

**Primera[®] OptiVault[™]
Archival Appliance
for E-mail and other
Critical Files**

I. Introduction

As an IT professional you realize that you need to make sure your company's electronic data is backed up regularly and remains safe in case of disaster. Most likely you backup the company e-mails, contact information, and other important files using tape. You probably rotate tapes and store copies offsite so you should be covered. *But are you missing something?*

Read below for two typical scenarios and learn how you may need to do more.

“Bill” is an IT manager in charge of backing up the data for a company with 40 employees. He feels like he has covered all of his bases by backing up his company's e-mails and other critical files using tape. Until one morning when he receives a phone call from the company CEO that might go something like this:

Scenario #1

“Bill, we have legal situation, and I need to retrieve all my e-mails to Johnson Construction from May 2001 through April 2002. I need all of them by this afternoon.”

The Problem

Bill is currently backing up the Exchange Server database to tape and storing them offsite. He also has been rotating tapes. However, he is not *archiving* the files to Write-Once-Read-Many (WORM) media and eventually the older databases are overwritten by newer databases. He also was not using a mailbox-level backup solution, so he must restore the entire database to a temporary server location. But he still can not retrieve the e-mails his CEO needs since the databases from 2001 through 2002 have already been overwritten.

The Solution

Primera's new **OptiVault™ Archival Appliance** is the answer to Bill's problem. It archives his entire Exchange Server including selected mailboxes to WORM-compliant optical media that can easily be stored offsite. All e-mail and contact information is stored permanently for later retrieval. This is done automatically using the powerful **EMC Dantz® Retrospect®** software together with the OptiVault hardware. The hardware has integrated robotics so that up to 25 discs are loaded automatically for hands-free archival of over 230GB of Exchange data.

OptiVault's integrated direct-to-disc printing labels each disc automatically for easy reference when data needs to be restored. Retrospect software is able to restore any of the archived e-mails, down to the mailbox level. This means that individual e-mails or contacts can easily be restored to any folder in the mailbox without retrieving the entire database. Optical media is also random-access, so e-mails and other critical data can be retrieved quickly. If the backup discs required for retrieval of specific files is not currently loaded, the Retrospect software tells you exactly

which discs are needed – even if they span multiple backup sets. Since each disc is automatically labeled, locating the proper discs is also fast and easy.

Scenario #2

“Bill, my hard drive crashed and I lost several highly critical CAD drawings. I keep backup copies on the network but when I tried to open one, it says the file is corrupt. Can you restore the file for me?”

The Problem

Bill has been dutifully been backing up the company’s critical files to tape. He reuses the tapes (tape is expensive, after all!) so that eventually all the data gets overwritten. That is fine as long as the files never get accidentally deleted or get corrupted. However, if and when a file gets corrupted, Bill unknowingly starts backing up the corrupted version of the file. Eventually he will even overwrite the original version of the file. He has the same problem if a file accidentally gets deleted – eventually the original file will be overwritten because he is re-using tapes.

The Solution

Primera’s OptiVault is once again the answer to Bill’s problem. It *archives* his critical files so the original file can always be restored. In fact, if Bill backs up the critical data nightly, he would be even be able to retrieve any version of the file (e.g. if changes were made to the file on a daily basis). The file can be retrieved quickly and automatically using the OptiVault’s integrated robotics. Or, the Retrospect software can tell him exactly what disc contains the needed file – and he can easily find the right disc since OptiVault automatically prints unique label information onto each disc.

Other Considerations

Besides these very practical reasons for deploying an OptiVault on your server(s), all publicly held companies also are required to save e-mail messages for long periods of time to comply with the Sarbanes Oxley Act. For health care organizations, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) has similar requirements. Other regulatory guidelines from the SEC, FDA and more require the same.

But don’t wait for your CEO to tell you this. As the IT person in charge of backups, you need to make sure you are regularly archiving your company’s e-mails and other critical company files.

II. Optivault Advantages

- Optical media is far more reliable than tape
- Optical drives are more reliable than tape drives – no head cleaning or other maintenance is required

- OptiVault uses Write-Once-Read-Many (WORM) optical discs which means your data is not overwritten and forever lost
- Integrated robotics for automatic and hands-free loading and unloading of the backup discs
- Integrated direct-to-disc printing so you never have to label your backups again – it does it for you
- Fast and easy installation through high-speed USB 2.0 – not SCSI
- Clients running Windows, Mac OS, Linux, Solaris and NetWare can also be backed up
- Optional software agents for open files, SQL and disaster recovery
- Optional upgrades for multiple servers and clients

III. Using OptiVault to Back Up Exchange Server

With the OptiVault's automated robotics and integrated printing, you simply set up your Exchange Server backups and forget about it. Retrospect provides powerful three-tier protection of Exchange Server:

- Server-level
- Exchange Server-level
- Mailbox-level

Server-level protection

At the highest level, Retrospect protects the computer that runs the Exchange Server application. Retrospect backup up valuable operating system settings, and, unlike traditional backup software, Retrospect can optionally create a disaster recovery CD for the server, even if the server is already non-functional. In contrast, other backup software requires backup administrators to create a recovery CD before a disaster occurs. With these other software programs, the IT staff must create a new disaster recovery CD whenever changes occur in the hardware or setting configurations. Retrospect's Progressive backups are efficient because they take only new and changed files and folders during each session. More importantly, Retrospect can accurately restore the computer to any point in time that it was backed up.

Exchange Server-level protection

The next level of protection is for the Exchange Server application. Retrospect performs full, incremental, and log/incremental backups to protect the Exchange Server database as well as the application settings for Exchange Server.

Mailbox and critical file-level protection

The deepest level of protection is at the mailbox and file levels. Retrospect utilizes patented Progressive backup technology to speed mailbox-level and file backups by only taking new and changed data during each backup session. And Retrospect makes it easy to automatically locate and restore individual

e-mails, appointments, contacts or file extension types. Date ranges and other search criteria are provided for the fastest possible retrieval.

IV. Conclusions

E-mail and other critical file archival is no longer an “extra” – it is a necessary part of your overall IT/MIS backup infrastructure.

Primera’s OptiVault is a reliable, automated method of archiving all of your company’s e-mails and other critical files onto WORM-compliant media. It is easy to install, uses low-cost and highly reliable archival-grade media and recovers data quickly and efficiently.