanding data storage locations. Administrator can apply data lifecycle policies to this data so that an orderly removal of archived data takes place.

This storage management function is at the core of the Backup Exec 2010 Archiving Options. Archiving moves data from expensive storage to slower, cheaper storage, allowing Exchange Servers and File Servers to be repositories of the newest and most frequently accessed data. A number of other benefits – faster backups, deduplicated storage of archived items, data retention policies, self-service recovery of end-user data, and others – are also included with Backup Exec's Archiving Options.

Benefits of Archiving

Archiving is critical to maintaining application size, performance, and scalability. Keeping old, infrequently accessed, and redundant data on Exchange or File Server primary storage not only wastes precious space, but it also costs time and money to manage, maintain, and back up the data. If these content sources used less storage, Administrators would see immediate improvements in backup times and a reduction in the amount of backup data stored to tape or disk. The Backup Exec Archiving Option enables administrators to reclaim primary storage space, enable retention policies, and maintain end-user access to archived files.

Backup Exec's Archive Option also allows Administrators to move older, less frequently accessed data from expensive primary storage to more cost-effective disk storage, while allowing end users to access their archived email and data using Backup Exec Retrieve, a Web-based Recovery portal for archived files, folders, and emails. Archiving can deduplicate and compress data while storing a single copy of a file or message in the archive, regardless of the number of times it is archived—or where it was originally from. Lastly, Archiving can apply retention policies for data, allowing storage-optimized copies of data to be kept for months or years in compliance with record retention rules.

Backup Exec 2010's Archiving Architecture

The Backup Exec Archive Option allows the creation of Vaults, which are special repositories of archived data. The Vault is a disk storage location that can be locally attached to a media server or hosted on a SAN or iSCSI volume. The Vault stores this archived data and performs additional actions on this data. First, for storage management purposes, the Vault has a deduplication function that optimizes data stored in it. Second, the Vault performs content indexing against data stored in it. Through context indexing, the Vault provides end users and administrators the ability to perform searches against the data it contains, using search criteria such as file names, paths, or keywords.

The Archiving architecture requires four necessary items and one optional (if highly recommended) item. The first is a Backup Exec 2010 Media Server – this is where the Exchange Mailbox or File System Archive Options are installed, configured, and managed. The second is the creation of a Vault via the Backup Exec Administration Console's Devices tab or the Vault Creation Wizard. The third is the ability to do Backups of "Content Sources", that is, the Exchange Server or Windows File Server that Administrators want to Archive data from. Whether archiving data from an Exchange server or Windows File Server, a remote agent must be installed on the content source: the Remote Agent for Exchange (in the case of Exchange Mailbox Archiving) or the Remote Agent for Windows Servers (in the case of File System Archiving). The fourth item is an Archive Job. An Archive Job is a new type of job in Backup Exec 2010 that compares archive criteria (size, age, or size + age) against data in Exchange Mailboxes (for Exchange Mailbox Archiving) or network (for File System Archiving) that have been backed up. If it finds a match, the Archive Job will copy the data from the backup set into the Vault. After the data is safely in the Vault, the Archive Job will delete the matching item from the Exchange Server or File Server.

The optional-yet-recommended item mentioned above is Backup Exec Retrieve. The Backup Exec Retrieve console is included with Backup Exec 2010 at no charge. Backup Exec Retrieve is a separately installed piece of software, installed on the Media Server or a separate Web Server, and integrated with Microsoft's Internet Information Server, or IIS. Backup

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Exec Retrieve is accessed via a Web Browser and allows both Administrators and End-Users the ability to recover Archived data.

See Figure 1 below for a graphical depiction of the Archive Option flow.

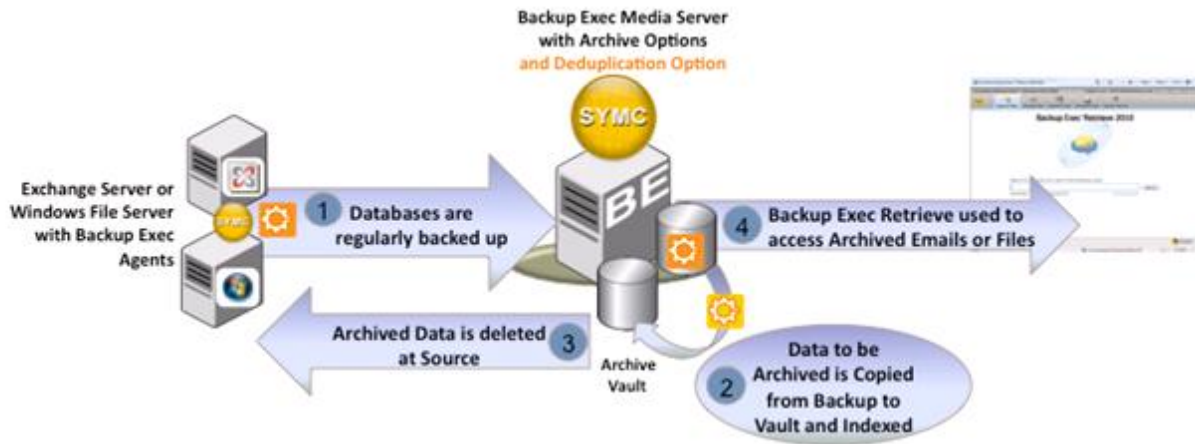


Figure 1 – Backup Exec Archiving Options – Architecture and Data Flow.

Note the addition of the Backup Exec 2010 Deduplication Option, brings additional space savings to backups necessary for Archive operations.

After these pieces are in place, everything starts with a backup of the content source – be it an Exchange Database or files on a Windows File Server. As data is backed up from a content source to a Backup-to-Disk or Deduplication Storage Folder on a media server, it is checked for archiving eligibility and archived to the Vault when matches are found.

It's important to note that Archive jobs run against the backup copy of data and do not 'touch' the original content source until files or emails are archived and the original copy of those archived items is deleted. This is key to understanding Backup Exec's method for archiving; administrators can think of this process as "off-host archiving", where these Archiving Jobs run on the Backup Exec media server and not directly on the content source. This has two primary benefits – first, off-host archiving reduces network transfers by only copying the data once per archive cycle. Second, this method reduces impact on the content source by only needing a single Agent – the Remote Agent for Windows Systems or the Agent for Exchange (depending if you're archiving an Exchange Server or Windows File Server respectively) - installed on the content source.

As Archive jobs run, these jobs copy data from a backup to the Vault. Archive jobs copy data to the Vault based on age criteria, size criteria, or a combination of both age and size. The Vault provides deduplication through single instancing of files, emails, and attachments that are copied into the Vault.

After Archive Jobs run, Backup Exec notes what files or emails have been copied to the Vault, and those files or emails are deleted from the original content source. By default, the deletion of source data can be configured to take place only after the Vault has been protected to tape or disk by Backup Exec, which adds an additional layer of protection for data before it is deleted from the content source.

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As data is stored in the Archive, it is indexed for retrieval. The Backup Exec Archive Option indexes data by name, path, and file or attachment content. Two general types of retrieval are supported: administrator retrieval and end user retrieval. Administrators can recovery individual files and emails from the Backup Exec Administration console, and can recover those files to the original location (including back to the mailbox from where they were archived) or to another disk location. End users can recover data through the Backup Exec Retrieve web console, which communicates back to the Vault via a Microsoft IIS web server installed on a dedicated Web Server machine, or on the Backup Exec Media Server. End user files can be recovered in native form to any accessible location. Emails and associated attachments are recovered as individual *.msg files to a file system location, and can be opened by Outlook or other applications that recognize the *.msg file type. End users are not able to directly recover emails to their mailbox.

End users log into the Backup Exec Retrieve through a web browser, and provide their Windows login credentials at login time. Backup Exec also provides an in-context way to access Backup Exec Retrieve so users and administrators don't have to save a shortcut or favorite to the Backup Exec Retrieve Web Server. In each directory where File System Archiving has archived a file, Backup Exec leaves a file – a URL shortcut – that, when clicked, launches Backup Exec Retrieve so that users can access their archived data. In an Exchange Mailbox Archive scenario, a folder is placed within each Mailbox that has had messages archived. If the user selects this folder in Outlook, the Backup Exec Retrieve Web Console is launched. With Backup Exec Retrieve, end user data is protected by Windows authentication, so each user can only see the files and emails that he or she owns.

Requirements for Backup Exec 2010's Archiving Options

General Media Server System Requirements

- The Backup Exec Media Server must have at least 1 GB of physical memory installed on it.
- The Backup Exec Media Server should have at least 1 dual-core processor

Exchange Mailbox Archiving General Requirements

The Backup Exec Exchange Mailbox Archiving Option supports Archiving from the following versions of Exchange:

- Exchange 2007
- Exchange 2003

The Backup Exec Media Server and the Microsoft Exchange Server must have several additional components installed and configured to enable Exchange Mailbox Archiving. These components are detailed below:

- Microsoft Outlook 2007 or higher must be installed on the media server *before* you install the Archiving Option. When you install Outlook on the media server, you must create a profile and connect to an Exchange Server mailbox. Outlook may display an error message about a conflicting program. If Outlook offers to fix the problem, choose to do so, and then follow the instructions that are given by Outlook.
- The Exchange Server backups must have the Granular Recovery Technology (GRT) option enabled.
- Exchange Server backups must be on one of the following devices:

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- Non-removable backup-to-disk folder
- Deduplication storage folder
- A storage array in a Storage Provisioning Option environment
- Archive jobs must have a valid path configured on an NTFS volume that is local to the media server for temporary storage of data. The default path is set to use C:\temp.
- A specific mailbox for use by the Archive Option (sometimes referred to as a 'system' mailbox) must be configured for exclusive use by Backup Exec on each Exchange Server on which you want to select mailboxes for archiving. Whenever you create an archive job for the Exchange Mailbox Archiving Option you are prompted to enter the name of this 'system' mailbox. The following are restrictions for this mailbox:
 - The mailbox must not be used for any other purpose; the Exchange Mailbox Archiving Option requires exclusive access.
 - The mailbox must not be hidden from address lists.
 - The mailbox account must not be disabled.
- The media server domain and the Exchange Server domains must trust the domain that the Backup Exec service account belongs to.
- The media server domain must trust the domains that contain the accounts of users whose mailboxes reside on the Exchange Servers.
- You must grant permissions to the Backup Exec service account to the Exchange servers. Refer to the Backup Exec Admin guide for instructions regarding specific permissions.
- The Backup Exec service account must be a member of the Active Directory domain. Symantec recommends that you use a Backup Exec service account that has domain and local administrator rights on the Exchange Server. You should not make the Backup Exec service account a domain administrator.

Exchange Mailbox Archiving: Platform and Licensing Requirements

Platform Support

- The Backup Exec Archive Option for Exchange Mailboxes supports archiving from backups of Exchange 2003 and Exchange 2007 servers.
- Note: The Backup Exec Exchange Mailbox Archiving Option cannot be installed on Microsoft Small Business Servers at this time.

Licensing Requirements

- The Archive Option for Exchange Mailboxes is licensed on a per-user basis. These licenses are sold in 10-user and 100-user packs, allowing an Administrator to fine-tune their Archive Option for Exchange Mailboxes to match the number of Mailboxes in their Exchange environment.
- The Backup Exec Agent for Exchange must be installed on the Exchange Server and at least 1 backup of the Exchange server must be completed before Archiving can take place.

File Server Archiving: General Requirements

The Backup Exec File System Archiving Option supports Archiving from the following Operating System and Network Share configurations.

| File System Archiving | Supported? |
|------------------------------------|------------|
| Windows 2008 R2 NTFS Shares | yes |
| Windows 2008 NTFS Shares | yes |
| Windows 2008 Small Business Server | yes |
| Windows 2003 R2 NTFS Shares | yes |
| Windows 2003 Small Business Server | yes |
| Windows 2003 NTFS Shares | yes |
| Windows 2000 NTFS Shares | yes |

Figure 2: Supported platforms for File System Archiving

The Backup Exec Media Server must have several additional components installed or configured for File System Archiving. These components are detailed below:

- The Backup Exec File System Archiving Option operates on shares. The shared folders and any child folders that contain data that the administrator wants to archive, must be regularly backed up on the media server. The backups can be done by selecting the complete volume or drive.
 - Example: If a share named “Users” needs to be archived, whose path is D:\data\users, then the backups can be done by selecting the entire D drive and the Archive job can have the “Users” share selected.
- The Backup Exec service account must have Full Control share permissions on the share that is selected for archiving.
- The Backup Exec service account must be granted the following NTFS rights on the folders in the share that is selected for archiving:
 - Modify, List Folder Contents, Read, and Write
- The media server domain and the file server domains must trust the domain that the Backup Exec service account belongs to.
- The media server domain must trust the domains that contain the accounts of users that access the file server shares.

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- The Backup Exec service account must have local administrative rights on the file server.
- Note: Symantec recommends that Microsoft Outlook should be installed on the media server to provide full indexing of MSG (saved email) files.

File Server Archiving: Platform and Licensing Requirements

Platform Support

- The Archive Option for File Servers can archive data from backups of Windows 2003, 2008, and Windows 2008 R2 servers. These machines can be 32-bit or 64-bit servers.

Licensing Requirements

- The File Server Archive Option is sold on a per-server basis. Administrators need to purchase one license for each File Server server they want to archive from.
- The Backup Exec Agent for Windows Systems must be installed on the File Server – and at least one backup of the File server must be completed – before Archiving can take place. The Backup Exec Agent for Windows Systems must be purchased separately.

Components of the Backup Exec Archiving Options

The Backup Exec Archive Options, as mentioned above, allow for the creation of Vaults, where archived data is stored.

This is an oversimplification of the actual underlying components that are used by Backup Exec in the Archiving process.

Under the covers, the Backup Exec Archiving Options install several database and file system structures that have been previously been referred to as “Vaults”. This section will break down the Vault into its component pieces to allow a better understanding of those components, as understanding these components is critical to sizing the Archiving Options appropriately.

Along with the components of the physical Vault, several different databases are used in the process of Archiving data through Backup Exec. These three databases are hosted by Microsoft’s SQL Express by default. Below is a description of each of these components.

- **Directory Database** – the Directory database contains the overall configuration and policy information for the Backup Exec Archiving environment.
- **Fingerprint Database** – the Fingerprint database contains a listing of all the “fingerprints” - unique hash values for each archived file - and other information relating to Single Instance Storage deduplication item that exists in the Vault.
- **Vault Store Database** – the vault store database holds configuration information for the vault store and details of the items stored in its archives.
- **Vault Store Partitions** represent the actual physical location where the archived items are stored. Backup Exec creates one vault store partition in each vault store by default, but Administrators can add more as the storage needs of Archiving grow, so Vault can contain one or more Vault Store Partitions.

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- **Index Locations** - the Backup Exec Archive Option will also have an Index associated with it. The Index is used to perform content searches on files and emails that have been archived by Backup Exec's Archiving Options. The Index is a physical location on disk that holds many individual files, which collectively provide the content indexing features available through Backup Exec Retrieve and the Backup Exec Admin Console.

Sizing Guidelines for Backup Exec Archive Option Vaults and Index Locations

Backup Exec requires permanent disk space for the following (both the Exchange Mailbox Archiving Option and File Server Archive Option components):

- The Vault Store Partitions associated Vault Stores
- The index locations
- The following SQL Express or SQL Server databases: the Directory database, Vault Store databases, and Fingerprint databases.

As the data in a vault store grows, you can create more vault store partitions to provide additional capacity. You can specify a local drive or a network share as a location for a vault store partition. The following sections will enable Administrators to have better sizing guidelines for the Backup Exec Archive Options. The File System and the Exchange Mailbox Archiving Options will be described separately.

Sizing Guidelines for the Exchange Mailbox Archiving Option

Symantec supplies certain formulas that Administrators can use to estimate the disk space requirements for the Exchange Mailbox Archiving Option. The following values and variables are used in the formulas:

- N is the number of emails.
- m is the average number of identical copies of attachments across user mailboxes.
- The compression factor for attachments is estimated as 60%. If the attachments are mostly Office 2007 files, the compression factor to use is 90%.
- The average number of emails that have attachments is estimated at 20%.
- The average size of an email attachment is estimated at 250 KB.

The size of a vault store partition used for Exchange Mailbox Archiving Option depends on the following items:

- The size of the emails.
- The type of attachments.
- The number and size of the attachments.
- The number of emails with attachments.

Here's a formula that can be used to approximate the vault store partition size for Exchange Mailbox Archiving: $(N \times 16) + ((1/m) \times (N \times 0.2 \times 0.6 \times 250))$ kilobytes.

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For example, you want to know the disk space requirements for a vault store partition for 100,000 emails. You estimate that each email attachment is shared across three people on average. The calculation for the disk space requirements is as follows: $(100000 \times 16) + ((1/3) \times 100000 \times 0.2 \times 0.6 \times 250)$ kilobytes = 2.6 GB approximately.

Index Size

The size of an index is approximately 8% of the total size of the items that are archived. The percentage may be less if there is less content to index. For example, there is less content to index when there are large attachments such as MP3 or .jpeg files.

Example: You have 100,000 emails that each with a body size of 8 KB. About 20% of the emails have attachments, each with an average total size of 250 KB. The index size is approximately 450 MB.

Directory Database

The Directory database only grows when a new mailbox or share is archived for the first time. The recommended disk space is 500 MB.

Vault Store Database

The size of a vault store database is approximately $N \times 500$ bytes. The vault store database grows with every item that is archived. Temporary space is used to hold information on the items that have not been backed up or indexed.

Fingerprint Database

The fingerprint database is created only if you enable single instance storage of archived items. Backup Exec initially allocates 212 MB for the fingerprint database. The fingerprint database grows with every item that is archived.

If the database grows to more than 212 MB, use the following calculation to estimate the disk space that it requires: $1/m \times N \times 0.2 \times 500$ bytes.

Sizing Guidelines for the File System Archiving Option

Symantec supplies certain formulas that Administrators can use to estimate the disk space requirements for the File System Archiving Option. The following values and variables are used in the formulas:

- N is the number of files.
- m is the average number of identical copies per file. If m is unknown, use the estimate of 1.2.
- The compression factor for files is estimated as 50%. This estimate applies to a mix of files that contain mostly Office 2003 documents. Office 2007 documents do not compress but when mixed with non-Office files, the compression average is 80% of the original size. Pure image files are not compressed.

Here's a formula that can be used to approximate the vault store partition size for File Server Archiving: $(N \times 4) + ((1/m) \times N \times \text{average file size} \times 0.5)$ kilobytes

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Example: You want to know the disk space requirement for a vault store partition for 10,000 files. The average size of each file is 250 KB, and the average number of identical copies per file is 1.2. The calculation for the disk space requirements is as follows: $(10000 \times 4) = ((1/1.2) \times 10000 \times 250 \times 0.5)$ kilobytes = 1.08 GB approximately.

Index Size

Administrators can estimate that the index files require approximately 2% of the total size of the files that are archived. The percentage may be less if there is less content to index. If the files are all compressed image files, indexing is less than if the files are mostly small text messages. Numerous small text messages require disk space requirements similar to those of the Exchange Mailbox Archiving Option for indexing.

For example, to archive 10 GB of data, at least 200 MB of available disk space is required to store the index files.

Directory Database

The Directory database only grows when a new mailbox or share is archived for the first time. The recommended disk space is 1 GB.

Vault Store Database

The vault store database grows with every item that is archived. Temporary space is used to hold information on the items that have not been backed up or indexed. The size of a vault store database is approximately $N \times 3000$ bytes.

Fingerprint Database

The fingerprint database holds the shareable parts of archived items. The deduplication technology built in to the Archiving Options will attempt to perform Single Instance Storage (SIS) for files, emails, and email attachments that are over 20Kb in size. For the File System Archiving Option, it is expected that all files are larger than the 20-KB threshold. Backup Exec initially allocates 212 MB for the fingerprint database. The fingerprint database grows with every item that is archived.

If the database grows to more than 212 MB, use the following calculation to estimate the disk space that it requires: $(1/m) \times (N \times 500 \text{ bytes})$

Requirements for Backup Exec Retrieve

Backup Exec Retrieve allows both End-Users and Administrators the ability to search and recover files via a web browser interface. Backup Exec Retrieve is a Web Server application that is installed on the Backup Exec Media Server or a separate Web Server. Note that Backup Exec Retrieve is the only self-serve method available for End-User recovery; Administrators can recover files or emails from the Backup Exec Administration Console or the Backup Exec Retrieve system.

Backup Exec Retrieve – Client Systems

Client systems that need to access the Backup Exec Retrieve Web Server and recover files or emails should meet the following system requirements:

- Client Operating Systems: Windows XP SP2 (or higher), Windows Vista, and Windows 7
- Web Browser Software: Microsoft Internet Explorer 7 or later
- Microsoft Silverlight 3.0 (or later) browser plugin must be installed on each client system
- HTTPS access: The Backup Exec Retrieve web service runs over HTTPS, so clients must be able to access HTTPS connections on remote web servers.

Backup Exec Retrieve Web Server Machine

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Backup Exec Retrieve's Web Server integrates with Microsoft Internet Information Server (IIS) version 6 or later. The Web Retrieve server can be installed on the Backup Exec Media Server or on a remote Web Server machine. The following system requirements are necessary for installing Backup Exec Retrieve on an IIS Server:

- Microsoft IIS 6.0 or higher. Note: If IIS 7.0 or higher is used, the IIS 6 Management Compatibility role and sub-roles must be installed on the Web Server. IIS 6 Management Compatibility is part of the Windows Server installation media, so Administrators may be prompted for Windows Server installation DVD's as part of the installation process.
- ASPNET: ASPNET 3.5 or higher must be installed on the Media Server or hosting Web Server. ASPNET 3.5 for 32-bit and 64-bit systems is included on the Backup Exec Retrieve installation media.
- SSL Certificate for the Local Default Web Site: The Web Server must have a Secure Sockets Layer (SSL) certificate for the Local Default Web Site.

What do the Backup Exec Archive Options NOT Archive?

The File System Archive Option and the Exchange Mailbox Archive Options target specific items of information in backups of file systems and Exchange Mailboxes, respectively. Administrators should be aware of which files, file system objects, and other items of information are **not** captured by either of the Backup Exec Archiving Options.

Data Types not archived by a File System Archive job

- Hard links
- Files with alternate streams
- Reparse points
- Sparse files
- Files in Microsoft Distributed File System
- Replication (DFSR) shares, system folders, or recycle bins
- Files that have an encrypted, hidden, or have system attributes
- Files that are in mount point directories. Note: You can share the root of the mount point target, and then select it for archiving.

Exchange Objects not archived by an Exchange Mailbox Archiving Job

- Mail messages that have pending reminders.
- Any Exchange items other than mail messages, such as address book entries and calendar items.
- Mail messages in Exchange managed folders, journal mailboxes, or in public folders.

Backup Exec's Archiving Options and Deduplication Option

Backup Exec's Archive Options provide deduplication in the Vault through a single instance process, which is based on entire copies of a file or message. The Backup Exec Deduplication Option provides a different type of deduplication, based on segments of the file. These two options can work together to provide deduplication across backup and archiving features in Backup Exec.

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A typical configuration involves using the Deduplication Option's Client or Media Server deduplication capabilities to store backup copies of data to a Deduplicated Storage Folder. Since Archiving works from a backup of the content source, it makes sense to optimize space on backup copies as well as data in the Vault. More information about the Backup Exec 2010 Deduplication Option can be found at <http://www.BackupExec.com>.

How is Backup Exec Archiving Different from Enterprise Vault?

Backup Exec 2010's Archive Options provide different services than does Enterprise Vault. Some of the key similarities and differences are outlined below.

- **Storage Management:** The Backup Exec Archive Options are aimed squarely at storage management of Exchange Servers and File Servers. Enterprise Vault can do all of the same functions that the Backup Exec Archive Options can do. However, customers looking for an integrated Archive and Backup solution, focused on Storage Management, with administration and recovery from the same UI, would be well served to look at the Backup Exec solution.
- **Compliance and eDiscovery:** Customers who have eDiscovery needs should choose the Enterprise Vault application. The Backup Exec Archive Options have limited Compliance features and no E-Discovery features, while Enterprise Vault has robust E-Discovery options.
- **Applications beyond Exchange and Windows File Systems:** The Backup Exec Archive Options support Exchange Mailboxes and Windows File Servers as content sources. If users need support for additional platforms, like Lotus Notes or Microsoft SharePoint, Enterprise Vault should be evaluated.
- **End-User Recovery through Shortcuts or "Stubs":** End-users looking to recover data that has been archived with the Backup Exec Archive options must use the Backup Exec Retrieve web console to access archived files. There are no stubs or placeholders left behind for each individual file or email message that has been archived by Backup Exec.
- **PST Migration:** Backup Exec Archiving Options do not have PST migration capabilities. If Administrators need PST Migration functions, those customers should evaluate Enterprise Vault.
- **Migrate Archived Data to Tape:** Backup Exec does not have the capability to migrate data to tape devices for long-term retention. Use Enterprise Vault in conjunction with the Backup Exec Agent for Enterprise Vault, which includes Enterprise Vault Migration features.

Figure 3 – When to use Backup Exec Archiving or Enterprise Vault Archiving

| Use Case | Recommended Product |
|--|---------------------------------|
| Storage Management for File Servers | Backup Exec or Enterprise Vault |
| Storage Management for Exchange | Backup Exec or Enterprise Vault |
| Compliance and eDiscovery | Enterprise Vault |
| Applications other than Exchange or File Systems | Enterprise Vault |

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| | |
|---|--|
| End user recovery with Stubs or Shortcuts | Enterprise Vault |
| PST Migration | Enterprise Vault |
| Migrate Archived Data to Tape | Enterprise Vault (with the Backup Exec Agent for Enterprise Vault) |

Upgrades to Enterprise Vault

The Backup Exec Archive Options are built upon Enterprise Vault technology and maintain a great deal of binary compatibility with Enterprise Vault. The Backup Exec and Enterprise Vault applications currently plan to offer an automatic methodology for upgrading to Enterprise Vault in the near future.

Offering an Integrated Backup and Archiving Application

Archiving can offer IT administrators a number of valuable benefits. Keeping storage growth in check on high-value storage arrays – like those used in Exchange environments – can save companies money. Moving data from high-value SAN or SCSI direct-attached storage to slower (and cheaper) SATA or iSCSI arrays makes a good deal of business sense. Since deduplication is an integral part of the Archive, additional storage savings can be realized on those cheaper storage arrays. Coupled with Backup Exec 2010's Deduplication Option, both backup and archiving can achieve significant storage savings. The ability to apply retention policies allows business the ability to comply with internal or external record retention requirements. The downstream benefits of archiving - reduce backup windows, shorten recovery times, and optimizing storage resources – also make a great deal of business sense. Backup Exec 2010, with the release of the new Archive Option for Exchange Mailboxes or the Archive Option for File Servers, can help businesses achieve these benefits.

About Symantec

Symantec is a global leader in providing security, storage and systems management solutions to help consumers and organizations secure and manage their information-driven world. Our software and services protect against more risks at more points, more completely and efficiently, enabling confidence wherever information is used or stored.

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