



## Backup Exec Makes Exchange Recovery Simple

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### Management Summary

Microsoft Exchange is one of those systems in which we have a love/hate relationship. We can't live with it and we can't live without it. We complain about spam; we complain about having hundreds of emails in our inbox when we return from several days of vacation. Nonetheless, it keeps us connected to friends, coworkers, and business partners and we suffer withdrawal when we are not connected.

Just stroll through an airport on a busy day and count the number of people searching for wireless connections in a terminal. Or visit your local coffee shop where you will find several workers busily generating and responding to emails on laptops and blackberries. Email is no longer a system that we use a few times a day. It is a critical business application that must be available all of the time. When email is corrupted by a virus and is no longer available, productive work comes to a grinding halt.

We all understand the importance of backing up Exchange files. This allows us to restore the Exchange system when corruption or accidental deletion occurs. Unfortunately, backing up Exchange systems can take a lot of time. Restoring Exchange is an even bigger problem. Recreating the Exchange environment to a point prior to the virus corruption can take hours and hours. That leaves employees out of touch for hours – frustrating for those workers that are waiting on an approval of a purchase order from outside the enterprise or approval of a project within the enterprise. One enterprise mentioned that Exchange been down for a day. Employees no longer had access to their calendars. Employees knew they had meetings scheduled, but they did not remember when meetings were scheduled or where the meetings were to be held. The result – the company lost one day of lost productivity and employees had to scramble to reschedule the meetings for a later date.

*Symantec* is a well-known name in data protection. *Backup Exec*, their flagship backup protection software for small to medium enterprises, has been enhanced over many years. With this new release, Symantec has solved the Exchange backup problem, and more importantly, the restore problem with its *Granular Recovery Technology*. That announcement alone is newsworthy, but *Backup Exec 11d* contains a lot of other new features and functions. In fact, it is the largest single release of Backup Exec in many years. Read on, for the details.

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## The Microsoft Exchange Problem

Some enterprises that are running *Microsoft Exchange* perform a full backup of Exchange all of the time. However, these backups can take hours; many administrators perform incremental backups during the week to reduce the time required for backups. Full backups, or a combination of full and incremental backups, allow IT administrators to restore the Exchange environment when a corruption occurs. Exchange administrators that need to restore only one mailbox or a few emails that were accidentally deleted must first restore the entire Exchange environment, and then retrieve the mailbox or email. This process is lengthy and tedious.

To reduce the time required to restore individual mailboxes or messages, some administrators run, in addition to a full Exchange backup, a full *mailbox* backup, followed by incremental *mailbox* backups. Mailboxes or messages can be more easily restored from these backups. However, mailbox backups take a lot of time, take up more storage, and require IT administrators to manage two different sets of Exchange backups. Symantec eliminates this problem with its new *Continuous Data Protection (CDP) for Exchange*.

## Continuous Data Protection for Exchange

Full or incremental backups - by their very design - backup and protect data at regularly scheduled intervals. These intervals are typically once a day. Continuous Data Protection (CDP), as its name implies, continuously protects data by capturing all updates as they occur. Backups can only restore data from the time of the last backup. **CDP solutions can restore data from any point in time.**

The importance of CDP can be illustrated in the following example. One datacenter backs up Exchange every night at 11 p.m. When the Exchange server is corrupted at 4 p.m., then the IT administrator must restore Exchange from 11 PM the previous night, losing many hours of updates. If that same datacenter had protected Exchange with a CDP solution, then the Exchange server could be easily restored to its status prior to the corruption - a loss of fewer, if any, updates.

Symantec has developed its own CDP technology that is now imbedded in Backup Exec 11d. **Using Continuous Data Protection for Exchange eliminates the requirement to backup the Exchange database, or perform mail-**

**box backups.** Initially a copy of the Exchange environment is created. Then Continuous Data Protection is activated with one mouse click on the Backup Exec management screen. Now, all transaction logs are captured throughout the day. Backup Exec uses these transaction logs to restore the entire Exchange environment, an individual mailbox, an email folder, or an individual mail message. Symantec calls this recovery *Granular Recovery Technology*, or *GRT*. Now, when one wants to restore several messages, for example, then they can bring up the Granular Recovery screen and click on the items that they want to restore. It is simple to use and quick to recover.

Best of all, the GRT technology works even when not using Continuous Data Protection for Exchange. IT administrators who still backup their Exchange once a day, say at 11 PM in our example, can eliminate the mailbox backup, and still get individual emails, folders or mailboxes back. **The impact of the GRT for protection Exchange is significant, in continuous or scheduled mode.**

## Active Directory

Exchange is not the only system that is difficult to restore using traditional methods. Restoring different components within Microsoft's *Active Directory* also has been difficult - that is, until now.

**With the new version of Backup Exec, individual user accounts can be restored using the same granular technology that is available for Exchange.** Within Active Directory, objects that are "deleted" are branded with a tombstone and assigned a tombstone date range, which defines how long an object, such as a user account, will be kept after it has been deleted. When the date range is exceeded, then the object is permanently deleted. Using Microsoft's normal backup procedures, objects outside the tombstone date range cannot be restored. However, Backup Exec changes these rules - these objects can now be restored, even if they are outside the tombstone date range. Objects within the tombstone data can be reanimated, without requiring a restore. These recovery operations do not require a reboot of the server.

**Additionally, Microsoft SharePoint documents can now be restored from a full database backup. Another new feature in Backup Exec allows administrators to schedule, create, delete, and restore Microsoft SQL 2005 Enterprise Edition snapshots.**

## What About Security?

Security is on the minds of many organizations today and Backup Exec has some new security features. **Encryption has been built in to Backup Exec 11d.** It's a feature at no additional cost. Each backup job can be encrypted with AES 128-bit or 256-bit encryption. Backup data can be encrypted at the source system. However, software encryption can slow down the backup process and enterprises can choose to write backups to disk without encryption. Later, the data can be encrypted - when it is copied to tape for offsite storage. Now, if the offsite tape is ever misplaced, the data on the tape remains secure.

## Other New Features

There are other new features in Backup Exec 11d. Here are a few highlights.

- **More platforms are supported.** For example, support is now available for 64-bit *Windows 2003* and *Windows XP* for the Backup Exec media server. Support for Microsoft's not-yet-released *Vista* operating system will be available soon.
- **Enterprises running NAS filers may find the new NDMP options attractive.** Backup support for NDMP enabled filers is now available. Now, administrators can backup a NAS filer to a tape drive. Support is also available to backup a filer to another filer (such as a *NetApp NearStore* filer), and then to tape.
- **Central Admin Server Option (CASO)** was first available in Backup Exec 10.0 to centrally manage several Backup Exec media servers. Central Admin Server Option could define and distribute backup jobs and monitor the activity of the many jobs that were running on the managed media servers. Now, CASO can support persistent *and* non-persistent connections with remote offices connected to a central location through a wide area network. The Central Admin Server, located in the main data center, can initiate the installation, configuration, and job setup of the managed media servers at remote locations. Periodically, the managed media servers send status information back to the Central Admin Server. Now enterprises with remote offices have an easy way to set up and monitor the backup servers at the remote locations.
- Are you backing up data on laptops? Many enterprises have discovered that data on laptops is seldom backed up. Unfortunately, they discover this after the laptop is stolen or

damaged beyond repair. Yet there can be a wealth of enterprise data on laptops that must be protected. Now, Symantec is offering five free licenses for desktop or laptops with this new release. Have more than five laptops? Additional licenses can be purchased in increments of ten.

- There are new or enhanced agents available. These include:
  - Agent for *Active Directory*
  - Agent for *Oracle RMAN* on *Windows* and *Linux*
  - Agent for *Oracle RAC* on *Windows* and *Linux*
  - *NDMP* option
  - Remote agent for *Macintosh* systems
  - Agent for *DB2* on *Windows* servers
  - Agent for *Windows* system that combines the Remote Agent and the Continuous Protection Agent.

## Conclusion

**Enterprises running older versions of Backup Exec should consider upgrading to this new release soon.** Symantec customers with older versions of Backup Exec under maintenance can upgrade free.

**IT administrators that struggle to complete Exchange backups on time, or have difficulty restoring Exchange need to evaluate this release.** The list price for the Exchange agent is \$995, a small price to pay to make Exchange backup and restore problems disappear. **Administrators with many updates to Active Directory will find appealing the flexibility and ease of restoring.**

**Enterprises that are not happy with their current backup software should evaluate Backup Exec 11d.** It has lots of new features and is worth a serious look.



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