

# File System and Exchange Archiving

PowerVault DL Backup to Disk Appliance



## Executive Summary

Much of the content produced in mid-market and enterprise 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 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 the PowerVault DL Backup to Disk Appliance powered by Symantec Backup Exec's new Archiving Options, built on 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..."

The PowerVault DL Backup to Disk Appliance powered by Symantec 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 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 storage options on the market that can store this data. While Exchange administrators wouldn't want to use these storage options in place of fast primary FC or SAS storage, why not move this old data out of the Exchange Server and store it on those more cost-effective storage systems? This is the problem archiving solves – it gives Administrators a way to clear out the older and infrequently-accessed data on Exchange servers and File servers. Administrators 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 more cost effective storage suited for long term retention, allowing Exchange Servers and File Servers to be repositories of the newest and most frequently accessed data. A number of other benefits are also included with Backup Exec's Archiving Options:



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

- faster backups
- deduplicated storage of archived items
- data retention policies
- self-service recovery of end-user data

### **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 older content, once archived, could be backed up once a month or as needed by administrators thereby reducing the overall backup of static unchanging data. 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 (highly recommended) item. The first is the PowerVault DL Backup to Disk Appliance powered by Symantec Backup Exec – 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



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

+ 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 the PowerVault DL Backup to Disk Appliance and located on the Backup Exec 2010 DVD. Backup Exec Retrieve is a separately installed piece of software, installed on the PowerVault DL Backup to Disk Appliance or a separate Web Server, and integrated with Microsoft's Internet Information Server, or IIS. Backup Exec Retrieve is accessed via a Web Browser and allows both Administrators and End-Users the ability to recover Archived data.

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

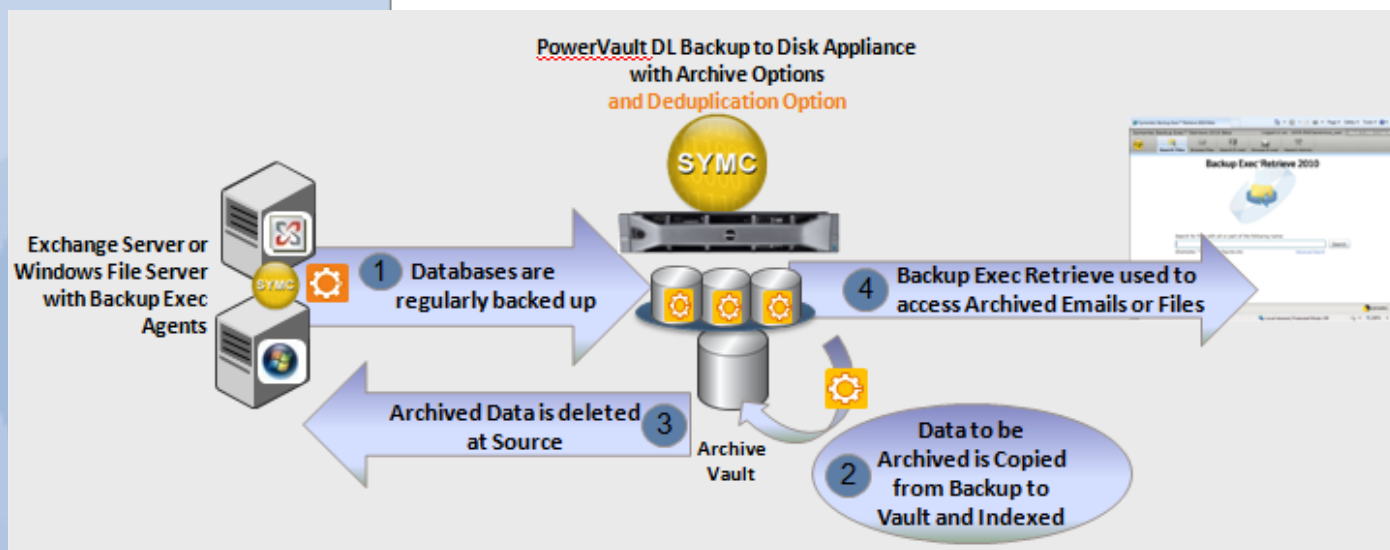


Figure 1 – Backup Exec Archiving Options –

**Architecture and Data Flow-** The addition of the Backup Exec 2010 Deduplication Option, brings additional space savings to backups necessary for Archive operations.

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

It is important to note that Archive jobs run **against the backup copy of data** and does 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



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

archiving”, where these Archiving Jobs run on the PowerVault DL Backup to Disk Appliance 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.

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 recover 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 PowerVault DL Backup to Disk Appliance. 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.

*Note: 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 BE 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 BE 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 Option**

### **Exchange Mailbox Archiving: General Requirements**

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



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

Exchange Mailbox Archiving	Supported?
Exchange 2007	✓
Exchange 2003	✓
Exchange 2010	No
Exchange 2000	No
Small Business Server 2008	No
Small Business Server 2003	No

**Figure 2: Supported Exchange Platforms for Exchange Mailbox Archiving**

The PowerVault DL Backup to Disk Appliance 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.
- The Exchange Server backups must have the Granular Recovery Technology (GRT) option enabled.
- Exchange Server backups must be on one of the following devices:
  - A Virtual Disk
  - Deduplication Storage Folder
  - Non-removable backup-to-disk folder
- 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:



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

- 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 PowerVault DL Backup to Disk Appliance and the Exchange Server domains must trust the domain that the Backup Exec service account belongs to.
- The PowerVault DL Backup to Disk Appliance 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:



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

File System Archiving	Supported?
Windows 2008 R2 NTFS Shares	✓
Windows 2008 NTFS Shares	✓
Windows 2008 Small Business Server	✓
Windows 2003 R2 NTFS Shares	✓
Windows 2003 Small Business Server	✓
Windows 2003 NTFS Shares	✓
Windows 2000 NTFS Shares	✓

**Figure 3: Supported platforms for File System Archiving**

The PowerVault DL Backup to Disk Appliance 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 PowerVault DL Backup to Disk Appliance domain and the file server domains must trust the domain that the Backup Exec service account belongs to.



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)



- The PowerVault DL Backup to Disk Appliance domain must trust the domains that contain the accounts of users that access the file server shares.
- 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 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.



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

**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.

**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.

### **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. Backup Exec Retrieve is not installed by default on the PowerVault DL Backup to Disk Appliance. Backup Exec Retrieve can be installed from the Backup Exec 2010 DVD. Backup Exec Retrieve installation requirements are listed in the next section. 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 BE 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**

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 PowerVault DL Backup to Disk appliance 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.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

## 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 that 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.

## The Archiving Option and Backup Exec's 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.

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>.

Data stored in the Vault and in the Deduplication Storage Folder use different methods for deduplication. Individual items that meet archive criteria will be "rehydrated" or reconstituted into their original form before being put into the Vault. Single instance storage deduplication will be applied to archived data as those emails or files are stored the Vault.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

Customers who use both Backup Exec Archiving and the Backup Exec Deduplication Option will end up with 2 unique stores of deduplicated data – the Deduplicated Storage Folder, where deduplicated backup data is stored, and the Vault, where deduplicated Archive data is stored.

### Backup and Recovery of Backup Exec Archiving Options

Backup Exec provides integrated Backup and Recovery functions for both Backup Exec Archive Options. Backup Exec provides this feature at no charge for disaster recovery purposes. This feature is accessed through the Backup Exec Admin Console. See Figure 2 for a view of Backup Exec’s Job Properties and selections for backing up Archive Option components.

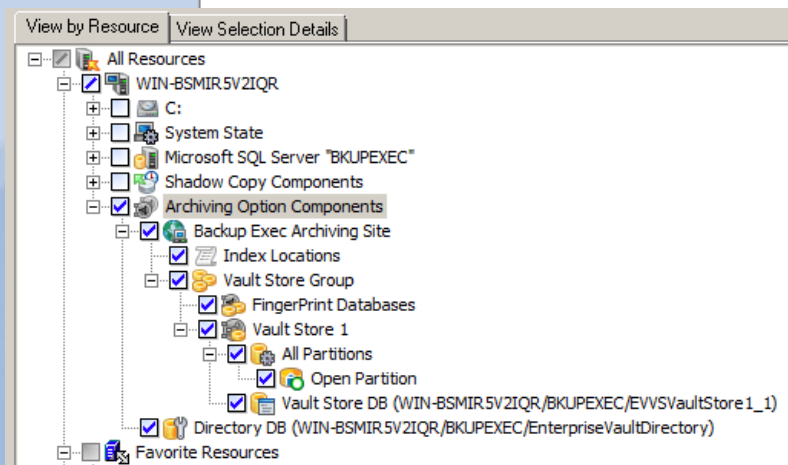


Figure 4 – Backing up Archiving Option Components through the Backup Exec Admin Console

### 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.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

## Installing the Archive Option on the PowerVault DL Backup to Disk Appliance

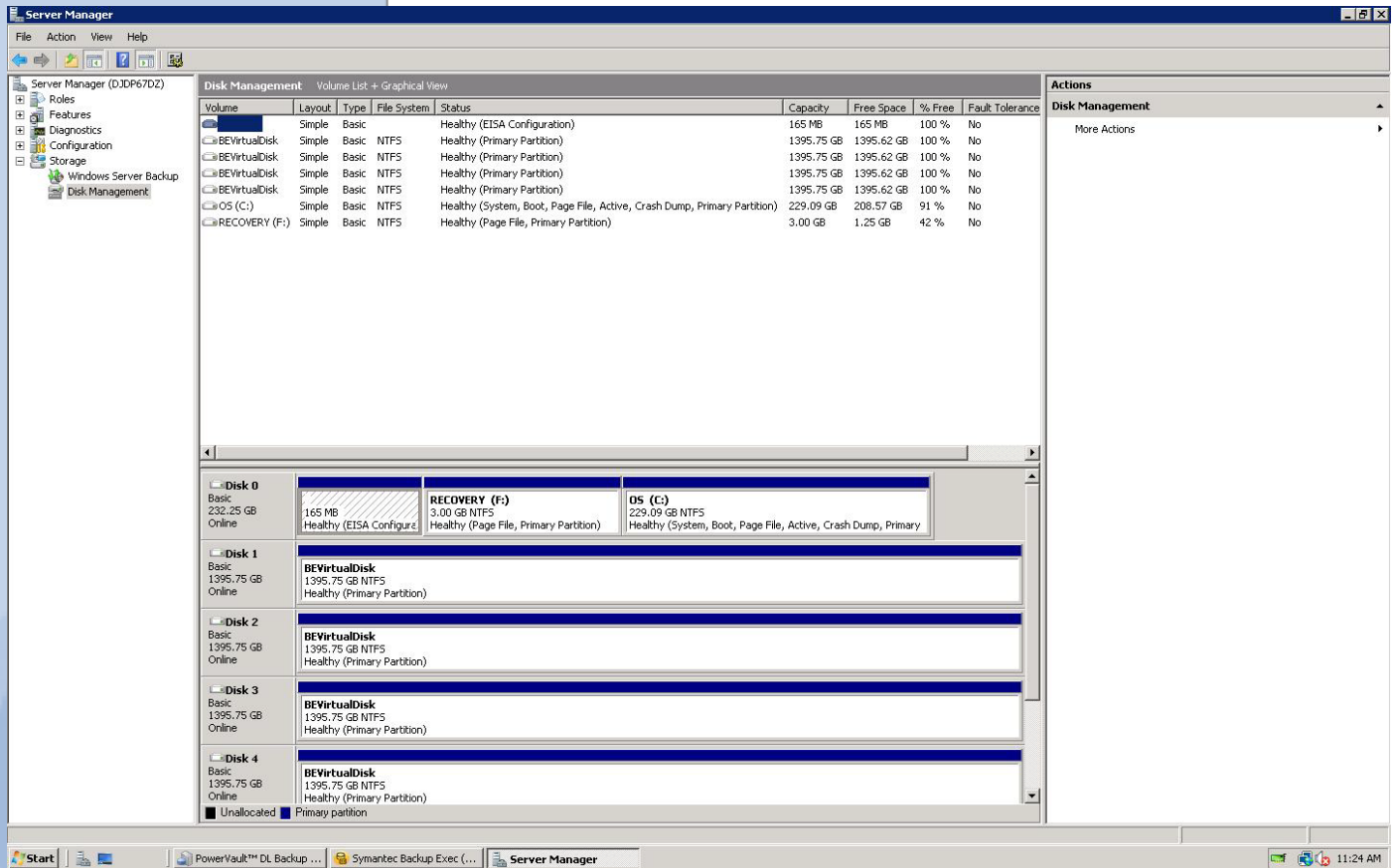
**NOTE:** The following steps assume the PowerVault DL Backup to Disk appliance has been setup and configured for operation utilizing the automatic disk provisioning. In addition, the appliance will need to be restarted during this process to complete the installation of the Archive Option.

Backup Exec Archive Option requires drive letter access when installed on the PowerVault DL Backup to Disk Appliance. As part of normal appliance operations Backup Exec will automatically configure and manage the disks attached to the system. However, drive letters are not assigned to the virtual disks in the system as part of this process. In order to support the installation of Backup Exec Archive Option, at least one drive letter must be available to store the archive data. A drive letter can be assigned to one or more virtual disks attached to the appliance by performing the following steps:

1. Start the Windows Server Manager and Select **Storage -> Disk Management**. Windows will display all of the disks attached to the system. The Virtual Disks created by Backup Exec are labeled BEVirtualDisk.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)



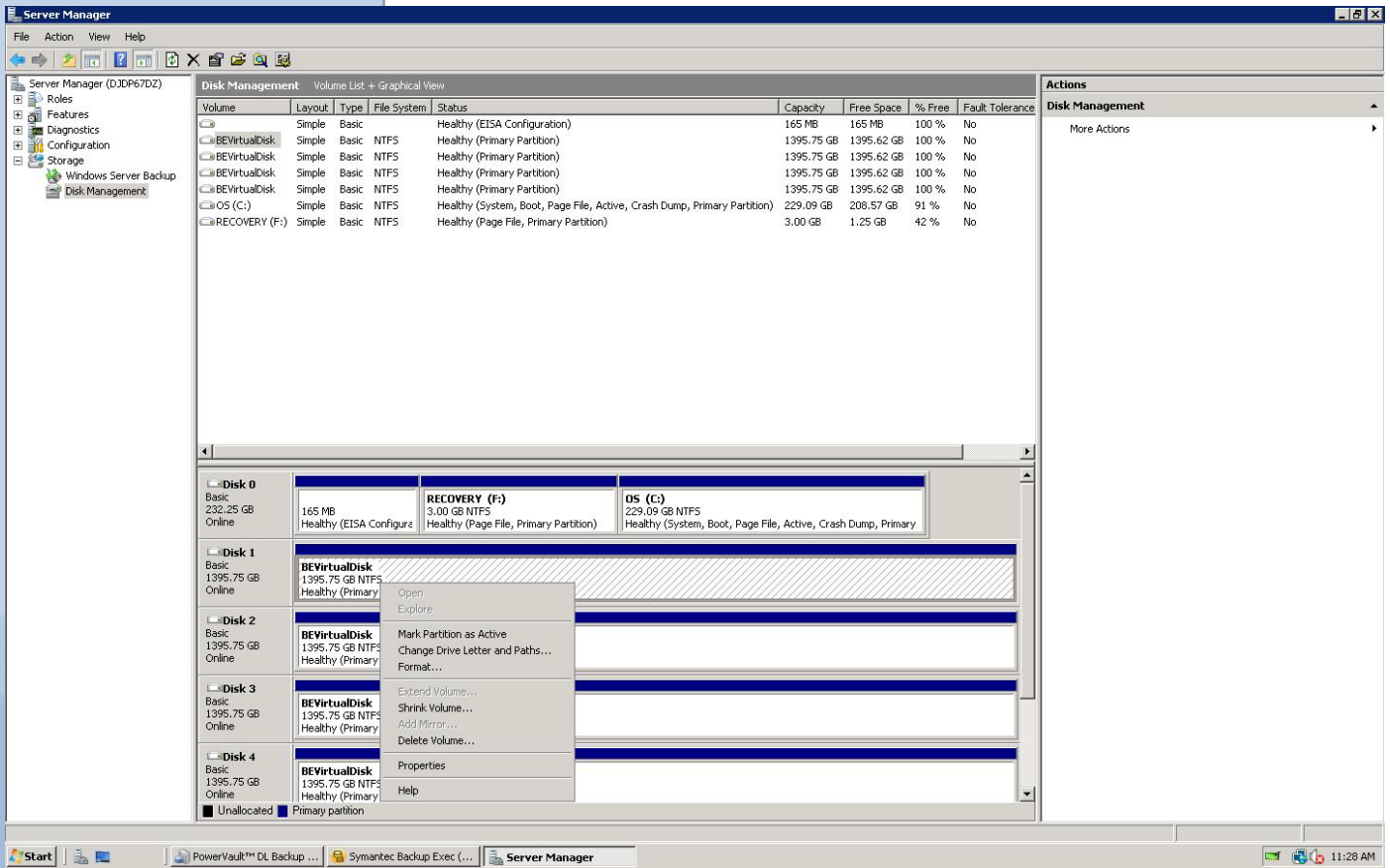
**Figure: Windows Server Disk Management**

- Determine a virtual disk where the Archive data will be stored. This location is referred to as an Archive Vault from within Backup Exec. Left click on the virtual disk and select **Change Drive Letter and Path** from the popup menu.

*Note: Ensure the drive you choose does not already have existing data on it as the storage space allocated for archiving can be less than needed for archiving jobs.*



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

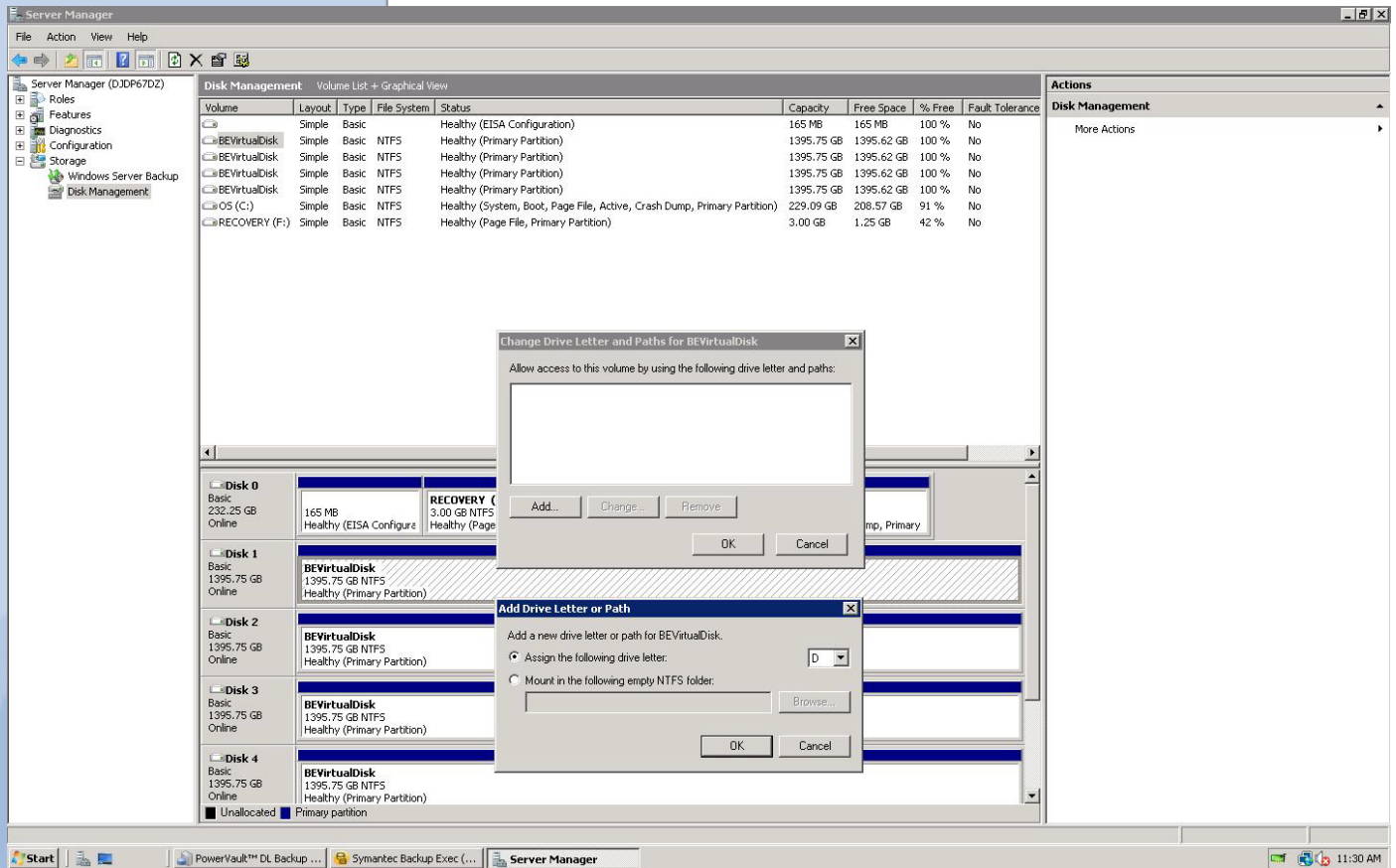


**Figure: Virtual Disks**

3. Click **Add** from the popup menu. Select an available drive letter to assign to the virtual disk. Select **Ok** to continue.



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)



**Figure: Assigning a drive letter to a Virtual Disk**

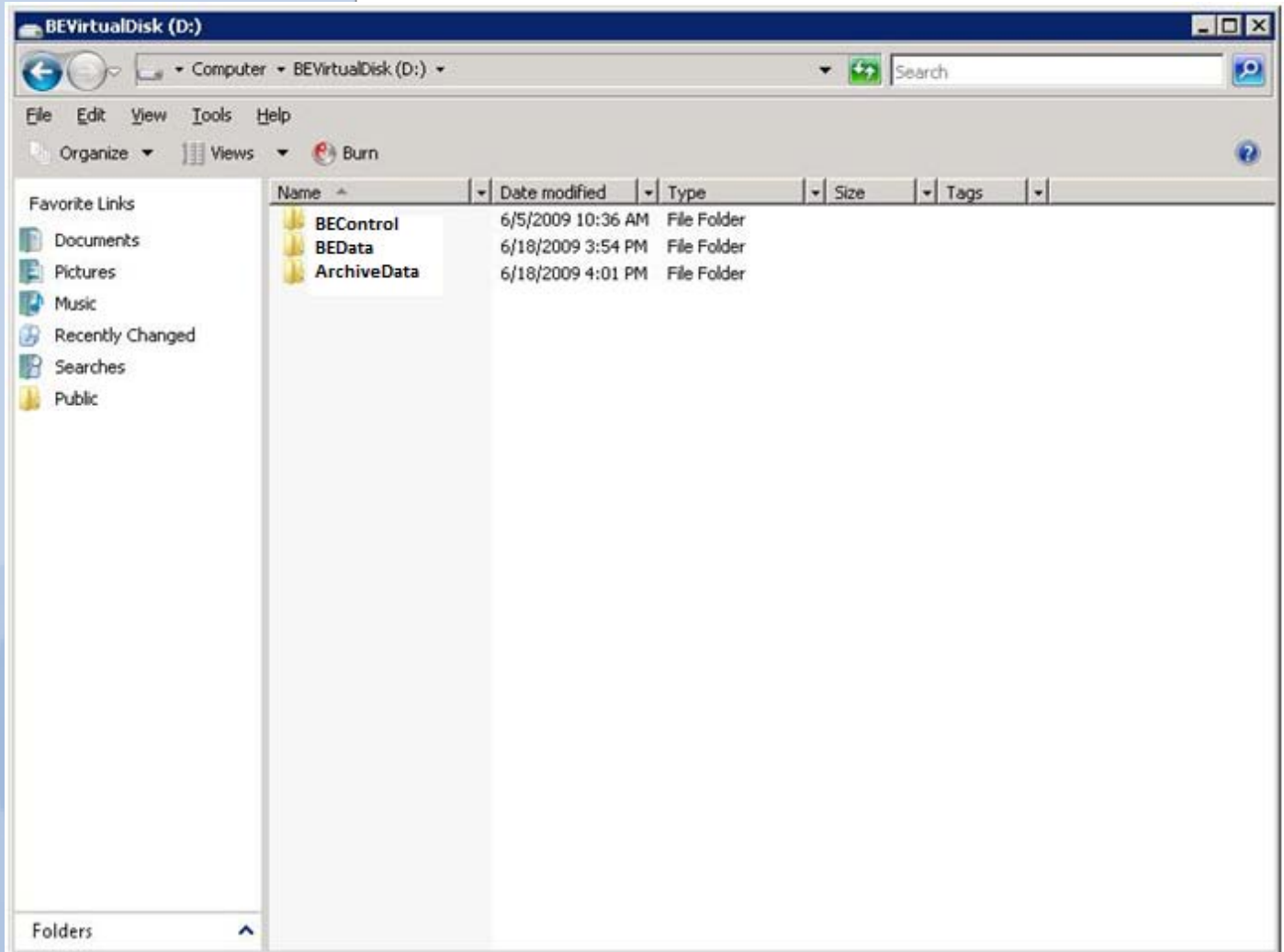
- Using Windows Explorer, create a folder on the virtual disk that will store the Archive data. It is not recommended to use the **BEControl** or **BEData** directories on the virtual disk to store the Archive data. These folders contain the Backup Exec configuration information and backup data from Backup Exec defined backups. In this example, the folder **ArchiveData** has been manually created to store the Archive data.

Note: Archive Data must be stored on an NTFS volume. The Backup Exec created virtual disks are configured as NTFS volumes.



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)





**Figure: View of Backup Exec Virtual Disk from Windows**

5. These steps can be repeated if additional virtual disks will be used as destinations to store Archive data.

Note: It is recommended that a dedicated Virtual Disk is used as a storage location for the Backup Exec Archive Options. Mixing backup to disk data, Continuous Protection Server Data, and Archive Option data on the same volume may result in the volume being filled to capacity quicker than planned.

File System Archiving Option Prerequisites: Installation of Microsoft Outlook 2003 Service Pack 3 or Microsoft Outlook 2007 Service Pack 2 along with Microsoft Hotfix KB968858 on the PowerVault DL Backup to Disk Appliance is recommended for use with the File System Archiving Option. Installing Outlook will enable the indexing and searching of Outlook Message files when used with the File System Archiving Option.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

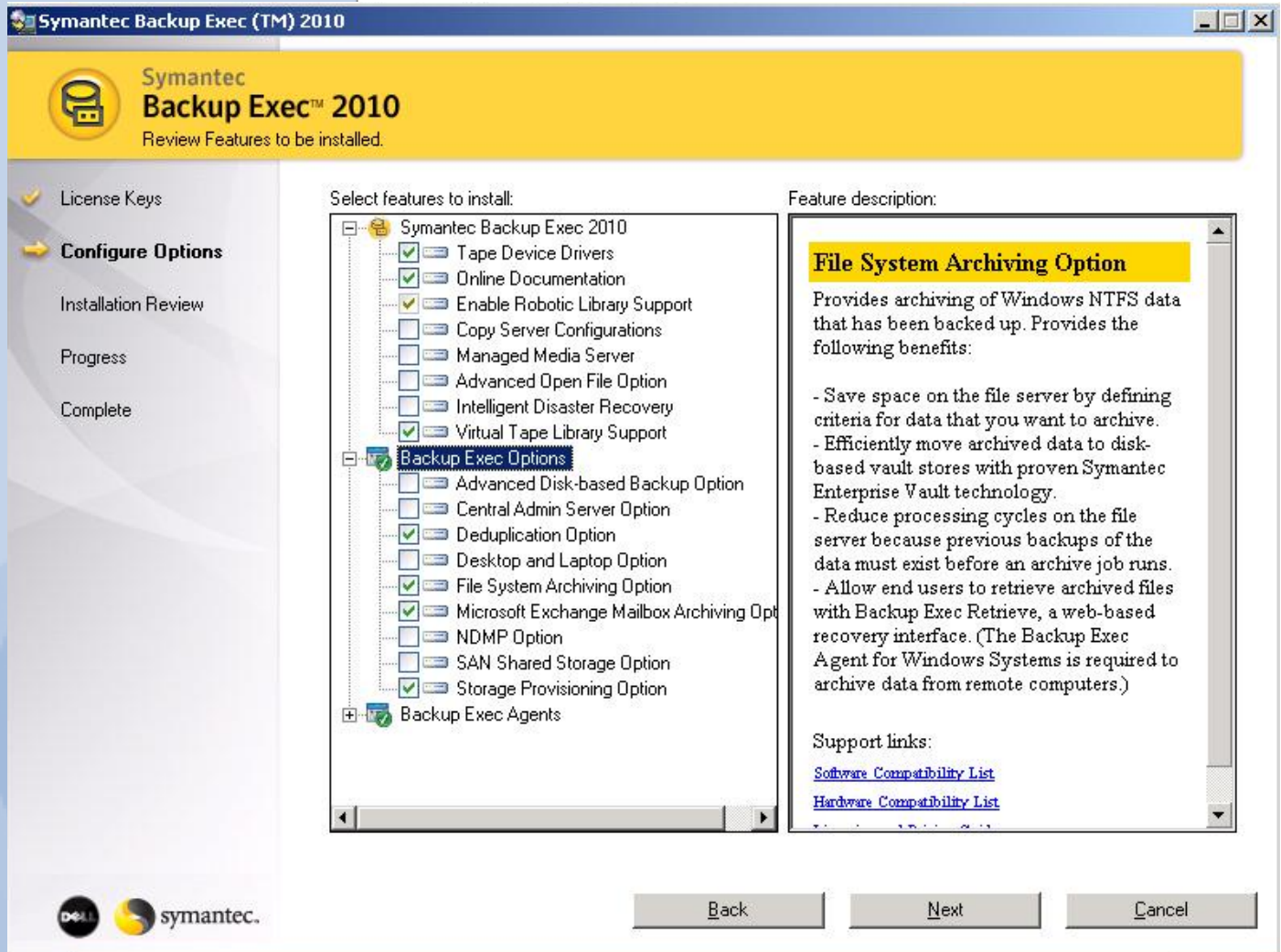
Exchange Mailbox Archiving Option Prerequisites: Installation of Microsoft Outlook 2003 Service Pack 3 or Microsoft Outlook 2007 Service Pack 2 along with Microsoft Hotfix KB968858 on the PowerVault DL Backup to Disk Appliance is required for use with the Exchange Mailbox Archiving Option. In addition, Outlook must be the default mail client.

The system is now ready for installation of the Backup Exec Archive Options. To install the File System Archiving Option or Exchange Mailbox Archiving Option, perform the following steps:

1. Select Tools -> Install Options and License Keys on this Media Server.
2. The Backup Exec Licensing screen prompts for additional license keys. Enter either the necessary keys for the Backup Exec File System Archiving Option and/or Backup Exec Email Archiving Option. Note that a File System Archiving Option license is required for each file server that will be archived. The Exchange Mailbox Archiving Option is licensed on a per user basis with 50 Exchange users included with each license. The PowerVault DL Backup to Disk license keys for Backup Exec are included on a yellow 5x5 card bundled with your appliance.
3. Verify that File System Archiving Option and/or the Exchange Mailbox Archiving Option is selected for install under Backup Exec Options and select Next to continue.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)



**Figure: Backup Exec Options**

4. Specify the Backup Exec service account for the Backup Exec services to use. This should be the same service account that was specified during the appliance installation process. Select Next to continue.
5. Backup Exec will acknowledge the login account with a pop-up message. Select Ok to continue.
6. Specify the location that Archive Data will be stored on the PowerVault DL Backup to Disk Appliance. This location should match the location setup during the previous set of instructions where a drive letter was assigned to a virtual disk. Select Next to continue.
7. A summary of the installation options appears. Verify the installation settings and select Next to continue.
8. Once the installation is complete, select Finish to complete the process.
9. A reboot of the PowerVault DL Backup to Disk Appliance may be necessary to complete the installation process.



Symantec Corporation World Headquarters  
 20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
 +1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)

10. Refer to the Backup Exec 2010 Administrator's Guide for details on configuring File System Archiving or Exchange Mailbox Archiving jobs.



Symantec Corporation World Headquarters  
20330 Stevens Creek Blvd., Cupertino, CA 95014 USA  
+1 (408) 517 8000 / +1 (800) 721 3934  
[www.symantec.com](http://www.symantec.com)